MOTHERING THE MOTHER

A study of effective content of routine care
during pregnancy
from women's points of view
in three European countries

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A thesis submitted in partial fulfilment of
the requirements of Glasgow Caledonian University
for the degree of Doctor of Philosophy

April 2008

In this version of the doctoral thesis the appendices are not included. The original thesis can be found in the British Library and the Library of the Glasgow Caledonian University, Scotland.

ABSTRACT

In the current study, the effective content of routine care during pregnancy was investigated from women's points of view in three European countries: the Netherlands; Scotland and Switzerland. The participants were 32 women who were either pregnant at different stages of uncomplicated pregnancies or mothers within a year after giving birth. One-to-one semi-structured interviews were used to explore their views, while related documentary material in each of the countries was collected in order to increase understanding of women's experiences of care during pregnancy. Through the grounded theory approach of Strauss & Corbin (1998), using language units to assess meaning, the complexity and magnitude of the research area was captured. Within each of the units, grounded theory led sampling, data collection and analysis.

As a contrast to previous studies, one woman-centred model of effective content of care for all three countries emerged, which involved three basic processes: 1. Content of care, which was called “Mothering the mother”, and resembled a mentoring process; 2. Women's own developmental process of becoming a mother, and as a link between these two processes; 3. Creation of a bond with their social environment as well as care providers. Effective content of care during pregnancy consisted of an experienced mothering person, provision of a familiar environment, continuous guidance towards family responsibility during a woman's process of becoming a mother, and a releasing process as they took up family responsibility on their own. Despite the emergence of one model of content of care, cross-national differences were noticed, particularly in regard to women's autonomy and confidence.

Effective content of routine care during pregnancy requires both an effective package of interventions as well as effective antenatal care models, which are based on the choice of care provider, the woman-care provider partnership, involvement of women’s environment and the continuity of the guidance process. Characteristics of these models, including the woman-provider relationship, should therefore be taken into account in the provision and evaluation of care that aims to be effective in improving the health and well-being of pregnant women and their families.

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PREFACE AND ACKNOWLEDGEMENTS

The current study started as a quest for a definition of effective content of routine care during pregnancy, which has concerned many professionals actively involved in the provision of antenatal care over the last two decades. Some of these professionals contributed to the development of the research question for the current study. In this regard I particularly thank Dr. Th. Uwe Dietz, Dr. Suzanne Braga, Professor Christoph Brezinka, Dr. Frans Roumen, Professor Henning Schneider, and particularly Dr. Martijn Heringa, who highlighted the need for a new approach to this quest in his own thesis.

Many people, both nationally and internationally have guided me during the development of this doctoral study. First and foremost, I am indebted to all the participating women who contributed with their own experiences to the knowledge in this study. They allowed me to share part of their worlds with them, in which I was made to feel very welcome. I hope the effects of this study will meet their expectations. I would also like to thank the hospitals, insurance companies, gynaecologists, general practitioners and midwives who supported the data collection process and explained to me their understanding of the place of their work within the maternity care system In this regard a particular “thank you” for guidance must go to Allison Ewing, Sue Brailey, Dr. Irena Anna Frei, Penny Held-Jones, Angela Poat, Elma Paxton, Ilse Steininger and Laury de Bie-Post.

Many thanks to the mothers that “mothered” me: my supervisors Professor Valerie Fleming and Dr. Sue Kinn. There are many aspects of being a mother that are little noticed and appreciated in an academic world, such as having time, being there and emotional experiences. In order to develop the current study, these were incredibly important, as being a mother is more about life than an academic experience. Thank you for sharing your academic as well as your everyday world with me, which increased my understanding for the subject I was dealing with.

Thank you, Christian Meuli, for offering me the opportunity to do this study and believing in this project throughout the difficult times I experienced since its conception. Many thanks also for the support of my team in the Midwifery

Programme in the Bildungszentrum für Gesundheit und Soziales in Chur, the team of the School of Midwifery at the Glasgow Caledonian University, and the people, who shared their “becoming a doctor” realities with me.

This study seems to be a product of three worlds, but at least two others are involved. Thank you, family and dear friends, for supporting me while going through this experience. Thank you particularly for sharing your joys which lifted me up in hard times and your enlightening ideas. I would like to dedicate this work to my mother as well as all other mothers in this world, whose work is sometimes little appreciated, but who are trying to make this world a familiar, nurturing environment for future generations of children.

DECLARATION

I hereby declare that this thesis has been composed by me and that the research on which it reports is my own work.

Johanna G. Luyben

April 2008

CHAPTER ONE - INTRODUCTION AND OVERVIEW

1.1 Introduction

Antenatal care is generally accepted as an intervention that makes pregnancy safer for mothers and their children in developed countries, as a reduction of maternal and perinatal mortality rates has been noticed since its introduction in the 1920s. Little is still known, however, about what antenatal care consists of and how it works (Chapter 2.3, 3.4), while concurrently some researchers have expressed their uncertainties about its true effective content.

The current study presents an investigation of women's expectations and experiences of the effective content of routine care during pregnancy in three European countries with different healthcare systems; the Netherlands, Scotland and Switzerland; in order to determine the provision of effective content of antenatal programmes. The topic was chosen as a result of a survey carried out amongst approximately 70 personally selected maternity care professionals in Austria, the United Kingdom (UK), Germany, the Netherlands and Switzerland, who were asked for topics that were relevant to their practice and needed to be studied. As a result of subsequent discussions and a literature study, I finally decided to pursue the topic of the effective content of antenatal care in Europe, even though the area that had to be addressed was immense, and some people even told me that such a study would be impossible. Having experienced the rise of evidence-based practice in obstetrics and midwifery following the interest generated by “Effective Care in Pregnancy and Childbirth” (Chalmers et al. 1989) in the Netherlands and the German-speaking countries, I had expected more available evidence on effective content. I was, therefore, very surprised when one obstetrician told me that he thought that effects of antenatal care were overestimated, and that what healthcare professionals did was not quite as effective as it was claimed to be. Similar conclusions were reported in the studies of Hall et al. (1985) and Heringa (1998) (Chapter 3.4). Most striking, however, was the fact that the relevant questions relating to the content of antenatal care had remained the same in the time between these studies.

As the effective content of antenatal care is an important part of midwifery practice, the current study addressed this topic. The provision of antenatal care had been part of my professional work in the Netherlands and in Switzerland, and although I had not practised in Scotland, several aspects of maternity care were familiar to me, as English-speaking literature had been the main source of my professional information. As recommended by Heringa (1998), a different perspective on the effective content of antenatal care was sought through the study of women's views. This thesis consists of ten chapters following this introduction. Before outlining content of these chapters, the importance of the problem, the aim of the study and some specifics in the use of terminology in this thesis are described in the next sections.

1.2 Importance of the study

How to determine the provision of effective content of routine antenatal care programmes has been a topic of discussion in Western Europe over the last couple of decades (Hall et al. 1985, WHO 1987, Heringa 1998). The concept of antenatal care was introduced in Western Europe at the beginning of the 20th century with the principal aim of reducing high rates of maternal and infant mortality. Although originally the emphasis was on educating mothers to take care of themselves and their babies, a shift towards preventative medicine and the professional supervision of expectant mothers can be observed shortly after World War I. Antenatal care programmes in their present format were first instituted in Britain in 1929 as a result of a report from the Ministry of Health. In the ensuing decades, other European countries followed the British example, initiating very similar programmes (Brezinka 1998, Heringa 1998). A reduction in maternal and perinatal morbidity and mortality was seen by service providers and researchers as evidence of value of these programmes during the course of the 20th century, without taking into consideration other factors which may have affected these figures (Hall 1985, Heringa 1998).With the exception of the introduction of more sophisticated screening and diagnostic procedures, the content of existing programmes has hardly changed since this time.

In the early 1970s, however, consumers and health providers in the UK began to call for a systematic evaluation of the effectiveness of health services (Garcia 1982,

Cochrane 1999). At the same time, advancing European integration and harmonisation led to concerted interdisciplinary concern about the effectiveness of antenatal care services in Europe. As a result, antenatal care programmes and their content were subjected to extensive research and evaluation during the 1980s and 1990s, both within Europe and internationally (Chapter 2.3, 3.4). Research addressed the number of antenatal care visits, antenatal classes, the people best suited to provide care, organisational aspects and screening procedures (Heringa 1998, Villar et al. 2001a, Villar et al. 2001b, Hatem et al. 2004, Gagnon & Sandall 2007). These studies found that the effectiveness of most single screening procedures used in antenatal care was yet to be proved, and that a reduction in the number and content of the antenatal care visits was possible without affecting maternal and perinatal outcome. Some of these evaluations, particularly in the UK, involved women's experiences and satisfaction. The principal complaints reported by women were the lack of agreement between the organisational aspects of antenatal care and their personal needs, the information they were receiving, a lack of continuity of care, and the impersonal treatment received at antenatal care clinics (Hall et al. 1985, Reid & Garcia 1989, Jacoby & Cartwright 1990, Sikorski et al. 1996).

Researchers are, therefore, currently divided about the value of the content of antenatal care programmes in Western Europe. While some studies found that related routine antenatal care led to better pregnancy outcomes (Richardus et al. 1997, Villar et al. 2001a, Villar et al. 2001b), others could not find a causal relationship between the content of a programme and its effects (Fink et al. 1992, Fiscella 1995, Enkin et al. 2000), or stated that increased medical content negatively affected women's health (Heringa 1998). It was even suggested that the ritualistic significance of the antenatal care visits was more important than the actual content (Heringa 1998; Enkin et al. 2000). As antenatal care plays an important role in the health and well-being of women and their families both during pregnancy and afterwards, further investigation of the effective content of these programmes in Europe had therefore been recommended (Heringa 1998).

1.3 Aim of the study

The aim of the current study is to investigate the provision of effective content of routine antenatal care programmes from women's points of view in Europe. In order to reach this objective, an analysis of antenatal care was carried out in three Western and Central European countries: Scotland, the Netherlands and Switzerland. The choice of these countries was based on the abilities of the researcher as well as variations in healthcare systems (Chapter 4.4), although limitations in generalising the results to Europe were acknowledged (Chapter 11.5).

As a different perspective on the topic was needed, the study used a bottom-up approach, in which, in the first instance, women's perspectives on routine care during pregnancy were used to develop a model of effective content of antenatal care, which was then compared with existing literature. As a result therefore, effectiveness of this content (including its aims, process and outcome) was defined by the participating women within the framework of this study.

1.4 Use of terminology

At this point, it is important to clarify the use of language and terminology in this thesis. Except in Chapter 1 and Chapter 11, the thesis has been written in a passive voice and past tense. Within this thesis, the participating women in this study have been referred to as "women", regardless of whether they were pregnant or already mothers. All names used with women's quotes are pseudonyms. As the British terminology of "social class" (MacFarlane et al. 2000) has no equivalent in Dutch and Swiss literature, this expression has not been used.

Many expressions used in this thesis have a specific, sometimes cultural, meaning attached to them. Firstly, "antenatal care" (UK), instead of "prenatal care" (USA), has been used to refer to the current existing model of antenatal care programmes (Chapter 2, 3.4). Thus, the primary focus of this study was on routine antenatal care visits, excluding antenatal classes and additional care outside this framework, such as care for high-risk pregnancies and psychosocial support. "(Routine) Care during pregnancy" on the other hand, has been used in this study to describe all the care that healthy women needed during pregnancy (Chapter 10), including the existing formal model of antenatal care, as well as everything that women said that went beyond this

model. Secondly, in the literature review in Chapter 2 and 3 the prevailing use of the terminology of “effective” in the evaluation literature on antenatal care has been analysed and outlined. In the current study however, as stated in Chapter 1.3, “effectiveness” of the content of this care was defined from women’s perspectives (Chapter 4, 5.3, 7.1, 7.4, 10, 11).

In line with this, “care provider” has been used to refer to a formal care provider (general practitioner (GP), midwife, nurse, gynaecologist), whereas “mothering” or “guiding” person has been used to describe the person caring for the women in line with the model developed in this thesis. Additionally, “gynaecologist” instead of “obstetrician”has been used as, according to women in some countries involved in this study, obstetrics is an area of normality in which medical participation is not necessary. In accordance with grounded theory (Chapter 4.2) variables such as culture (Helman 2007), were not acknowledged until they emerged in the study. Therefore, the term “cross-national” instead of “cross-cultural” has been used to refer to the countries involved.

1.5 The structure of the thesis

In this thesis, a study of the evaluation of antenatal care in Europe using a “bottom-up” approach is described. The thesis consists of three main parts.

Part One (Chapter 1 to 4) describes the introduction to the study. Chapter One addresses the background to the research problem and presents an outline of the thesis. In Chapters Two and Three, the literature review relevant to the thesis is introduced in two parts. Chapter Two presents the context of the antenatal care services in Europe in which the research question arose. This context involves both the history of antenatal care and its evaluation as a result of the call for effectiveness and harmonisation of antenatal care services in the 1970s. As effectiveness could not be proved, and harmonisation was not achieved, doubt was raised about the appropriateness of the content. Following this, the current organisation of antenatal care in Europe is described, with an emphasis on the similarities and differences between the three countries involved in the current study. Chapter Three contains a literature review on the concept of effectiveness, and its application in the evaluation of antenatal care. Firstly, the concept of effectiveness is analysed and compared with

its application and evalaution in the disciplines of industrial technology and education. The results of this analysis are then contrasted with current evaluation literature on the effectiveness of antenatal care. As a consequence, the need for a critical analysis of the effective content of antenatal care is highlighted.

In Chapter Four, the approach and methods used to address the research problem are described. Grounded Theory was decided on as a comparative, bottom-up approach which encompasses the complexity of antenatal care, and its use is justified in regard to the cross-national aspects. The implementation of the study, including getting access and ethical approval as well as sampling, data collection and analysis follow. Considerations about the validity and reliability of the research design complete this chapter.

Part Two (Chapter 5 to 10) describes and discusses the results of the study. These results involve four subcategories, which describe women's personal experiences of becoming a mother from the beginning of pregnancy until well after giving birth, and the core category consisting of their needs for care as a result. Chapter Five is an introduction to the results, and how they are described. Chapter Six describes women's processes of expecting and their resulting needs concerning responsibility, autonomy and confidence at the start of pregnancy, while Chapter Seven contains information about the relationships that women build with people in their environment, including care providers, as a result of these needs. Chapter Eight then addresses women's development not only during pregnancy, but also during birth and the postnatal period. Following this, women felt equipped to take up family responsibility at the end of the process, and this is described in Chapter Nine. Finally, Chapter Ten describes the answers to the research question, and discusses the core category of “Mothering the mother”, which comprises the care that women need during their journey towards becoming a mother.

Chapter Eleven summarises the conclusions resulting from the present study. Limitations are acknowledged and new knowledge arising from this study is described. As a result, implications and recommendations for practice, education and future research are formulated.

CHAPTER TWO- ANTENATAL CARE IN EUROPE

2.1 Introduction

Understanding the research situation for the present study involved both knowledge about the current situation and the historical background and context from which it arose. This chapter therefore starts with an overview of the historical development of antenatal care in Europe. Despite the variety of antenatal care services provided in the European countries, their origins were similar (Chapter 2.2). This historical development influenced both the evaluation and the current situation of antenatal care, as described in the following sections (Chapter 2.3, 2.4).

The description of the historical background and current situation was based on English, Dutch and German literature on antenatal care. Key words used for searching were “pregnancy” and “antenatal care” or “prenatal care”. English literature was the most readily available and most prominent in electronic databases relating to obstetrics, gynaecology, nursing and midwifery (Luyben 2002, Appendix 27). Additional information was hand searched or provided in discussions (Appendix 1). While some of the Dutch and German literature was found in Medline, most was found in multiple locations. For the current study, the databases of several universities and other institutions, as well as professional websites in the Netherlands and Switzerland were searched. Key words used were “zwangerschap” or alternatively “Schwangerschaft” (pregnancy), and “prenatale zorg” or alternatively “Schwangerschaftsvorsorge”, “Schwangerschaftsfürsorge” or alternatively “Schwangerenbetreuung” (antenatal care). Additionally, Dutch and German professional journals and experts were consulted.

Due to the creation of the “Oxford Database of Perinatal Trials”, it was possible for “Effective Care in Pregnancy and Childbirth” (Chapter 2.3, 3.4) (Chalmers et al. 1989) to include data from earlier studies. Therefore 1989 was used as a starting point for searching evaluation literature on antenatal care in Europe in the current study. Initially, Medline was consulted for studies between 1989 and 2001 using the key words “evaluation”, “programme” and “antenatal care”/”prenatal care”. As “Europe” was linked to the address of the authors rather than the research area, it

was not a reliable search term. The resulting studies predominantly addressed complications in pregnancy, and involved a variety of elements of antenatal care including single interventions as well as packages of interventions. As these results were inadequate for reviewing the effective content of routine antenatal care, Medline, CINAHL, PsychLit and the Cochrane Database of Systematic Reviews were searched with the key words “antenatal care” and “prenatal care” for articles between 1989 and 2001. Following this, abstracts were hand searched for cross-national projects addressing the evaluation of the content of antenatal care in Europe as a package. Tracing other major projects carried out before 1989 completed this search. Efforts undertaken to determine the provision of content and its evaluation before 1970 are included in the history of antenatal care in Europe, which is described in the next section.

2.2 The history of antenatal care in Europe

Although differences in the development of antenatal care throughout Europe during the 20th century were noticed, similarity of origins could be traced (Oakley 1982, Hall et al. 1985, Heringa 1998, Heuvelmann 1999). Despite the fact that most literature on antenatal care is in English, British and Dutch authors both referred to the early French origins of antenatal care (Oakley 1984, Heringa 1998). At the end of the 18th century, the Hôtel de Dieu in Paris, known as a centre for midwifery work, took women in at the end of their pregnancy, either because they were ill or in unfavourable circumstances (for example due to heavy work or a long journey) (Oakley 1984). This way of supporting mothers and their children was based on voluntary maternal and infant welfare work, which had been regarded as the international beginning of antenatal services (Oakley 1984). These welfare services were aimed at supporting and educating mothers to take better care of their children, principally in order to reduce infant mortality. Lüschen et al. (1995) claimed that “welfare work” was a specific phenomenon of English-speaking countries, whereas the German-speaking parts of Europe emphasised the role of “charity”. Although the literature from these parts of Europe contained no documentation of their antenatal care at this time, it may have consisted of informal lay support, for example from nuns and/or relatives. On the other hand, the early establishment of the discipline of preventative and social medicine played an important role in the rise of antenatal care in these countries (Heuvelmann 1999).

Medical concern with pregnancy and childbirth in Europe started during the second half of the 19th century. At this time, midwives were booked for delivery, not for antenatal care. Medical care had to be paid for, and therefore only more prosperous women visited the local doctor during the second half of pregnancy (Oakley 1982). In 1899, the Lauriston Pre-Maternity Home, an in-patient service for unmarried pregnant women, was founded next to the Royal Maternity Hospital in Edinburgh. Although initially designed for unmarried and ill pregnant women, the clinic opened as the first British out-patient clinic for all pregnant women in 1915. The establishment of out-patient antenatal care services was part of an international movement, as others had been initiated prior to this in Boston (USA) and Adelaide (Australia). At the same time, members of the medical profession subjected several aspects of pregnancy, such as albumin in urine and foetal heart sounds, to studies (Oakley 1984, Rhodes 1995). J.W. Ballantyne, who took over the supervision of the clinic in Edinburgh the beginning of the 20th century, has usually been regarded as the "founding father" of current antenatal care in the English-speaking literature (Oakley 1982 p. 4). His interests however were only the diagnostic and preventative aspects of antenatal care, with a focus on the foetus.

The formal institutionalisation of antenatal care programmes was a continuation of existing welfare work as "child health would be improved if women were taught to care for themselves during pregnancy" (Enkin & Chalmers 1982 p. 266). In most European countries, this institutionalisation was largely government-directed (Oakley 1982). Alongside general advice and care, the focus was on the early detection of abnormalities and disorders in pregnancy in order to prevent or treat these timeously, and thus improve birth outcome (Oakley 1982, Rhodes 1995, Heringa 1998). Accordingly two ideas grew together: firstly to improve education and support for pregnant women, and secondly preventative medicine.

Up to the end of the 1920s however, care during pregnancy remained a task of the social and welfare services in Europe (Oakley 1982, Oakley 1984, Heringa 1998). In the Netherlands, Britain and Switzerland, the degree of state involvement in maternity care services differed.
In the Netherlands, the institution of consultating offices for infants, which influenced the reduction of infant mortality, was a private initiative (Heringa 1998).

The Dutch government hardly intervened in these services, other than in the passing of laws which improved social circumstances, and, in 1927, issuing guidelines for motherhood courses.
Similarly, the British government passed laws supporting care for mothers and their children, such as the Maternity and Child Welfare Act in 1918 (Oakley 1984). Welfare services increasingly became regulated by the state and municipal authorities, in which home visiting took place to check on the effectiveness of the antenatal classes (Oakley 1982). In 1919 the responsibility for the health of mothers and their children moved from the Board of Education to the Ministry of Health. The education and counselling of mothers and their children thus increasingly turned into medical supervision.
In Switzerland, (medical) antenatal care was included in the health insurance law passed in 1964, while a law on paid maternity leave was only passed in 2004 (Eidgenossiches Departement des Inneren (EDI) 1964, Eidgenossische Kommission für Frauenfragen 1999). Little has been documented about the existence of other services for pregnant women.

At this time infant mortality fell in Western Europe, while maternal mortality remained high (Oakley 1982, Heringa 1998). After the introduction of universal suffrage, the women's movement in the UK supported the introduction of (medical) antenatal care in order to save women's lives. A similar role played by the women's movement in either the Netherlands or Switzerland with regard to antenatal care has not been described. In the UK, several government reports examined maternal as well as foetal and infant mortality in more depth. These government reports consequently included recommendations on how to lower mortality rates, such as routine (medical) antenatal care, improvement of social conditions, care during birth and the status and training of midwives.

By the end of the 1920s, the general public as well as the medical professions regarded routine medical care during pregnancy the best strategy for the prevention of maternal and foetal death (Oakley 1982, Oakley 1984, Hall et al. 1985). Accordingly, the Ministry of Health formally instituted the concept of antenatal care in 1929, including authority-based guidelines on the frequency of antenatal visits as well as the content for each visit, based on clinical practice in the UK at that time

(Oakley 1982, Hall et al. 1985). This concept, proposed by Dr. Janet Campbell, was the basic template for routine antenatal care programmes in most European countries, as other countries followed the British example (Brezinka 1998, Heringa 1998). Although variations in practice existed, antenatal care was based on this concept for the next 50 years.

The medical profession's growing interest in pregnancy resulted in increased medical concern with antenatal care internationally, although the timing and mode differed between countries (Oakley 1984, Brezinka 1998, Heringa 1998). While medical preventative supervision was emphasised, the perspective on the achievement of the aims of antenatal care gradually changed, in which it increasingly became synonymous with medical care during pregnancy (Oakley 1984). At the same time medical knowledge of complications in pregnancy and their treatment progressed.

The aims of reducing of maternal and foetal mortality and morbidity through the provision of medical care remained the focus of antenatal care throughout the 20th century. In the UK and the Netherlands changes in antenatal care during this century were based on reports on perinatal and maternal morbidity and mortality and subsequent discussions on how to reduce these (Oakley 1982, Oakley 1984, Heringa 1998). These discussions often led to recommendations about increasing the number of screening procedures within the content of antenatal care. Both countries however, had different ways of implementing recommendations, although these had to be in line with available scientific knowledge and the existing national healthcare systems (Oakley 1982, Heringa 1998).

In the UK "intra-personal rivalries" between midwives and GPs about antenatal care occurred (Oakley 1982 p. 9). While the British Medical Association safeguarded the interests of the GPs, medical officers took over the work at antenatal clinics and the autonomy of the midwifery profession was gradually reduced.
At the same time in the Netherlands, one aim was to keep the division between primary and secondary care levels intact within the healthcare system (Heringa 1998). The extension in the level of antenatal care therefore involved an upgrade in the competencies of midwives, for example in 1932 and 1949, in order to support

them in their role as acting guardians of normality at the primary level of maternity care.

In German speaking countries, antenatal care had a long tradition of medical obstetric involvement (Dudenhausen 1986, Brezinka 1997), which was related to the transition from home to hospital birth, and the connection between gynaecology and preventative medicine. Brezinka (1997 p. 11) described how antenatal care was claimed to be the gynaecologist's task during the Second World War;
"During the time of national socialism, clinical obstetrics was of low value to the rulers who, with the leadership of the president of the midwives' association ("Reichshebammenmutter"), Countess Conti, wanted to bring back the whole German population to the idea of the "healthy" home birth. The obstetrics branch of gynaecology had difficulties in justifying its existence. At the 26th Congress of the German Association of Gynaecology and Obstetrics 1941 in Vienna, the gynaecologists decided to reclaim vehemently their specific obstetrics role within preventative medicine. The concept of antenatal care as part of expert medical performance was introduced: it had to include counselling, therapy and supervision."

Although no specific information for Switzerland was found, based on the close relationship between the German speaking countries, this decision seemed to have influenced the development of maternity care in Switzerland as well (Heuvelmann 1999). Due to the fact that Switzerland is a federation consisting of 23 cantons with a high degree of autonomy in the regulation and provision of care, the Swiss government regulated little at national level. Changes in health insurance law were made upon the petition of professional groups providing maternity care (EDI 1964, EDI 1996). Until the 1970s GPs played an important role in antenatal care (personal correspondence with H. Seger, Medizinhistorisches Institut Zürich), but this role was gradually taken over by gynaecologists in private practices. Due to the de-central organisation, a variation in the provision of antenatal care could be assumed in which the professional groups and the universities played an important role in the dissemination and adaptation of programmes (Husler et al. 2002).

For all these European countries, available scientific knowledge consisted of the latest progress in medical knowledge until the end of the 1980s. Upon the institution

of the “Oxford Database of Perinatal Trials” and the publication of “Effective care in pregnancy and childbirth” in 1989 (Chalmers et al. 1989) (Chapter 2.3, 3.4) however, changes in the antenatal care programmes were increasingly based on the latest research evidence. Only in the UK, however, did discussions about these changes also involve women's views.

Antenatal care could thus be regarded as an international movement with similar origins across the geographical spectrum but evolving independently in each different country (Oakley 1982). As Enkin and Chalmers (1982 p. 266) stated, “The nature and pattern of antenatal care have been shaped as much by political, professional and cultural factors as by purely scientific considerations”. Influencing factors included the professional groups providing antenatal care, the state and consumers, the position and status of women, philosophies about pregnancy and childbirth, the development and use of technology, epidemiological pregnancy outcome, and social factors (Oakley 1982). Social factors influencing the reduction of perinatal and maternal morbidity and mortality, however, were largely ignored. In particular, the sudden decline in maternal and perinatal mortality during the Second World War in the UK has been related to an improvement in the social conditions of pregnant women (Chapter 3.4.1).

Although it had been stressed that antenatal care should “embrace the social environment, as well as the medical aspects of pregnancy” (Villar & Bergsjo 1997 p. 76), social phenomena were taken into account very little in the construction of antenatal care services during the 20th century. At the same time as the growing concern about the evidence-based content of antenatal care, the services which are described in the following section were evaluated in several European projects.

2.3 Cross-national projects evaluating antenatal care in Europe

The review in this section focuses on concerted cross-national European projects addressing the provision of effective content of antenatal care in order to achieve its harmonisation during the last few decades. Other studies with regard to the effectiveness of content of antenatal care are described in Chapter 3.4.

A call for the systematic evaluation of maternity care services by consumers as well as healthcare providers began in the UK. In 1972, as a result of growing concern about the effectiveness and efficiency of the National Health Service (NHS), the epidemiologist Archie Cochrane proposed an evaluation of all disciplines in healthcare in the same way using randomised controlled trials (RCTs) (Cochrane 1999) (Chapter 3.4.1). The resulting systematic review of existing studies in the field of obstetrics and midwifery led in 1989 to the publication of "Effective Care in Pregnancy and Childbirth" (Chalmers et al. 1989). These initiatives influenced the evaluation of maternity care both within the UK and internationally. As a result, antenatal care programmes and their content were subjected to extensive research and evaluation.

In Europe, concerted interdisciplinary concern with maternity care services was raised in a yearly meeting of the European Region of the WHO in the late 1970s (WHO 1987, Phaff 1986). Until this time provision as well as evaluation had been a national or even regional concern. In 1979, the International Year of the Child, the 33 European member states of WHO questioned the quality of maternity care services (WHO 1987). While the maternal mortality rate (MMR) and the perinatal mortality rate (PMR) were still high in some of the developing countries, in the developed, industrialised countries these rates were low, but were accompanied by high medical intervention rates. Additionally, women had few options in regard to care.

Although some information about the structure of the maternity care services was available, little was known about either the content of care or what really influenced pregnancy outcome. Consequently a perinatal study group was commissioned by the WHO to investigate these services in Europe and to compile a report about the situation and formulate recommendations for action. The investigation had to answer following questions:

1. "What is known about the health of women and their children in the period before, during and after childbirth?
2. What healthcare services are available to women and their children during this period?

3. How big is the gap between what is known (or not known) and what is being done (or not being done)?" (WHO 1987 p. 3,4)

This was the largest and most comprehensive study addressing maternity services in a European context. Not only were the organisation of the official systems and statistical and medical information addressed, but also the psychosocial aspects of maternity services and alternative forms of care, although women receiving the care were not part of the study. The study group consisted of 15 members from ten countries. Ten professional disciplines were involved: economics; epidemiology; midwifery; health management; nursing; gynaecology; paediatrics; psychology; sociology and statistics. The study took place between 1979 and 1984 and consisted of observations and surveys in 23 European countries, a review of the literature and a report of experiences in care (Fraser 1983, Blondel et al. 1985, Phaff 1986, WHO 1987, Oakley & Houd 1990).

In the narrative literature review, Fraser (1983) primarily aimed to define the effective medical and psychosocial elements of existing ante-, peri- and postnatal care, with which existing practice could be compared during further study. Although an inverse correlative relationship between antenatal care visits and PMR had been found in observational studies (Butler & Bonham 1963, Eskes et al. 1980), a causal relationship had not been proved (Chapter 3.4.1). Underlying constraints in most studies included the limitations of medical technology and the unpredictable nature of pregnancy and childbirth as well as the fact that failures were found in the exchange of information with women. While Fraser (1983) could not therefore determine effective content, women's dissatisfaction with the provision of information as well as a lack of knowledge about the possible harmful effects of obstetric interventions on women was highlighted. Based on these findings the need for more research, in particular RCTs, was emphasised.

Concurrently, two surveys were carried out using questionnaires that addressed the organisation and content of maternity care and the psychosocial consequences of medical interventions (WHO 1987), although these only represented the professional's points of view and only addressed official systems of maternity care. Therefore, a midwife and a sociologist were commissioned to collect information by

visiting alternative services in a sample of eight European countries and in Canada and the USA, as the services in the latter countries were closely related to those in Europe (WHO 1987, Oakley & Houd 1990). While the latter part of the study remained an exceptional approach to the evaluation of maternity care, Reid (1986 p. 60) called it a “rare attempt” to document alternatives to the “orthodox” services.

The completed study was descriptive and contained professional views only, although information on the possible effects on women was also collected. Effective content of antenatal care was not determined in either the literature review or in the surveys and the visits. Additionally, although there was a wide variety of antenatal care programmes, they were all found to have similar MMR and PMR. The study highlighted problems, however, which had to be addressed in the following decades and this led to the following recommendations being made in order to improve the effectiveness of antenatal care:

- Antenatal care programmes should be improved by a better combination of medical and social content.
- The role of primary healthcare providers in this regard should be reconsidered.
- The effectiveness and the consequences of increased risk selection should be evaluated.
- Screening, diagnostic and therapeutic interventions should be subjected to rigorous evaluation in RCTs.
- Midwifery research should be increased and knowledge gained relating to the qualitative aspects of professional midwifery.
- The client/provider relationship should be included in the evaluation of the content. Researchers should be strongly encouraged to research “what really is happening between the care provider and the pregnant woman and what this means for shaping the content of care” (WHO 1987 p. 93).
- Women should be empowered by determining their health needs, planning and evaluating their care and deciding how to use the services offered to them. The important issues of the provision of information, advice and counselling and the availability of choices for women should be addressed.

Despite limitations in determining effective content due its descriptive nature, this comprehensive study remained exceptional in its evaluation of antenatal care in Europe over the following decades.

The European Union (EU) was another stakeholder who supported the evaluation of and research into maternity care in Europe during the last decades of the 20th century (Blondel 1986, Kaminski et al. 1986, Richardus et al. 1997, Zeitlin et al. 2003). Because the EU aimed for the increasing integration of the member countries and the Schengen agreement of 1985 encouraged freedom of movement between countries, the harmonisation of healthcare services was found to be desirable (Lüschen et al. 1997). An example of European harmonisation was the implementation of the Council Directive 92/85/EEC in 1992 which regulated the safety and health of working pregnant women and new mothers (European Union 1992). Through the financial support of collaborative research by its member states, the Commision of the EU aimed to accelerate harmonisation in selected fields (Kaminsky et al. 1986). As a result, several concerted action projects were initiated to study antenatal care services in Europe.

One of the main projects of the Health Services Research Committee of the EU involved the evaluation of ante-, peri-, and postnatal care systems (Kaminsky et al. 1986). In March 1986 a workshop was held in Brussels within the framework of the Third Medical Research Programme in order to plan a collaborative research project with representatives from ten countries (Blondel 1986). While aiming for harmonisation, specific aspects of care, including efficacy, effectiveness, costs and psychological and social impact, had to be evaluated. Three collaborative projects were decided on: neonatal care for the very low birth-weight infant; management of spontaneous labour in primiparous women; and screening during the antenatal period. The project on screening involved a “review of existing screening procedures, development of a general protocol of evaluation and a pilot testing of this protocol on one specific screening procedure” (Kaminsky et al. 1986 p. ix).

As a consequence, two gynaecologists, Heringa and Huisjes (1988a, Heringa & Huisjes 1988b), systematically evaluated existing screening procedures in antenatal care programmes in EU countries through a survey and a literature review. By use of

a written questionnaire containing 30 procedures, antenatal screening practice in 67 universities and major training hospitals was assessed. Literature was reviewed to investigate the relevance of the clinical problem screened for, how the diagnosis could be made and what intervention was available. The validity, effectiveness and cost-effectiveness of the procedure were looked into at the same time. A wide variation of 11 to 24 routinely performed tests was found between as well as within countries. The hospitals had only five traditional tests in common: blood pressure, glycosuria, weight blood group and rhesus of the mother and fundal height. The narrative literature review showed however that, for multiple reasons, evidence of the effectiveness of many procedures was lacking. These reasons included the lack of studies undertaken, the low sensitivity and specificity of the test, low predictive value, unclear criteria for normal and abnormal results, the lack of a gold standard of diagnosis, the lack of options for effective treatment and finally the influences of contextual factors, for example the gathering of necessary information from women (Chapter 3.4). The authors concluded that "the benefits of routine screening, especially in a low-risk population, are probably overestimated and the disadvantages under-valued" (Heringa & Huisjes 1988b p. 840). The findings of this study however were not representative of the content of routine (low-risk) antenatal care, as only obstetricians in tertiary hospitals were surveyed. The large variation of screening procedures and lack of evidence of their effectiveness, however, confirmed the findings of earlier studies. Therefore, as in the case of Fraser (1983), further study on the effectiveness of antenatal care was recommended.

Despite this ambivalence towards the lack of existence of a causal relationship between content of antenatal care and pregnancy outcome, in May 1994, the project "Barriers and Incentives to Prenatal Care in Europe" was launched. This project addressed the utilisation of antenatal care, in particular factors relating to its under- and overutilisation (McQuide et al. 1998, Delvaux et al. 1999, Hemminki et al. 2001). The project was based on the premise put forward in prior epidemiological studies, that uptake of antenatal care improves pregnancy outcomes (Fraser 1983) Chapter 3.4.1). Seventeen countries were involved in the project: Austria; Belgium; Denmark; Finland; France; Germany; Greece; Italy; Ireland; Luxembourg; the Netherlands; Portugal; Spain; the UK; Sweden; Hungary and Norway.

Within the framework of the project, several descriptive studies were carried out. Delvaux et al. (1999) studied the attendance at antenatal care appointments in the countries involved in the study, including non attendance and late attendance. Incentives and benefits relating to antenatal care attendance were addressed by McQuide et al. (1998) in another descriptive study. Non-attendance varied between 0.5% and 2.6%, and late attendance (after 15 weeks) between 3.1% and 29.2%. On the other hand "over utilisation" (more than 12 visits) was reported. Although all countries offered incentives (national health insurance payment, paid maternity leave) to attend, there was not found to be a relationship between incentives and the degree of attendance. Women who attended antenatal care early and frequently however had different demographic characteristics to women who did not attend or attended late. Most women with inadequate antenatal care were likely to be either young disadvantaged mothers (less than 20 years of age, not highly educated and lacking a regular income) or older experienced mothers (already having had four children or more). None of the studies, however, surveyed women themselves regarding reasons for non- attendance, although it could be that their reasons relate to a lack of effectiveness of the content of antenatal care. Despite the fact that effective care results from the three factors of the intervention, the client and the care provider (Sackett 1980), not all of them were taken into account in these evaluations.

As another part of this project, Hemminki et al. (2001) tried to link several organisational aspects of antenatal care provision to utilisation and PMR. This study, like the others in the project, solely used demographic and epidemiological data to meet the objectives. Despite the large variety of antenatal care services, all were equally effective with regard to PMR. Additionally, cross-cultural comparisons were difficult due to the the large variety of content of antenatal care in Europe and lacking epidemiological data. The researchers therefore concluded that more information was needed on the relationships between the organisation, content of care, health outcomes, the use and provision of the services and women's background statistics. None of the studies however mentioned the possibility of a different approach to evaluation, such as a combination of epidemiological with biological and sociological research as had been mentioned (Hall 1992), and thus the focus on existing indicators also remained.

The EuroNatal study (Glossary) started in 1996 and aimed to determine the validity of PMR as an outcome indicator for the quality of antenatal and perinatal care, and involved an investigation of differences in registration practices as well as of risk factors influencing perinatal mortality. Consequently, it was assumed that a 25% reduction in PMR could be achieved by improved standards of care (Amelink-Verburg et al. 2000, Richardus 2004). The study was the concerted action of 11 countries; Belgium, Denmark, the UK, Finland, France, Germany, Greece, the Netherlands, Norway, Portugal, Spain and Sweden (Richardus et al. 1997). Perinatal auditing on individual cases of perinatal death was used to determine avoidable factors, and whether it could have been prevented through other courses of action. This mode of epidemiological evaluation has a long tradition in Europe in determining the quality of perinatal care, based on the assumption that antenatal care is effective and therefore causally related to epidemiological outcome. There is, however, insufficient proof of this relationship (Chapter 3.4.2).

PMRs from all participating countries were obtained from national and Eurostat (Glossary) publications. These statistics were then adjusted to WHO criteria (stillbirths and first week deaths of live births at ≥ 28 completed weeks and ≥ 1000 g), as national criteria differed (Graafmans et al. 2001). The audit involved 1619 anonymous cases of perinatal deaths (90% of all deaths) between 1995 and 1998 (Richardus et al. 2003). Cross-national differences in the quality of care were linked to the prevalence of factors of perinatal death and the content of clinical guidelines and their implementation. In 715 (46.3%) cases, factors of suboptimal care were identified that possibly contributed to perinatal death. Half of them related to the antenatal period, in which major contributors were failure to detect and effectively treat intra uterine growth retardation (IUGR) as well as maternal smoking (Chapter 3.4.2). Improvement in the quality of antenatal care was thus recommended, with a particular emphasis on the identification of the determinants of high quality care delivery (Richardus et al. 2003). While the international reliability of PMR as an indicator was studied (Richardus et al. 1998), its validity as indicator of performance of care was not addressed.

Determination of effective content also requires, however, valid, reliable and comparable indicators for measurement. The PERISTAT (Glossary) project was

funded by the EU in order to develop indicators for monitoring and describing perinatal health and care in Europe as part of the European Commission's Health Monitoring Programme (Zeitlin et al. 2003*)*. The main concern was the comparability of pregnancy outcomes in Europe. Fifteen countries were involved: Austria; Belgium; Denmark; Finland; France; Germany; Greece; Ireland; Italy; Luxembourg; the Netherlands; Portugal; Spain; Sweden; and the UK. The project started with a review of existing international and national perinatal health indicators by European experts in maternity care. Following this a Delphi consensus process with a scientific advisory committee (clinicians, epidemiologists and statisticians as well as a panel of midwives) was carried out.

Four categories of indicators were determined: foetal/neonatal health; maternal health; demographic, socio-economic and behavioural factors associated with health outcomes; and health services. The indicators were then labelled as either "core", "recommended", or "further development needed". Despite the inclusion of most stakeholders in maternity care, other than women, and their overall agreement, most of the traditional indicators (for example PMR and MMR, based on WHO definitions) remained. While most of these indicators were measured after birth, considerations about process indicators, for example in antenatal care, were hardly reported. Although a few indicators in regard to women ("support to women" and "maternal satisfaction") were reported, there was a lack of adequate information and therefore they could not be used (Zeitlin et al. 2003, Bréart et al. 2003). Further development was recommended but concrete procedures were not defined.

After the committee had determined definitive indicators, a feasibility study was carried out in the countries involved to assess their use in practice, although this study did not address the relationship between indicators and the performance of the services. The study showed that some of the indicators were not available in all countries, that demographic differences influenced their value (Bréart et al. 2003), and that for some indicators different definitions were used (Lack et al. 2003). Like the EuroNatal study, this study addressed the international reliability and comparability of the, mainly epidemiological, indicators, but barely considered validity in regard to reflection on either performance or the complexity of care.

In addition to these concerted action projects, several comparative cross-national studies involving European countries were undertaken as private initiatives. Some of these studies involved Europe only, while others involved a comparison with the USA, Canada, and Australia. Several studies compared international differences in obstetric management of term birth and the use of obstetric interventions (Notzon 1997, Alran et al. 2002). Like Heringa and Huisjes (1988a, 1988b), Langer, Caneva & Schlaeder (1999) surveyed the clinical content of routine antenatal care programmes in nine arbitrarily selected hospitals in eight western European countries between October 1992 and November 1993 using questionnaires. Likewise, large variations in the number and timing of the visits and clinical examinations were found. More systematic evaluation of these examinations was recommended, which also needed to address the reduction of medicalisation and improvement of the well-being of mothers and their children. A concrete approach to this evaluation, however, was not proposed.

Others compared recommendations in guidelines, as evidence-based national guidelines were considered to be important initiators in the establishment of effective practice. Haertsch et al. (1999) analysed the content of seven antenatal care guidelines in four countries (USA, Canada, Australia and Germany) with similar maternal and perinatal outcome. Sixty-nine recommendations were found, although the guidelines had only four recommendations in common: measurement of blood pressure; haemoglobin assessment; the determination of syphillis serology; and the determination of hepatitis B status. Other than in the measurement of blood pressure, these procedures differed from the findings of Heringa and Huisjes (1988a, 1988b). The majority of the recommendations Haertsch et al. (1999) found related to clinical tests and screening (54%), while the remainder addressed health screening and promotion (26%), education in pregnancy (11%) and organisational aspects (9%). Educational procedures were not mentioned in the German guidelines, although research evidence showed positive effects, for example in reducing smoking during pregnancy. Despite the rise of evidence-based practice, some of the guidelines were still based on expert opinion. Haertsch et al. (1999) therefore recommended integrating research evidence into guidelines, although at the same time they noticed that some of them not only served the purposes of effective clinical practice but also, for example, health insurance. This finding however raises the question of whether

national and cultural factors interfere with, or are necessary for, the provision of effective content in antenatal care.

The findings and recommendations of all of these studies had a recurring format, in that more studies were needed as existing ones had failed to provide evidence of effectiveness for most interventions (Chapter 3.4) and some data were not available in each country. These projects resulted in the development of a large body of knowledge about antenatal care services in the individual European countries. Although evidence of effective content was not established, the studies highlighted relationships between many varying aspects of antenatal care, and the difficulty of studying such aspects in isolation. The epidemiological and biomedical approach to the evaluation of antenatal care was dominant, and different, more complex approaches had not been reported, other than in the WHO study (WHO 1987).

The question of whether one single model or several different models of effective content of antenatal care in Europe exist therefore remained unanswered. This review of cross-national projects in Europe, however, also highlighted some flaws in establishing the effective content of antenatal care and harmonising this content between European countries. Although most stakeholders in antenatal care, such as policy makers, epidemiologists, gynaecologists, paediatricians and midwives, were involved, women as the major stakeholders had been excluded. Neither were contextual factors, such as culture, which is particularly highlighted in studies on attendance and non-attendance, included.

Additionally, the manner in which the effectiveness of antenatal care was evaluated was confusing. Most projects addressed effectiveness from the end result, that is to say that a good outcome indicated good content (Chapter 3.2, 33.3), thus demonstrating that varying antenatal programmes in European countries, particularly those within the EU, were equally effective in regard to this outcome. Some projects however studied the provision of content of antenatal care and its influence on outcome, i.e. that good content leads to a good outcome, although indicators of outcome were traditionally fixed (maternal and perinatal mortality and morbidity or related outcomes). Because of this confusion regarding the evaluation of

effectiveness, the concept of effectiveness and its evaluation needed clarification in order to determine the approach of the current study (Chapter 3).

The present state of antenatal care in Europe has been influenced both by the historical development of antenatal care and by knowledge gained through the cross-national evaluation projects. This constituted the context in which the current study was carried out. In the next section, antenatal care in Europe is described, with an emphasis on the three countries involved in the study.

2.4 The current state of antenatal care in Europe: similarities and differences

The current state of antenatal care services in Europe is described in line with four criteria for capturing the characteristics of healthcare systems (Lüschen et al. 1995), which were adapted to antenatal care accordingly. This resulted in the following elements;

1. Maternity care profile	health expenditure birth rate, PMR, MMR
2. Organisation of healthcare	system, care providers, content of care
3. Healthcare financing	health insurance
4. Legislation and regulation	state, regions

The following description was based on the latest available demographics of the European countries in the WHO's "European Health For All Database" (WHO 2006b). The data for the countries involved in the current study (Table 1) were extracted from different databases, as none of them included all data for all three countries. Although a period from 2000 to 2004 was addressed, these numbers remained stable for each country. As the UK involved all British countries in this database, these data were used, if information about Scotland specifically was unavailable.

2.4.1 Maternity care profile

Healthcare expenditure in Europe in 2002 varied from 3.3 of the Gross Domestic Product (GDP) in Tjazikistan to 11.2 % in Switzerland (WHO 2006a), which in real

terms meant between 47 and 3446 United States Dollar (USD) per person per year. The lowest health expenditure in Western Europe was in Luxembourg (WHO 2006a). Health expenditure in the countries involved in the current study is described in Table 1. A comparative study of health in six Western European countries however noticed national priorities for health expenditure: while Germany spent most money on prescribed drugs, most money in Belgium was spent on ambulatory care (Lüschen et al. 1995).

In 2003, the live birth rate in Europe was 11 per 1000 population, whereas in the European Union this rate was 10.37 births per 1000, ranging from 8.56 in Germany to 15.46 in Ireland (WHO 2006b). In the same year, PMR within the European Union ranged from 3.42 per 1000 births in Finland to 8.48 for the UK. PMR was 7 per 1000 births in Switzerland. The mean was 6.43 for the countries of the European Union only, but 8.53 per 1000 births for the European Region (WHO 2006b).

MMR in the European Union in 2003 ranged from 2.6 per 100.000 live births in Austria to 7.62 in the UK. In Switzerland MMR was 5.1 per 100.000 births. The mean was 5.25 for the countries of the European Union, whereas it was 16.19 per 100.000 live births for the whole European Region (WHO 2006b). The birth rates, PMR and MMR for the countries involved in the current study were similar (Table 1).

2.4.2 Organisation of healthcare

The organisation of healthcare systems in Europe had been described in different studies through the use of several terms which are actually synonymous. Schmidt (1986) distinguished between state and private systems, while the WHO (1987) described these as monopolistic and pluralistic, and Hemminki et al. (2001) as dominant and parallel. In a dominant system, care was organised and provided by the state (for example Sweden, Russia, Yugoslavia, Finland), which also employed care providers. No other private choice was available for the client. In parallel systems, choices were available, as care was organised by several care providers (for example Belgium, Luxembourg, Switzerland). A mixture of both systems (for example Denmark, France, the Netherlands and the UK) was described as an

intermediate system (Schmidt 1986). The “borderline” between different systems however “remained hazy” (Hemminki 2001 p. 146).

In a dominant system, the main care providers were determined by the state, whereas in other systems, the choice of care provider was based on a free market mechanism, and thus decided by the client. Care providers in Europe were usually contracted by the state, institutions affiliated to the state (for example the National Health Service in the UK) or by insurance companies (for example in the Netherlands and Switzerland). The number of hospitals, however, as well as professionals offering healthcare varied cross-nationally in 2003 (Table 1).

Antenatal care in Europe was mainly provided by three professional groups; GPs, gynaecologists and midwives. Other care providers, for example nurses or health visitors, completed the maternity care system (Hemminki et al. 2001), although little was known about these groups of providers in regard to antenatal care. The number of GPs varied from 13.98 per 1000 population in Uzbekistan to 166.45 in Finland, and midwives from 11.96 in the Netherlands to 119.05 per 1000 population in Azerbaijan. The number of gynaecologists differed between 5.04 in the Netherlands and 27.26 per 1000 population in the Russian Federation (WHO 2006b). Often, the care provider responsible for antenatal care also provided care during childbirth (Blondel et al. 1985). The numbers of GPs, midwives and gynaecologists varied between the countries in the current study (Table 1).

Gynaecologists were the principal providers of antenatal care in most EU countries, although in some countries GPs, midwives and nurses were also involved in its provision (Blondel et al. 1985, Hemminki et al. 2001). The role of midwives has been extended in several countries, particularly during the last decades of the 20th century, including legalisation of their competencies (Hall et al. 1985, Departement of Health (DoH) 1993, EDI 1996, Heringa 1998). The WHO study of 1987, however, reported that more midwives were involved in antenatal care in monopolistic than in pluralistic healthcare systems, particularly in regard to the social and educational aspects of care. In pluralistic healthcare systems, such aspects were reduced, and medical tasks were transferred to GPs, gynaecologists and nurses.

The study also reported that many women had little knowledge of what midwives actually did.

In two of the 15 countries surveyed by Hemminki et al. (2001), midwives were the lead professionals in routine antenatal care, which included public health nurses in Finland. In these two countries (for example the Netherlands), care with a gynaecologist was reserved for women with a complicated pregnancy. Midwives also had an important role in the shared care system in Denmark, where responsibilities in antenatal care were shared between care providers, based on expertise and facilities. In the UK however, shared care meant that routine antenatal care visits were shared between a community-based clinic, most often the GP's surgery (by GP or midwife), and the hospital (by consultant or midwife) depending on the aims of the visits (Hall et al. 1985; Scottish Executive Health Department 2001). Sharing care meant that two visits took place in the hospital while the others were carried out in the community. The institutions responsible for the organisation of antenatal care as well as the main care providers in the countries involved in the present study are described in Table 1**.** Continuity of care (ante-, peri- and postnatal) was provided in the Netherlands, although Hemminki et al. (2001) mentioned that this continuity was only found in the four countries of Denmark, Belgium, France and Greece. The number of antenatal care visits and their content is described in *Legislation and regulation* (Chapter 2.4.4).

2.4.3 Healthcare financing

Antenatal care services in EU countries were paid for either with income from taxes (for example in the UK), or through public health insurance (for example in the Netherlands) (Hemminki et al. 2001). In these systems care providers billed the finance institutions directly ("tiers payant"). Most countries offered the option of supplementary private insurance. Switzerland however had a system only of private health insurance, which meant that clients were billed by care providers and refunded by the insurance company ("tiers garant" or "out-of-pocket system") (EDI 1996). These differences in financing however hardly affected antenatal care, as this was provided free or at low cost in all EU countries (Hemminki et al. 2001) as well as in Switzerland.

2.4.4 Legislation and regulation

The WHO study of 1987 reported on the existence of guidelines with recommendations for content of antenatal care in 18 of 23 European countries. Twelve countries had detailed national regulations, while in the other six countries more general recommendations originating from university hospitals existed. Differences, however, were found between the guidelines and practice. Other studies reported on a lack of consistency in the content of guidelines within or among countries and a lack of evidence-based foundations for the guidelines (Haertsch et al. 1999) (Chapter 2.3).

In the countries involved in the current study, the provision of antenatal care (number of visits and content of care) was regulated by either a national or professional guideline (Table 1). This guideline was defined in most detail in Scotland and least detail in Switzerland (Chapter 2.2). The guidelines in Scotland and the Netherlands were based on the latest research evidence (Scottish Executive Health Department 2001, Nederlands Vereniging voor Obstetrie en Gynaecologie (NVOG) 2002), but varied in some respects, such as the number of ultrasound scans and screening for foetal anomalies. The differences highlighted the influence of other national and professional regulations and guidelines, for example the Wet Geneeskundige Handelsovereenkomst (WGBO) (Act on Medical Treatment) and the Wet op Bevolkingsonderzoek (WBO) (Act on Population Screening) in the Netherlands (Heringa 1998). In the Netherlands, routine population screening tests for incurable illnesses or abnormalities had to be officially licensed by the state. Therefore a woman had to be supplied with the right information about options in care (WGBO), without offering a population-screening test (WBO) (van Huis 2004). Variations in the guidelines were also found in antenatal care practice in these countries (Huch 1997, Wildschut et al. 1999, Holzgreve & Hösli 2003).

The number of antenatal care visits varied between the countries in the European Union during the 1980s and 1990s (Blondel et al. 1985, Heringa & Huisjes 1988b, Langer et al. 1999). The number of antenatal care visits in the European countries involved in the study was similar and varied between five and nine in 2004. Based on the guidelines, the number of antenatal care visits was highest in Scotland (nine) and lowest in the Netherlands (five to seven), and varied in Swiss practice from

seven to 17 (Table 1) (Huch 1997, Hebammenpraxis Zürcher Weinland 2003, Holzgreve & Hösli 2003).

The content of these visits traditionally consisted of urine testing, blood pressure monitoring, abdominal palpation and foetal auscultation (Oakley 1984, Heringa 1998). Previous evaluation studies, however, emphasised antenatal screening procedures (tests) for which the criteria laid out by Wilson and Jungner (1968) were used (Chapter 3.4). Overall agreement was found regarding the traditional screening tests and ultrasound, while little remained known about non-medical aspects, including the care-providing relationship (Butter 1986, Reid 1986, Heringa 1998, Haertsch et al. 1999). In each of the countries involved in this study, the traditional content (blood pressure, urine analysis, fundal height and foetal presentation) was repetitively applied.

Table 1. Overview of the antenatal care services in the three countries

Subject	**Netherlands (NL)**	**Scotland (SL) (UK)**	**Switzerland (Confederatione Helvetica (CH))**
Population 2003	16.225303	5.078400	7.339002
Health expenditure in GDP per person (USD))	8.8/ 2564 [1]	7.7/ 2160 [1]	11.2/ 3446 [1]
Number of hospitals per 100.000 population	1.22 [2]	? [2]	4.82 [2]
Number of GPs per 100.000 population	50.59 [2]	65.09 [2]	63.95 [2]
Number of gynaecologists per 100.000 population	5.04 [2]	? [2]	14.65 [2]
Number of nurses per 100.000 population	1366.9 [2]	669.07 [2]	1075 [4]
Number of midwives per 100.000 population	11.96 [2]	62.46 [2]	28 [4]
Birth statistics per 1000 population	12.34 [2]	10.6 [2]	9.79 [2]
MMR per 100.000 population	3.99 [2]	7.62 [2]	5.1 [2]
PMR per 1000 births	7.37 [2]	8.4 [3]	7 [2]
Sources of maternity statistics	1. National statistics (Centraal Bureau voor Statistiek (CBS)) 2. Joint national registration primary and secondary care providers (Landelijke Verloskundige Registratie (LVR))	1. National statistics 2. NHS through several institutions 3. Confidential Enquiries into perinatal/maternal deaths	1. National statistics (Bundesamt für Statistik (BFS)) 2. Statistics women' clinics: (Schweizerische Gesellschaft für Gynäkologie und Geburtshilfe (SGGG)) 3. Statistics birth centres 4. Statistics of independent working midwives

Subject	**Netherlands**	**Scotland (SL)**	**Switzerland**
Organisation of care	State: law/insurance companies with healthcare professions	NHS/Scottish Executive Health Department	State: law/cantons/ insurance companies/ healthcare professions
Official legislation of antenatal care programme	1932	1929	1964
Topics in antenatal care reforms (historically)	Maintenance of divisions of echelons	Healthcare for all in need	Decentral organisation and choice in care
Main care provider in routine antenatal care	Midwife Possibly GP/Gynaecologist	Shared care: GP/midwife/ Gynaecologist Possibly private care with midwife or gynaecologist	Gynaecologist Possibly GP/midwife
Number of antenatal care visits	7 for primigravida 5 for multigravida	9	7
Regulation of antenatal care	Interdisciplinary guideline on routine antenatal care (NVOG 2002, NVOG 2004)	A framework for maternity services in Scotland (Scottish Executive Health Department 2001)	Law on health insurance (Krankenver-sicherungsgesetz) (KVG) (EDI 1996))
Consumer involvement	Consumer organisations increasingly since the 1990s	Consumers through NHS committees, increasingly since the 1970s/ 1980s	Consumer organisation incidentally

1. World Health Organisation Regional Office for Europe (WHO 2006a). Data from 2002.

2. World Health Organisation Regional Office for Europe (WHO 2006b). Data from 2003.

3. General Register Office for Scotland (2005). Data from 2004.

4. World Health Organisation (WHO 2007). Data from 2000.

2.5 Conclusion

In this chapter the historical development of the content of antenatal care, European projects aiming at its evaluation and the current situation are described. Although the origins of antenatal care were internationally similar, further historical development during the 20th century varied in each country. Reduction of PMR and MMR was the common formal aim, and was largely influenced by preventative medicine. Several factors played a role, such the role of medical practitioners and midwives and the influence of the state and consumers. Each role however was emphasised in a different way in each country.

The systematic evaluation of antenatal care services in Europe started the end of the 1970s, as a result of a call for the evaluation of healthcare services in English-speaking countries. Several large projects were initiated by both the Regional Office for Europe of the WHO and the EU, with the aim of establishing effective content of care and consequently harmonisation of this content and services. Although a great deal of information was generated, a specific effective content of antenatal care could not be established. Recommendations therefore involved an increase in studies (particularly RCTs) and the collection of missing epidemiological and biomedical data. The review of these projects highlighted a failure to take into account the views of women and contextual factors. Additionally, it was noticed that there was a need to clarify the varying modes of evaluation of effectiveness (Chapter 3).

The current maternity healthcare profile for European countries varies but is similar for the countries involved in the current study (Table 1). All countries had guidelines on the provision of antenatal care, but the responsibility for these guidelines, as well the degree to which details were regulated, varied. Although antenatal care was free or at low cost in all EU countries and Switzerland, differences were noticed in its organisaiton. Whereas gynaecologists were the lead professionals in most EU countries, midwives were responsible for antenatal care in the Netherlands, and in Scotland antenatal care responsibility was shared. Antenatal visits consisted of a large number of examinations which varied widely throughout the EU countries. The diversity was most noticible in regard to serologic screening and screening for foetal anomalies. Agreement was found on the traditional content of antenatal care, as was the lack of knowledge on non-medical aspects and women as consumers. In

order to pursue the aim of the current study which is carried out within this context, the evaluation of effectiveness needed clarification, and this is addressed in the next chapter.

CHAPTER THREE- EVALUATION OF EFFECTIVENESS

3.1 Introduction

Over the last few decades, the evaluation of the effectiveness of maternity care services had been an important topic, which also affected antenatal care in Europe. Policy makers and care providers had expected to find evidence of the effectiveness of one specific model of content of antenatal care for all countries and settings (Chapter 2.3). Despite their efforts, however, one specific model was not found and different content of antenatal care had been shown to be equally effective in regard maternal and perinatal mortality and morbidity (Chapter 2.3, 2.4).

The review of European evaluation projects on antenatal care showed that the way effectiveness was evaluated needed to be clarified in order to pursue the aim of the current study (Chapter 2.3, 2.5). Therefore an analysis of evaluation studies in antenatal care was carried out in the second part of the literature review. Initially Medline, CINAHL, Psychlit and the Cochrane Database of Systematic Reviews were consulted for articles between 1996 and 2001 (Chapter 3.4, Appendix 2). The number of studies found was immense, and in them a large variety of procedures and packages, as well as single interventions, were evaluated. While several evaluation methods were identified, the use of the term “effectiveness” was confusing because of a lack of specification.

The next sections explain the four steps taken to enable the analysis of the evaluation of effectiveness in antenatal care: 1) analysis of definitions of effectiveness in dictionaries in order to determine an operational concept (Chapter 3.2); 2) analysis of the application of this concept as well as related evaluation methods in two different exemplary disciplines (technology/industry and education) (Chapter 3.3); 3) review of the evaluation literature on the effectiveness of antenatal care (Chapter 3.4); and 4) analysis of the application of the concept of effectiveness and methods used in this evaluation literature, and comparison with the results of Chapter 3.3 (Chapter 3.5). Consequently in Chapter 3.6, conclusions are drawn with regard to the methodological approach needed for the current study. Primarily, therefore, an operational concept of “effectiveness” had to be determined.

3.2 The concept of effectiveness

If concepts in healthcare, such as effectiveness, are not well-defined, concept analysis is used as a systematic way to clarify meanings and identify their main attributes (Rodgers 2000a). Concept analysis allows a shared understanding of a concept, which facilitates communication and operationalisation. Although different approaches to concept analysis had been described, all of them had basic procedures in common (Rodgers 2000b, Bidmead & Cowley 2005). In order to achieve the objectives of the current study, the use of the concept of effectiveness and evaluation methods in antenatal care was analysed through the use of the procedures described in Table 2. In line with these procedures, definitions of effectiveness in dictionaries are analysed in the present section in order to determine an operational concept.

Table 2. Procedures used in the analysis of the concept of effectiveness and its evaluation

1.Identification of the concept of effectiveness and associated expressions
2.Selection of appropriate settings and samples for data collection relating to the concept
3.Collection of data for the identification of attributes of effectiveness as well as its contextual basis (including antecedents and consequences)
4.Analysis of data regarding the above characteristics of effectiveness
5.Analysis of the application of the concept of effectiveness and evaluation methods in two different disciplines (Chapter 3.3)
6.Identification of concepts related to effectiveness in these disciplines (Chapter 3.3)
7.Analysis of the use of effectiveness in the evaluation of the content of antenatal care (Chapter 3.4, 3.5)
8.Analysis of the application of the concept of effectiveness and evaluation methods used in antenatal care, and comparison with the results of point 5 (Chapter 3.5)
9.Identification of implications for the methodological approach in the current study (Chapter 3.6)

While focusing on determining an operational concept of effectiveness, available general and specialised dictionaries in all three languages were searched, both on-line and by hand in local libraries, with the search terms “effectiveness”, “effective” and “effect” as well as the related terms of “efficacy” and “efficient” (Appendix 2) being used. Similar Dutch and German terms were used. In the following sections, attributes and related terms, antecedents and consequences and referents are described.

3.2.1 Attributes and associated expressions

Effectiveness was related to “effective”, which was based on the term “effect”. All the dictionaries consulted contained a definition of “effective”, but not all contained one for “effectiveness”. Some mentioned “effectiveness”, but referred to “effective” for a description, others did not mention one of these terms at all (Longman 1984, Allen 1990, van Sterkenburg 1996, Dudenredaktion 2002).

The word “effective” was defined as having an effect or result (Simpson & Weiner 1989, Urdang 1989, van Sterkenburg 1996, Dudenredaktion 2002). Both “effective” and “effect” are derived from the Latin verb “efficere”, meaning that some kind of action or performance must be carried out and something be accomplished as a result in order to be effective (Hanks 1979, Simpson & Weiner 1989). These operational aspects were also emphasised in the Latin form “effectus” or through the relationship of “efficere” with “facere” (“to do”) (Hanks 1979).

Thus, “effectiveness” was a characteristic of an agent (for example an instrument, intervention or service), whose performance produced a result (“effect”). As the effect often happened at the end of a process, “outcome” had been used as a synonym for this (Chapter 3.3.1). “Effect” however was the result of an agent's performance, which could also happen during a process. The three medical dictionaries consulted described “effectiveness” specifically as a result of a therapy or treatment (Churchill Livingstone 1989, Stedman 1995, Dorland 2000). Therefore, a causal relationship between performance and effect had to exist, in which a difference was noticed between the situation before and after the performance of the agent (Chapter 3.2.3). Although general dictionaries lacked a specific description of this difference, most commonly described was that the effect was positive,

successful or beneficial. The medical dictionaries consulted mentioned that health had to be improved and disease reduced through cure or control. Due to the positive character of the effect, sometimes the word “quality” was used as an alternative (Chapter 3.3.1). Although both terms had similar characteristics, proof of effectiveness of performance had to be available, before quality could be determined.

Furthermore, “effective” was applied to the experience of actual, existing reality rather than a theoretical experiment (Encyclopedia Brittanica 1986, van Sterkenburg 1996, Fowler & Burchfield 1998, Dudenredaktion 2002). In the medical dictionaries, “effectiveness” was determined in an average (standardised) clinical environment (Stedman 1995).

“Efficacious”, “efficient” and “effectual” were sometimes used as synonyms. All these terms referred to something having an effect, but with slight variations in meaning (Fowler & Burchfield 1998). “Efficacy” was the most commonly used synonym for “effectiveness”, but referred to the power or ability of an agent under ideal theoretical conditions, and thus had to be known before “effectiveness” could be investigated (Chapter 3.2.2). Similarly, “effective” was used to describe the possible (theoretical) power of an army of soldiers or sailors fit and prepared for warfare. “Effectual” highlighted the real, decisive effect of a performance (for example putting a definitive end to an illness) (Longman 1984). “Efficiency”, on the other hand, involved a minimum waste of time or energy while at the same time achieving the desired effect or result (Allen 1990, Stedman 1995, Fowler & Burchfield 1998).

3.2.2 Antecedents

The presence of an aim that defined the desire or intent of the effect was an important characteristic of effectiveness (Urdang 1989, Allen 1990, Fowler & Burchfield 1998). According to Chalker and Weiner (2003), “to effect” described a goal-directed action performed by a certain agent. Accordingly, Churchill’s Illustrated Medical Dictionary (Churchill Livingstone 1989) defined the “effectiveness” of a drug or agent as the achievement of its therapeutic purposes. If

there was no effect, this was described as “effectless”, “useless”, or “impotent” (Johnson 1979).

Effectiveness was most often combined with another noun or adjective, which described this purpose of action. “Cost effectiveness” was a combination used as a synonym for efficiency, which involved a positive effect on costs. Other combinations found were, for example, “organisational effectiveness”, “clinical effectiveness” or “treatment effectiveness”. Some medical dictionaries described the combination “relative (biological) effectiveness”, which involved the comparison of the biological outcomes (“ratio of biological effects”) of two different therapies, instead of a “with/without” comparison of effects.

The resulting effect of a performance therefore was something that was normally expected from an agent (Encyclopedia Brittanica 1986, Dorland 2000). In order to achieve objectives, the ability and power of the agent in question, details of its performance, the object involved, and what normally happened (including the effects) had to be known beforehand (Johnson 1979, Encyclopedia Brittanica 1986, Allen 1990). As “effectiveness” involved performance in reality rather than an ideal theoretical environment (Chapter 3.2.1), knowledge of this real context should be available.

3.2.3 Consequences

Historically, the term “effect” was linked to the term “affect”, which referred to the consequences of the performance. Although some regarded "effect" as a misuse of the term “affect”, similarities were noticed (Grant 1931-1975, Simpson & Weiner 1989). Both “effect” and “affect” were defined as the result of an agent or action bringing about a change and having an influence on things. The result was thus related to the objectives of the performance (Chapter 3.2.2). “Effect” however was more generally used and therefore could be any kind of change, whereas “affect” emphasised an influence on emotions and feelings, which is probably the reason why “affect” was rarely used outside the discipline of psychology (Urdang 1988).

According to Simpson and Weiner (1989), “effectiveness” resulted in “effects”, which influenced various senses. In an artistic context, effectiveness was used to

describe something which had an impressive effect on one's sensory perception (Pollard & Liebeck 2000). Through observation of the difference before and after the performance, effects, and thus effectiveness, could be measured. These effects however sometimes induced a longer lasting change process and therefore sometimes the word "impact" was used as an alternative to "effect" (Chapter 3.3.1).

3.2.4 Framework and definition

The framework of antecedents, attributes and consequences of the concept of "effectiveness" that resulted from the analysis of the various dictionary definitions is presented in Table 3.

Table 3. Framework of the concept of effectiveness: attributes; antecedents and consequences

Sources	**Antecedents**	**Attribut**es	**Consequences**
General dictionaries	Intention/Aim Knowledge about: agent; performance; involved object; possible effects; indicators of this effect; context	Agent Performance Positive achievement Existing reality	Perceivable by senses Can be measured Impact on other processes
Medical dictionaries	Improving health, curing/ controlling disease (outcome-based) Knowledge about: agent; standardisation; outcome	Different agents Performance Positive achievement Standardised clinical environment	Improved health, cured or controlled disease

“Effectiveness” had been defined as a characteristic of an agent which, through its performance in a real-life situation, produced a positive result. The performance of the agent was thus causally related to this result. Antecedents involved the presence of an aim based on this performance, and knowledge of agent, its performance, the nature and status of the object to be influenced, the possible effects of the performance, and the context in which the performance takes place. Consequently, the effect was a successful, positive achievement of the aim that was measurable. The effect could have an incidental longer lasting impact on the situation of the influenced object.

The analysis of definitions in the medical dictionaries showed how the perspective of a particular discipline influenced this framework (Table 3). Characterising “medical effectiveness” were the same aims and consequences for varying agents

(for example therapies, services), and standardisation of the environment. Despite the relevance of “medical effectiveness” for antenatal care, the medical perspective might also have been one of the reasons why evidence of effectiveness of antenatal care had not been found so far. Throughout this chapter, therefore, the concept of effectiveness from the general dictionaries (Table 3) is used for analysis and comparison. In the next section, the application of this concept and methods used to evaluate effectiveness in industrial technology and education are analysed.

3.3 Evaluation of effectiveness in the disciplines of industrial technology and education

“Effectiveness” was a term used in several disciplines. In EDINA Index to the Times, from 1912 onwards, “effectiveness” was most often used in articles on warfare. While a long history of the evaluation of effectiveness was noticed in technical disciplines, the use of the term “effectiveness” in the evaluation literature of the humanities intensified only during the second half of the 20th century. “Effectiveness” was increasingly mentioned after 1970 in healthcare evaluation in Medline, whereas in education, the combination of “effectiveness” and “evaluation” in ERIC first appeared in 1977.

In order to analyse the application of the framework (Chapter 3.2.4) and methods used to evaluate effectiveness, databases of the two exemplary disciplines of industrial technology (EDINA Ei Compendex) and education (ERIC) were consulted. Industrial technology was chosen based on its long tradition of evaluating the effectiveness of technical interventions, while education had developed new ways of systematic evaluation during the last three decades, in which human and contextual factors were integrated (Norris 1978, Yorke 1989). Consultation of the EDINA Ei Compendex and ERIC for studies between 1996 and 2001with the key words “effectiveness”, “evaluation”, “programme evaluation” and “measurement” (Appendix 2) resulted in 403 publications. Their analysis is described in the following sections.

3.3.1 Attributes and associated expressions

Most publications in the EDINA Ei Compendex, the database of industrial technology, focused on the performance (operation, action) of an instrument, service or even evaluation method, which had to be evaluated. Usually single interventions, programmes or agents were addressed. Instead of “effectiveness”, the commonly used alternatives were “performance measurement”, “performance assessment”, “performance evaluation” (Enstrom et al. 2000, Benjafaar & Ramakrishnan 1996), and also “outcome”.

Evaluation in education also focused on performance. Little, however, was usually known about the details of the performance of a programme as these interventions were complex. This lack of knowledge influenced the method of evaluation (Chapter 3.3.4). Synonyms used for effectiveness were “quality” (Tarter & Hoy 2004) or “impact”, referring to the fact that education did not always result in a particular measurable end effect, but often had long lasting influences on the developmental process of a human being (Rosenthal 2000).

3.3.2 Antecedents

Only in industrial technology, was knowledge about the performance of a single agent or instrument usually available before its effectiveness was evaluated. This information was gained through testing this agent in an experimental design under laboratory conditions (an “efficacy trial”) before putting it into practice. As in the framework of effectiveness (Chapter 3.2.4), aims for use of the agent were defined based on this knowledge.

The aims were different for the evaluation of varying agents and performances as well as for the professional disciplines involved. In industrial technology, evaluation of the performance of single agents prevailed, and therefore objectives varied. If a complex situation or system was addressed, multiple objectives were described. In contrast, evaluation in education focused on objectives (in terms of expectations) rather than performance, although these objectives varied between each programme as well as between each component of these programmes. Most studies defined multiple objectives to be evaluated in this way. Based on these objectives, new evaluation instruments were developed. In both disciplines, the objectives

determined the timing, method and indicators for the measurement of the effects (Chapter 3.3.3).

Different combinations of effectiveness were described in EDINA Ei Compendex, such as “shielding effectiveness”, “cost effectiveness” and “display/format effectiveness”. If “effectiveness” was used as a single term, the context and the professional group referred to the perspective from which evaluation was approached. Combinations were also found in ERIC such as “teacher effectiveness”, “programme effectiveness”, “school effectiveness” and “training effectiveness”. Most often, however, simply “effectiveness” was used.

3.3.3 Consequences

In EDINA Ei Compendex, measurement of technical effects was causally related to the performance of an agent, and linked to its objectives (Chapter 3.3.2). Thus indicators of measurement varied. Usually, indicators were quantifiable and measured by use of instruments or measurement scales (determination by reference points or standards). The timing and indicators used depended on the kind of effectiveness aimed for and the objectives of the performance. In education, both quantitative and qualitative indicators were used based on defined objectives. Quantitative indicators contained elements such as costs, input, output and demographics. Examples of qualitative indicators were attitude, behaviour or skills, which were described or measured with existing instruments such as scales. Objects of assessment included the individual performance of teachers as well as students. In both disciplines, a differentiation between product (outcome) and process assessment was described, which had consequences for defining indicators as well as the timing of evaluation.

The most important aspect of evaluation in education was the effect of programmes and services on their clients in which an important role was played by the interaction between the provider and the client. Several factors such as expectations, values and culture influenced this interaction. The study of Willemsen et al. (1999) in an undergraduate psychology programme highlighted how the professorial staff saw their role as being advisory through the provision of information, whereas the students expected more support from them in regard to their careers. These

differences in expectations influenced the objectives of effectiveness, and consequently the methods of evaluation.

3.3.4 Methods of evaluation

Attributes, antecedents and consequences influenced the choice of evaluation method in both disciplines. Industrial technology preferred a quantitative, experimental approach, in which comparative models, such as a “before and after” or “with/without” studies, prevailed. A variety of evaluation methods was used to investigate complex systems, such as the performance of software and travel systems. Primarily, objectives and achievement were defined, along with indicators of measurement, with a focus on the performance of the system. If necessary, evaluation included the context, and quantitative and qualitative methods were combined. Increasingly mathematical models and computer simulation were used for evaluation of complex systems.

In education, the evaluation of complex systems (programmes) was standard rather than the exception, and included context as well as human experiences of providers and clients. The choice of evaluation method was based on defined objectives (Chapter 3.3.2). Most studies used an evaluation package, containing a mixture of quantitative and qualitative methods (for example descriptive case study or auditing), each addressing certain areas of the programme. Comparative models, such as “before and after” and multi-site designs, prevailed. Comparison of two or more school programmes however resulted in the measurement of “relative effectiveness” rather than “effectiveness”. Multiple new evaluation programmes, instruments and indicators were developed over recent decades based on literature reviews or an overall analysis of the actual situation. A few of these procedures showed similarities with total quality management models (TQM) and included benchmarking (Ammerman et al. 1999, Fertman et al. 2000).

3.3.5 Conclusions

The results of the analysis of the application of the framework of effectiveness, and evaluation methods in both disciplines, are described in an overview in Table 4.

Table 4. Analysis of evaluation of effectiveness in the disciplines of industrial technology and education, based on the framework of effectiveness in Table 3.

Sources	**Antecedents**	**Attributes**	**Consequences**	**Evaluation methods**
Technology	Aims/objectives based on knowledge about performance Knowledge about: agent; performance; involved object; possible effects; indicators. Performance possibly tested in efficacy trial Knowledge about context little relevant. If complex, context included in evaluation	Agent Performance central Existing reality Positive achievement related to objectives	Perceivable by senses Can be measured - indicators preferably quantitative Indicators related to objectives and performance Result measured as process or product outcome	Evaluation of single performances. Before-after or with-without studies preferred. Usual exclusion of context Complex systems evaluated by: separate performances; objectives; methods; indicators

	Antecedents	**Attributes**	**Consequences**	**Evaluation methods**
Education	Aims/objectives central (expectations of performance) Indicators based on objectives Knowledge about: programme; providers; clients; context Little knowledge about: objects involved; possible effects Little knowledge about performance.	Agents are complex, varying programmes with a variety of elements Existing reality Positive achievement based on objectives	Perceivable by senses Sometimes hard to measure - quantitative and qualitative indicators Indicators related to objectives Result measured as process or product outcome	Complex systems evaluated by: a variety of objectives; methods; indicators Packages of evaluation methods, often descriptive results Usual inclusion of context

In both disciplines, evaluation aimed to determine effectiveness as the outcome of the performance of an agent (instrument, service or programme). The mode of evaluation however differed in industrial technology, in which knowledge about a causal relationship between performance of an agent and its effects facilitated a linear evaluation of its effectiveness, and the context was of little relevance.

In education however, little was known about the relationship of the performance of a programme to its specific effects, which meant that the antecedents for "effectiveness" (Chapter 3.2.4) were not available. For the approximate evaluation of effectiveness however, comprehensive packages of different evaluation methods addressing a variety of elements (for example human interaction and context) were used. Multiple objectives for each of these elements were defined, and consequently evaluation methods as well as indicators determined.

The results from this analysis of effectiveness and its evaluation in both of these disciplines will be compared with the evaluation of effectiveness in antenatal care. In the next section (Chapter 3.4), the literature review of evaluation studies in antenatal care is presented, and consequently analysed in Chapter 3.5, in which the above results will be used as a reference. Based on this analysis, conclusions will be drawn in regard to the methodological approach needed in the current study.

3.4 Evaluation of effectiveness in antenatal care

In order to investigate the evaluation of the effective content of antenatal care, a review of the literature in this area as well as an understanding of the current approach to evaluation was required. Therefore literature between 1996 and 2001 was searched in four electronic databases (Chapter 3.1). Additionally, referenced books and articles from dates prior to 1996, other databases, and books on antenatal care in local libraries were consulted (Appendix 2). Although studies on women's views were often described as examining the "quality" rather than the "effectiveness" of antenatal care, these are integrated in this review due to their relevance to the current study.

This literature review aims to determine with which methods, and from which perspectives, the effective content of antenatal care had been evaluated during the

20th century in order to be able to define the approach for the current study. The starting point of the review, therefore, is the traditional method of evaluating the effects of antenatal care following its introduction.

3.4.1 The traditional approach to the evaluation of antenatal care

In developed countries it is generally accepted that antenatal care, as it is currently known, had been an effective intervention in making pregnancy safer for women and their children. Following its official introduction in the 1920s and 1930s, the reduction in maternal and perinatal morbidity and mortality rates (epidemiological outcome) during the second half of the 20th century was seen by service providers, as well as researchers, as evidence of effectiveness of these programmes (Oakley 1982, Oakley 1984, Hall et al. 1985) (Chapter 2.2). These assertions were underpinned by epidemiological and observational studies which showed a correlative relationship between improved pregnancy outcomes and both early and frequent antenatal care attendance (Hall & Chng 1982, Fraser 1983, Enkin et al. 2000) (Chapter 2.3). There were two main influences on these findings (Fraser 1983, Hall et al. 1985). Firstly, women with negative pregnancy outcomes (for example premature birth) had fewer antenatal visits. Secondly, socio-economically well-situated women with low-risk pregnancies usually attended antenatal care earlier and more frequently than women with increased medical and social needs (for example teenage pregnancy, poverty). Evidence of a causal relationship between the content of antenatal care and pregnancy outcomes however was not identified (Fraser 1983, Enkin et al. 2000).

At the same time, critical voices claimed that antenatal care was not the sole factor accounting for the improvement in pregnancy outcomes, as changes in social factors had coincided with the development of the antenatal care programmes (Oakley 1982, Hall et al. 1985). This view was particularly underpinned by the unexpected decline in perinatal and maternal mortality and morbidity rates in the UK during the Second World War (Oakley 1984). During this period, pregnant women were treated as a special care group which meant, for example, that, despite food rationing, they received additional dietary supplementation. These epidemiological data, however, remained the main evidence of the effectiveness of antenatal care worldwide during

the 20th century (Enkin et al. 2000, Villar et al. 2001a, Richardus et al. 2003). One of the methods used to bring about this evidence was confidential enquiry.

3.4.2 Confidential inquiries; an approach with tradition

During the course of the 20th century, the auditing of maternal and perinatal deaths was an important method in the collection of evidence of the effectiveness of antenatal care (Oakley 1982, Richardus et al. 2003). In the United Kingdom, confidential inquiries were initiated by Dr. Janet Campbell in an "embryonic" form in her government reports in the 1920s (Chapter 2.2), with the goal of eliminating "avoidable" deaths and injuries (Oakley 1982 p. 7). Medical Officers of Health throughout the country were asked to review the medical histories of cases of morbidity and mortality, classify these cases by cause of death, and identify the presence of avoidable factors according to existing standards of medical care. Recommendations often involved increasing medical interventions, such as the introduction of routine medical care during pregnancy in 1929 (Oakley 1982, Hall et al. 1985) (Chapter 2.2). Only the lack of medical elements in antenatal care were viewed as having negative effects on maternal and perinatal morbidity and mortality rates, while other factors, such as contextual and procedural factors, were hardly considered.

Confidential enquiries into maternal deaths were officially instituted in the United Kingdom in 1952, and from 1992 onwards also covered stillbirths and perinatal deaths. Several other European countries (for example the Netherlands and Switzerland) followed this example and initiated similar confidential enquiries in the second half of the 20th century (MacFarlane et al. 2003). The European Association of Perinatal Medicine tried to standardise its methodology across Europe and drew up guidelines at the beginning of the 1990s (Dunn & McIlwaine 1996). Subsequently, in 1997, the EuroNatal study was launched as a concerted European action involving ten countries (Richardus et al. 1997, Richardus et al. 1998, Graafmans et al. 2001, Richardus et al. 2003) (Chapter 2.3). During the course of further development, the prevalence and methods of effective treatment of diseases changed. In the 1990s, the medical focus of evaluation slowly changed, in that other professionals became involved (for example midwives) and, to a varying extent, social factors (for example ethnicity and social class) were taken into consideration

(MacFarlane 2004). Additionally, the value of confidential enquiries changed as the relevance of RCTs in generating evidence of effectiveness rose (Cochrane 1999, Chalmers et al. 1989, Enkin et al. 2000, Villar et al. 2001b). Consequently, auditing PMR turned into the “most appropriate epidemiological tool for evaluating the outcome of pregnancy and childbirth, and for monitoring the quality of perinatal and antenatal care” (Richardus et al. 1997 p. 313)

Although confidential enquiry is a valuable, individualised approach to the evaluation of standards of clinical management as well as organisation and resources (Maresh 1998), the fundaments of effectiveness upon which it builds are poorly constructed. Using a reverse method of evaluation (outcome instead of performance orientated), outcome is an independent, and performance a dependent variable. Three critical elements in regard to the effectiveness of antenatal care are involved: evidence based guidelines as a standard of reference; the availability of information for this factor analysis; and the effective identification of risk factors and treatment of the identified condition. Firstly, several European studies showed a varying content of national and professional guidelines, based not only on research evidence, but also on other sources such as authority (Chapter 2.3) (Haertsch et al. 1999, Hunt & Lumley 2002). Secondly, available information consisted mainly of medical and epidemiological data. Thirdly, for many interventions aiming at screening, diagnosis and treatment, evidence of effectiveness is insufficient or completely lacking (Heringa 1998, Enkin et al. 2000). Confidential enquiry, therefore, reflects performance according to standards rather than the effective content of antenatal care.

For example, from a biomedical perspective on antenatal care, the linear, direct way to prevent foetal death caused by intrauterine growth retardation (IUGR) (Richardus et al. 2003) (Chapter 2.3) starts primarily with screening for risk factors in women's medical history according to a formal risk-scoring list at their first antenatal care appointment. With regard to effectiveness, one critical aspect in this process is the communication between care providers and women (Sackett 1980, Heringa 1998). Additionally, formal risk scoring systems should conform to Wilson and Jungner’s (1968) criteria for evaluation, which include determining their validity (high sensitivity and specificity) and accuracy (high positive and negative predictive

values), and consequently be tested in a RCT (Grant & Mohide 1982, Mohide & Grant 1989, Heringa 1998, Enkin et al. 2000). While several risk-scoring lists were identified, observational studies found that their validity and accuracy were poor, as only 50 to 80% of women having a low birth weight (LBW) baby could be identified as being at risk (Alexander & Keirse 1989, Enkin et al. 2000). Babies with an IUGR make up only part of this group. Although these studies showed potential benefits concerning the reduction of adverse outcomes, no RCT have been carried out. Additionally, potential negative effects, such as unnecessary worry and increased interventions, had hardly been addressed. Formal risk assessment, however, is viewed as part of standard antenatal care in many European countries, and results in Germany, for example, in 70% of pregnant women labelled as being "at risk" (Wepler 1998).

Secondly, a "satisfactory diagnostic test" is required (Mohide & Grant 1989 p. 68), which is related to the existence of a "gold standard" (objective diagnostic truth) with which to compare the results of the test. Diagnosing IUGR most commonly involves a sequence of abdominal palpation and symphysis-fundal height measurement, followed by ultrasound assessment. As the ultimate diagnosis takes place after the birth of the child, tests during pregnancy can only aim to predict this event. The predictive value reported for both abdominal palpation (30-50%) and fundal height measurement (up to 65%) is low (Berg & McDermott 1996, Neilson 1998a), and was even lower in the only RCT carried out comparing both tests (Lindhard et al. 1990). Despite a lack of evidence of effectiveness and based on the prevalence of IUGR (2.5%- 10% of all births) and low costs of these tests however, maintenance of current practice had been advised unless larger trials showed that them to be unhelpful (Berg & McDermott 1996, Neilson 1998a). Ultrasound assessment, on the other hand, improved the recognition of IUGR and the monitoring of foetal well-being in women with a high-risk pregnancy, but was not very effective for routine screening in women with a low-risk pregnancy (Neilson & Alfirevic 1996, Neilson 1998b). On top of this, the sequence of tests leads to a reduction of effect on the ultimate diagnosis (Luyben 1997).

Thirdly, preventing foetal death caused by IUGR requires the "effective management of the recognised condition" (Mohide & Grant 1989, p. 68). Only a few

options are available for intervention in the process causing IUGR and modifying risk factors or improving IUGR. One of the reasons for this is insufficient understanding of its natural history development (Wilson & Jungner 1968). Another reason is that only some risk factors are modifiable, such as maternal smoking and nutritional deficiencies (Stevens-Simon & Orleans 1999). RCTs on smoking cessation programmes showed that six in 100 women stopped smoking and the number of LBW babies was reduced, but they lacked the power to show a reduction of very LBW babies and perinatal death (Lumley et al. 2004). Even less evidence of effectiveness exists for improving the condition of IUGR (Enkin et al. 2000). Therefore, management of IUGR exists merely through the monitoring of foetal well-being and a timely elective birth. Again however, this management involves prediction and some weak relationships between procedures and outcome (Alfirevic & Neilson 1996, Luyben 1997). While this example course of action only reflects a linear causal relationship between medical content and its effects, assessing the effectiveness of comprehensive content was even more complex.

While attempting to identify factors associated with the effectiveness of comprehensive, multi-component programmes for the prevention of LBW babies, Stevens-Simon and Orleans (1999) reviewed 55 articles produced between 1960 and 1998. The approach was described as “unsystematic” (Stevens-Simon and Orleans 1999, p. 186), because articles were only searched in MedLine and other literature resulting from the reference lists of those articles, which limited the comprehensiveness of the review. Another limitation was the outcome-orientated approach to the evaluation of content, similar to confidential inquiries. Fourty-three descriptive articles, four of which involved case-controlled studies, and eight RCTs were included. The authors, however, did not differentiate between the causes of LBW babies. Thus babies were included with a LBW resulting from both IUGR and preterm birth, although each of these groups would need a different approach in care. Additionally, the programmes included aimed at prevention and treatment at all three strategic public health levels (primary, secondary and tertiary), through which a variety of content was addressed. The resulting variety of interventions, nature of services, process and outcome variables and methodological problems in the design, implementation and evaluation in the RCTs, however, made a meta-analysis impossible.

Despite the methodological weaknesses, this review highlights some essential problems in evaluation studies on the effectiveness of antenatal care. The first of these problems is the weak relationship between risk factors and outcome. Many of the risk factors of LBW can not be modified, and several trials involve undifferentiated risk populations of pregnant women. In selected target populations (for example the malnourished), however, specific programmes had shown improvement of health habits and psychosocial well-being. Therefore Steven-Simon and Orleans (1997) recommended the allocation of interventions to critical select target populations. The second problem is the absence of adequate process variables for measuring the effects of these programmes. Additionally these variables and evaluation methods should take into account the content of interaction between care providers and women. Therefore more knowledge about the performance of particular interventions and their effects was needed for determining process variables and methods to assess its efficacy and effectiveness. Generating this knowledge, however, had been the intention of contributors to the systematic evaluation of interventions in obstetrics and midwifery during the 1980s, while aiming for effective care.

3.4.3 Effective care during pregnancy and childbirth: the rise of the RCT

Following the call for a systematic evaluation of the NHS in the United Kingdom in the 1970s, a wider application of RCTs was proposed, which had to address not only medical, but also all other healthcare interventions and services (Oakley 1984, Long & Harrison 1985, Cochrane 1999) (Chapter 2.3). Through their quantitative, comparative, controlled experimental design, RCTs were considered to be the best method for assessing effectiveness of clinical interventions. As individuals are randomly allocated to two or more interventions groups, both known and unknown influencing factors can be evenly distributed, which largely reduces systematic and random errors (Hicks 1998, Jadad 1998). During the course of the last few centuries, RCTs had already been used for evaluating the effects of medical therapies (Bull 1959, Enkin 1998, Tröhler 2000). The current approach of using an RCT for evaluation was attributed to Hill, who studied the therapeutic effects of streptomycin for pulmonary tuberculosis (Daniels & Hill 1952, Hill 1952). Following this study, RCTs became the new paradigm for evaluating the effectiveness of medical

therapies during the 20th century (Chalmers 1989, Enkin 1998, Tröhler 2000, Enkin 2006).

The idea of evaluating healthcare services similarly was brought forward in 1972 by Cochrane in “Effectiveness and Efficiency” (Chapter 2.3) (Cochrane 1999). In this monograph, he proposed the use of “effectiveness” rather than “efficacy” to refer to the effects of interventions in research, as he liked the first term better. Although the special character of midwifery was acknowledged, he suggested that to evaluate it appropriately “the emotive atmosphere should be removed and the subject treated like any other medical activity and investigated by RCTs” (Cochrane 1999 p. 66). In line with this perspective, antenatal care was described as “basically a multiphasic screening procedure” (Cochrane 1999 p. 66). Thus, without further considerations of its complex nature, antenatal care was medically and epidemiologically defined for evaluative purposes. These ideas influenced the evaluation of effectiveness, nationally as well as internationally, in the following decades.

The international need for evidence of the effectiveness of antenatal care led to a critical review of studies in the field (Enkin & Chalmers 1982a, Chalmers et al. 1989, Rooney 1992, Bergsjö & Villar 1997, Villar & Bergsjö 1997). In women with pre-existing diseases (for example diabetes) or medical complications (for example pre-eclampsia) during pregnancy, evidence clearly showed that advanced diagnostic and therapeutic possibilities had improved maternal and perinatal mortality and morbidity (Enkin & Chalmers 1982b). There was, however, a lack of evidence of the effectiveness of antenatal care for the majority of women with uncomplicated pregnancies. While antenatal care was viewed as a form of preventative medicine aimed at the identification and treatment of complications at an early stage, these interventions could also “do more harm than good” in a normal pregnancy (Enkin & Chalmers 1982b p. 269).

The first international publication that sytematically reviewed routine antenatal care was “Effectiveness and satisfaction in antenatal care” (Enkin & Chalmers 1982a). Antenatal care was adressed in three parts: 1) the nature of how it worked, including the views of women; 2) the effects of antenatal treatment, education and advice; and 3) the organisation of care. Screening procedures, treatment and advice were

evaluated as “content”, while other elements were part of the “process” (Enkin & Chalmers 1982b p 285). While the nature and organisation were descriptively evaluated, evaluation of the effectiveness of single elements of content was based on a meta-analysis of previous studies.

Evidence of effectiveness, however was insufficient for most elements in content (screening, treatment, advice) of routine antenatal care (Grant & Mohide 1982, Hemminki 1982, Enkin & Chalmers 1982b) as a result of multiple factors. The complex nature of some interventions (for example antenatal classes (Enkin 1982)) made systematic evaluation difficult. For some complications biomedical knowledge was insufficient (for example IUGR (Lumley & Astbury 1982)), while others were multifaceted (for example anaemia (Hemminki 1982)). Additionally, relationships between screening procedures, diagnosis and effective treatment were weak (Chapter 3.4.1), and thus the identification of IUGR for example did not necessarily improve foetal outcome (Grant et al. 1982). In addition, it was often the case that insufficient information was collected and documented regarding women's histories as “the fundamental component of antenatal care” (Grant & Mohide 1982 p. 55). Doubts were also raised about the relevance of the currently used indicators for the measurement of the effects of interventions in pregnancy, such as low birth weight and low Apgar score. Although further systematic evaluation by RCTs was recommended, Enkin and Chalmers (1982b p. 286) perceived limits to this mode of evaluation as a result of human interaction, empathy and beliefs, as “science cannot take the place of the magical elements in the therapeutic relationship”. Despite their statement that “there are no simple or quick answers to complex problems” (Enkin & Chalmers 1982b p. 283), no solution was offered to account for this complexity, and thus identify the nature of the performance of antenatal care, while evaluating its effectiveness.

As a continuation of Cochrane's ideas, the “Oxford Database of Perinatal Trials” (later “Cochrane Library”) was instituted during the 1980s (Chalmers et al. 1989), and became “the underlying basis for what is currently called evidence based medicine” (Enkin 1998 p. viii). Cochrane (1989) chose obstetrics to be the first discipline subjected to this form of systematic evaluation, with the intention of establishing a body of evidence of the effectiveness of interventions in maternity

care. The results of the reviews were published in the two-volume edition “Effective care in pregnancy and childbirth” (Chalmers et al. 1989). The editors were an epidemiologist and two gynaecologists, although professionals from other disciplines, such as social scientists and midwives, were also involved as reviewers and authors. Through reviews of published and unpublished studies on specific interventions, evidence of their effectiveness was produced. The generation of evidence was based on a hierarchy of study designs with a preference for RCTs, which is the best research design for the reduction of systematic and random errors (Chalmers 1989, Jadad 1998). In addition screening and diagnostic procedures had to meet the requirements of Wilson and Jungner (1968). Despite differentiating between efficacy (explanatory; “Can it work?”) and effectiveness (pragmatic; “Does it work?”), Chalmers (1989 p. 27) stated that most trials did not fall neatly into one of these categories. In the light of the results of the reviews, however, this lack of differentiation was only a minor problem.

Several different elements of general care (for example advice and support), screening, diagnosis and treatment during pregnancy were evaluated based on performance (Chalmers et al. 1989). The same methodology and similar outcome indicators were used, regardless of whether the interventions addressed were simple, complicated or complex, which was questionned by one of the editors (Enkin 2006) almost two decades later (Chapter 3.4.10). Consequently, these interventions were arranged in six categories ranging from effective (beneficial) to ineffective or harmful, which resulted in a “gold standard” of evidence of effectiveness in maternity care. Evidence of effectiveness was found for only a few interventions during low-risk pregnancy (for example women carrying their own pregnancy record), however for many there was either insufficient or no evidence (Chalmers et al. 1989, Enkin et al. 2000).

Although the context and some components of the process (care providers, women) were described (De Vries 1989, Reid & Garcia 1989, Robinson 1989), it was impossible to incorporate these in reviews of the effectiveness of interventions due to differences in methodology. Consequently, the complexity of some interventions involving human interaction and the process of pregnancy and childbirth, such as psychosocial support or antenatal education, were hardly considered. Thus, the

determinination of the effectiveness of antenatal care essentially represented the views of only some of its stakeholders, such as policymakers, epidemiologists and (medical) care providers. Women's views were sometimes incorporated into reviews of effectiveness with the aim of reflecting on the "quality" of the process of care (Enkin & Chalmers 1982b, Proctor 1998). Reviews of women's views originated from studies carried out in English speaking countries, mainly the USA and the United Kingdom (Garcia 1982, Reid & Garcia 1989, Jacoby & Cartwright 1990). While research methods changed from quantitative to qualitative over time, most often these studies had only limited capability to address large areas, as they had only small sample sizes and descriptively reported findings (Jacoby & Cartwright 1990). These studies, however, also indicated the existence of a different perpective on the effectiveness of antenatal care.

3.4.4 Varying perspectives: midwives' and women's views

Reviewers both within and outside Europe experienced similar difficulties in establishing evidence of effectiveness. Different perspectives on the aims of antenatal care however were noticed, which influenced the approach to the evaluation of effectiveness. From a midwifery perspective, Field (1990 p. 220) narratively reviewed studies on the "efficacy" of antenatal care on women's development of the mothering role, which was in contrast to the aims of most previous evaluation studies (Chapter 2.3, 3.4.1, 3.4.2, 3.4.2). Although criteria for the selection of studies were not provided, the three areas of physical, psychosocial and educational effectiveness were addressed. The review on the physical aspects, however, included only one experimental medical study (Hall & Chng 1982, Hall et al. 1985). The findings of this study were used concurrently to focus on women's views as the central issue of the review. Following this, several negative psychosocial and educational effects of antenatal care on women's development, resulting from a lack of a woman-centred attitude in antenatal care, were highlighted. According to Field (1990), this attitude particularly resulted from hospital- rather than community-based care, insufficient psychosocial support, which negatively influenced women's self-esteem and feelings of control, and the failure to treat women as adult learners and acknowledge their needs in antenatal education. It was thus concluded that the aims of antenatal care had to include medical, psychological and educational aspects of care and that their achievement

should be assessed accordingly. Like Graham and Oakley (1981), Field (1990, p. 221) ultimately suggested that “women and healthcare workers approach pregnancy with two different frames of reference” in this regard. Field (1990), however, remained one of the few researchers to criticise the prevailing approach to the evaluation of effectiveness and to define its aims from women's perspectives.

Other studies on women's views during the final decades of the 20th century confirmed the findings of Field's (1990) review. Both nationally and internationally women agreed on similar topics. The topics mentioned most frequently were: reasons to attend; several organisational aspects including difficulties in access and long waiting times; insufficient and conflicting information; lack of choice; and problematic relationships with care providers (Garcia 1982, Hall et al. 1985, Reid & Garcia 1989, Sikorski et al. 1996, Villar et al. 2001a, von Rahden 2003, Tandon et al. 2005, Büchi et al. 2006). The central issue in these topics was the lack of a woman-centred attitude in services and providers. Despite negative experiences, however, women did keep attending antenatal care appointments (Garcia 1982, Reid & Garcia 1989). Several studies reporting on women's experiences during the 1970s and 1980s found that women felt that attending antenatal care appointments was traditionally the best thing to do, but they often lacked any particular reason for doing so (Graham & McKee 1980, Porter & MacIntyre 1984, van Teijlingen et al. 2003).

Different approaches and attitudes between public and private healthcare systems were highlighted in comparative studies in the USA and the United Kingdom (Shaw 1974, O'Brien & Smith 1981, Garcia 1982, Reid & Garcia 1989). In contrast to private care, public care was often perceived to be impersonal. Having the time to talk, being listened to and respectful treatment were important issues (Garcia 1982, Proctor 1998). In the WHO antenatal care trial (Chapter 3.4.6), women in the four countries involved, however, reported on the negative attitudes of care providers, such as a lack of courtesy, scolding and rude treatment (Langer et al. 2002). In a qualitative pilot study for a RCT on midwife-led care, von Rahden (2003) interviewed thirteen German women, recruited through their care providers, about their expectations of care during their first pregnancies. While they had a choice of care provider, which was a contrast to the subjects of most British studies, these

women emphasised the importance of professional competence and knowing and trusting the care provider, but also differentiated between groups of care providers in this regard. Gyneacologists were viewed as medical experts, while counselling, reassurance and advice, as well as the provision of a feeling of trust and security, were expected from midwives. Representativity of the findings however was limited due to the high education and age of the women, which had been justified by the willingness of this group of women to participate in interviews. Similarly, Patterson et al. (1990) emphasised the importance of a former relationship with and the attitude of the care provider to women in their decisions to choose either public or private antenatal care (Chapter 3.4.7). Generally, a positive attitude in care providers improved their interaction with women, resulting in positive experiences of care and women feeling better informed (Coverstone et al. 2003, Nigenda et al. 2003). In the public care system, however, women often experienced that their own, wider social environment and their responsibilities were hardly taken into account (Garcia 1982). Although they all preferred to see the same doctor at every visit in order to build up a relationship, fragmentation and discontinuity of the system made this impossible (Reid & McIlwaine 1980).

A similar contrast between women's needs and the organisation of antenal care was found in a phenomenological study on women's experiences in Finland (Bondas 2002). The samples were representative for routine antenatal care due to the inclusion of women from different educational and occupational backgrounds, but limited due to the inclusion of both uncomplicated and complicated pregnancies. The first stage involved a longitudinal study of nine women, who were interviewed at 36 weeks of pregnancy and then three weeks, three months and two and a half year after birth. In the second stage, the results of the first stage were further explored by interviews and observations of the antenatal care visits of a further 31 women. Despite the diversity of the sample, the results of the study confirmed the findings of previous studies on women's views. Women focused on the health of their baby, themselves and their family, but emphasised their desire to share their stories in a confident, ongoing care-providing relationship based on humanity and interest. Within this relationship, they expected competent protection (professional competence and humane surveillance), and continuous participation (sharing of knowledge and integration of family and friends). Women's needs, however, were in

contrast to reality, as the fragmentation of the public maternity care system in Finland made continuity impossible.

Some alternative models of care which emphasised the care provider-woman relationship through continuity of care, also showed improved health outcomes. Case-management during pregnancy led to positive effects on emotional well-being, increased learning combined with an increased confidence in parenting, a change in lifestyle behaviours, an improvement in the women's financial situation, increased service utilisation during pregnancy and a perception of being healthier (Issel 2000). A Cochrane review of RCTs comparing non-continuous care by physicians and midwives with continuity of care from midwives, showed that latter led to fewer hospital admissions during pregnancy, improved psychosocial well-being and fewer antenatal and perinatal interventions, although perinatal mortality and morbidity was similar (Hodnett 2000). As midwives provided both models, however, it could not be determined whether these results were caused by midwifery care or continuity of care.
Most reviews evaluating interventions in antenatal care, however, were framed by the traditional epidemiological and biological approach to evaluation.

3.4.5 Reviews during the 1990s: epidemiological and biomedical perspectives

Based on the aims of most reviews, the epidemiological and biomedical approach to the evaluation of the effective content of antenatal care was pursued. Rooney (1992) reviewed evidence of the biological effectiveness (or "efficacy" (Rooney 1992 p.9)) of antenatal interventions for the WHO, with the aim of reducing maternal mortality and improving maternal health in developing countries. The review started by identifying the four major biological causes of maternal mortality: haemorrhage and anaemia; hypertensive disorders; obstructed labour; and infections. Consequently, antecedent diseases and risk factors, and subsequently the interventions used to prevent, detect or treat complications in pregnancy were defined. Evidence of the effectiveness of these interventions was searched for in both published and unpublished literature from relevant biomedical and epidemiological databases and other research sources in the field of maternal health. Despite the extensive in-depth review, much information was missing, and only a small list of effective interventions could be established. This lack of information particularly concerned

the aetiology and pathogenesis of some pregnancy complications and the efficacy of treatments. Thus, Rooney (1992 p.34) concluded, “What is striking in examining evidence for or against the effectiveness of care during pregnancy in reducing maternal mortality or serious morbidity is, how little is known”. As a result, a large number of studies, using a variety of research methods and involving several other disciplines, were recommended. Although this research had to benefit both developed and developing countries, Rooney (1992) regarded developing countries the best setting for much of this research, as beneficial effects could be noticed more easily and people would benefit more directly due to the high prevalence of complications and high mortality rates. The differences in the context and complexity of antenatal care between these regions, and their effects, however, were barely acknowledged.

The same perspectives on the evaluation of the effective content of antenatal care were used by some American reviewers during the 1990s because of problems with inadequate or non-existent antenatal care in the USA. Although frequently cited in the literature (Villar & Bergsjö 1997, Haertsch et al. 1999, Handler et al. 2003, Tandon et al. 2005, Carlson et al. 2006, Majoko et al. 2007), most of them only consulted Medline as their main source of evidence which, therefore, limited the scope of the reviews. Fink et al. (1992) aimed to determine which activities related to a positive epidemiological birth outcome, and which mothers and babies benefited from such effective content. A combination of the terms “antenatal care” with “evaluation studies”, “utilisation”, or “accessibility” was used to search articles evaluating antenatal care programmes between 1981 and 1991. Eight methodological criteria, such as randomisation, were used for reviewing. None of the 22 studies met all these criteria but seven of them met five or more. The reviewers experienced problems achieving their objectives, as the studies included a variety of enhanced, comprehensive antenatal care programmes, including psychosocial support and education on pregnancy and childbirth as well as nutrition and weight gain. Improvements in birth outcomes appeared to be associated with antenatal care, but also with compliant behaviour in a certain group of women (likely optimal childbearing age, high level of education, married and income). The reviewers could therefore not establish evidence of a causal relationship between the content of antenatal care and birth outcome.

Evidence of this causal relationship was also sought by Fiscella (1995), although different reviewing criteria were used. While LBW and preterm birth were focused on as outcomes of antenatal care, the review included 50 studies (mainly observational but including 11 RCTs) from Medline from between 1966 and 1994 in which study groups had to be comparable and statistical probability for birth outcomes was used. Seven criteria from a previously published guideline (Gordis et al. 1990) were then used to evaluate evidence of a causal biomedical relationship between antenatal care and birth outcome. As a consequence of its outcome-orientation, the review included evaluation studies of a variety of enhanced programmes aiming at reducing LBW or preterm birth. Most of these studies compared adequate and inadequate antenatal care in terms of attendance (Kotelchuck 1994, Krueger & Scholl 2000). As in other reviews, evidence of a causal relationship between antenatal care and birth outcome was not established, as evidence of the effects as well as the quality of this evidence was insufficient. Analysis of the available studies based on the seven criteria of a causal relationship highlighted some important problems in the current generation of evidence of effectiveness, such as the medical definition of antenatal care, compliance, the impossibility of “with-without” studies, a large number of confounding factors in observational studies, and the lack of adequate outcome measures. In striking contrast to the results of this analysis, however, Fiscella (1995) subsequently recommended an intensive continuation of the current approach to evaluation in order to prove finally the effectiveness of antenatal care.

Although much cited for different reasons (Majoko et al. 2007, Carlson & Lowe 2006, Handler et al. 2003, Gregory & Davidson 1999, Haertsch et al. 1999, Heringa 1998, Villar & Bergsjo 1997), none of these reviews achieved their aims, although they all used slightly different, but well established methodological criteria for reviewing evaluation studies on evidence of effectiveness. Reasons include the variety of interventions found, insufficient quality of evidence and a dearth of effects of antenatal care on birth outcome. In comparison with the framework on effectiveness (Chapter 3.2) and its evaluation (Chapter 3.3), however, several deviations are noticed. Firstly, effectiveness of content was not evaluated as a characteristic of the performance of antenatal care, but, due to the linear, outcome-orientated approach, was analysed as a factor that possibly contributed to a

predefined desired effect. Although content include a variety of interventions, it was limited to its medical definition. Analysis, therefore, neither accounted for the complex nature of antenatal care, nor other influencing contextual factors. Secondly, both American reviews highlighted the influence of other (confounding) factors on birth outcome, but only Fink et al. (1992) considered their direct contribution to this outcome. Thirdly, most of the studies reviewed included women with risky or complicated pregnancies, and therefore failed to provide information about the effects of routine antenatal care (the number and timing of visits and content) on low-risk women. These effects, however, were the particular subject of studies comparing the traditional model with alternative models of routine antenatal care over the past few decades.

3.4.6 Comparative studies: models of antenatal care

Ultimate proof of the effectiveness of routine antenatal care required studies based on a “with-without” design. Such a study, however, could not be carried out due to its unethical consequences (Hall et al. 1985, Fiscella 1995). Most studies therefore compared two different models of care, which resulted in evidence of “relative effectiveness” rather than “effectiveness” (Chapter 3.2.2). Alternative models of antenatal care with a reduced number of visits, reduced content or different care providers were compared with existing models in order to prove equivalent clinical effectiveness (Hall et al. 1985, Villar et al. 2001b). The first new model with an increased contribution from GPs and midwives was introduced in Aberdeen the beginning of the 1980s (Hall et al. 1985), and contained fewer goal-orientated visits with a reduced medical content, through which the contribution of GPs and midwives was increased. The study used a historical before-after design, in which the outcomes of the programmes of 1975 and 1982 (as a whole package) were compared. This design facilitated the implementation of the study in daily practice, but was more susceptible to bias due to changes in context and the prevalence of diseases, such as the slight change in prevalence of pre-eclampsia between 1975 and 1982. Whereas women's and providers' views were also evaluated, only clinical outcome was used to assess the effectiveness of antenatal care. The introduction of the new model did not significantly change this outcome, although it is not reported whether equal effectiveness resulted from changing either the number of visits, the content or the care provider. Both care providers and women, however, liked more

visits for social reasons. Their views hardly differed regarding the aims of antenatal care, but differed more on desired content (for example communication). Hall et al. (1985 p.112) therefore recommended that “in designing an optimum schedule of care in any locality one needs to disaggregate the aims of care into a number of specific goals and then explore firstly whether these aims can be achieved and secondly how, when, where, and by whom they can best be achieved”. This recommendation, however, suggested evaluating antenatal care as a complicated rather than a complex (Enkin 2006) intervention.

Similar programmes with lower numbers of visits were evaluated during the following decade. Care providers defined goals and achievement was measured in terms of clinical outcome and satisfaction. A Cochrane review compared the relative effectiveness of these new programmes with or without goal-orientated content with a programme with the traditional number of visits (Villar et al. 2001b). Seven randomised controlled trials were included, four of which were undertaken in developed countries (Binstock & Wolde-Tsadik 1995, McDuffie et al. 1996, Sikorski et al. 1996, Walker & Koniak-Griffin 1997) and three in developing countries (Munjanja et al. 1996, Majoko et al. 2000, Villar et al. 2001a). The review confirmed that a reduction in the number of visits could be achieved without any negative effects on the clinical outcome for either mother or child, although women were less satisfied with the reduced number of visits. In developed countries, women also highlighted a lack of time to talk or ask questions and not being listened to as reasons for their dissatisfaction with antenatal care. Although their opinions might have been influenced by prior experiences (“what is, is best”) (Porter & McIntyre 1984), the importance of time for talking was confirmed by the findings of other studies (Hall et al. 1985, Reid & Garcia 1989). Most women in the antenatal programmes with fewer visits, however, opted to have the same schedule of antenatal care again. In the study of Sikorski et al. (1996) psychosocial and emotional effects were integrated into the evaluation of the reduced models, and showed an increase in worrying and a lack of confidence in women’s ability to cope with their babies after birth (Clement et al. 1996). The provision of additional psychosocial support and reassurance of women was therefore recommended. Significant long-term effects on the physical and psychosocial health of mother and

child, however, were not found in the follow- up study 2.7 years after birth (Clement et al. 1999).

Based on Rooney's (1992) recommendations (Chapter 3.4.5), between March 1996 and September 1999 the WHO conducted the largest randomised controlled study of programmes with a reduced number of visits and reduced content in four developing countries (Argentina, Cuba, Saudi Arabia and Thailand) (Villar et al. 2001a, Langer et al. 2002, Nigenda et al. 2003). Traditional antenatal care programmes existed in all four countries and their socio-demographic and epidemiological characteristics were similar. While using an outcome-orientated approach to a systematic review of the literature, evidence based content for the detection and treatment of the most important causes of maternal and perinatal morbidity was determined (Villar & Bergsjo 1996, Bergsjo & Villar 1997). The causes identified were: bleeding; anaemia; pre-eclampsia; obstructed labour; sepsis and genito-urinary infection and low birth weight. Based on the expected yield in regard to the prevalence of diseases as well costs in the countries involved, components of the content were defined, although evidence of effectiveness was not found for most of them. In this way the medical content was reduced. Communication (for example history taking and passing on information) however was also defined as an essential component of care, although its effectiveness had not been addressed in the review.

Consequently this new model of antenatal care, with four goal-orientated visits (at 12, 26, 32 and 38 weeks of pregnancy), was compared for its effectiveness with a traditional model with a mean of eight visits, varying between seven in Thailand and eighteen in Cuba (Villar et al. 2001a). Fifty-three clinics caring for a total of 24678 women with singleton pregnancies took part in the study and were randomised in clusters. Although this mode of randomisation simplifies organisation and reduced treatment contamination (Donner et al. 1998, Villar et al. 1998, Ross et al. 2005), it limits both women's options for consent and the validity of their individual responses. Only few women (1.3%) refused to participate. Consequently, women were allocated to routine or special antenatal care through risk selection. Blinding in antenatal care was impossible, which does increase the possibility of bias, but was achieved for data collection after birth in most countries other than Thailand, where antenatal care and birth took place in the same institution. This exception, however,

implies that continuity of care could have been a bias in the study. The main care provider was similar in both models within a given country, but varied between countries. Gynaecologists provided most antenatal care in Argentina and Cuba, GPs took this role in Saudi Arabia and midwives cared for almost all women in Thailand (Villar et al. 2001a). Several cultural adaptations in predefined content were made, which were not evidence-based. Thus in Argentina, for example, one ultrasound without medical indication was included. Possible differences in outcome caused by these adaptations in the study however were not reported.

In line with the medical perspective on antenatal care, effectiveness was determined by primary (maternal/perinatal morbidity) and secondary medical outcome. Evaluation also included women's and providers' perceptions, cost-effectiveness, compliance with the protocol, and process outcomes, although these were evaluated in terms of service use rather than the effects of performance of care. Women in the new model had a mean number of five visits, as some (for example in Cuba) called on their primary care provider (GP), if they felt they needed more visits. The primary and secondary clinical outcomes in both groups were similar, although rates of pre-eclampsia/ eclampsia were slightly higher in the new model. Healthcare costs for the new model were equivalent to those for the traditional model, and in two countries (Thailand, Cuba) were even less. Despite slight variations in the design amongst countries during the study, it was concluded that routine antenatal care could be provided with a reduced number of visits and content without affecting its medical effectiveness. No specification was made, however, regarding the individual contributions of either the number of visits or the content to this effectiveness.

At the same time women's and providers' perceptions were studied alongside this RCT using both qualitative and quantitative methodologies (Villar 2001a, Langer et al. 2002, Nigenda et al. 2003). An ethnographic approach was used to assess the cultural concepts and expectations of women in both models in order to understand their views and construct a questionnaire for the quantitative part of the study (Nigenda et al. 2003). Although the importance of women's expectations on experiencing effective care had previously been highlighted (Green et al. 1998), the qualitative part was used as feedback on the quality of provision of antenatal care, and not integrated into the assessment of its effectiveness. Twenty-four focus group

interviews were carried out with164 women, who were at 32 or more weeks of gestation and had had at least two visits before the interview. In each country, the interviews focused on three topics: cultural concepts and perceptions of pregnancy and healthcare; experiences with healthcare services; and opinions about the new antenatal care model. Based on theoretical saturation, cultural themes for each topic were inductively generated. The emergence of this theory was, however, framed by a ten-item standardised interview guideline, which was provided in the language of each country. Tapes and notes were then translated into English for computerised analysis.

Women's perceptions of pregnancy and healthcare related to their cultural backgrounds (Nigenda et al. 2003). While religious values were important for Saudi women, traditional community values prevailed for Thai women. Both preferred female care providers. Contrastingly, Cuban and Argentine women's' liking of modernity and technology was associated with their preference for gynaecologists. Although all the women were satisfied with the new model, satisfaction with antenatal care reflected women's prior cultural experiences. As in previous studies on women's views (Garcia 1982, Reid & Garcia 1989), the women were unsatisfied with the information they received. Their specific needs, however, differed cross-nationally. For example, the need for nutritional advice was significant in Thailand, while dealing with the emotional and psychological changes in pregnancy was more important in Cuba. Although women were basically satisfied with their treatment, most complained about the attitudes of their medical practitioners. These attitudes involved a lack of courtesy, but also inconsistencies in information and the willingness to provide this.

Because of difficulties with extrapolation and validity, these qualitative data were incorporated into a standard questionnaire in order to measure quantitatively women's satisfaction (Langer et al. 2002). Insights into the effectiveness of care, however, were reduced and became less clearly differentiated through this process, particularly in regard to the varying populations involved. The quantitative part of this study thus showed a higher rate of satisfaction with the new model than the qualitative part, as had been noticed in previous studies (Porter & McIntyre 1984, Reid & Garcia 1989, Proctor 1998). The 24 close-ended questions only addressed

women’s preferences for the number of antenatal care visits, time spent in the waiting room and with the caregiver, and the amount and appropriateness of the information received during visits. Almost 1600 women in both models were surveyed in private. Concern was particularly expressed about the reduced frequency of visits. Langer et al. (2002 p. 7) therefore proposed the provision of support by means other than the “formal encounters with medical providers”, which had previously been suggested in other studies (Hall et al. 1985, Heringa 1998). As time spent with the care provider, reassurance concerning worries, and satisfaction with information had increased, it was concluded that the new model improved the quality of human interaction (Langer et al. 2002). This conclusion however did not account either for the fact that the quality of human interaction had not been assessed, or for the fact that women had complained about attitudes of some care providers, even though the importance of human interaction for effectiveness of care had been highlighted by others (Vera 1993, Whittaker 1996).

The providers’ views on the same issues were surveyed in a questionnaire containing 15 questions (Villar et al. 2001a, Nigenda et al. 2003). The self-administered questionnaire was filled in by 174 care providers, who were mainly medical practitioners. Care providers in the new model were satisfied with the reduced number of visits, as long as modifications “did not limit their clinical control” (Villar et al. 2001a p. 1560). Like women, care providers in the new model were unsatisfied with the spacing between visits, but liked the time spent during each visit. All rated their care as good, and gave themselves a higher score than the women with regard to the provision of information.

As the new model did not negatively affect either the effectiveness or satisfaction of women and care providers, the researchers recommended implementation in both developed and developing countries. It could be questioned however whether the settings chosen were representative for developing countries, for example in Africa (Ekele 2003), particularly in regard to context and to the women's and providers' culture and expectations. In addition, the evaluation of effectiveness had been of merely the medical components, while women's and providers' views were evaluated separately. The largely praised multi-disciplinary design of this study corresponded with the evaluation of a complicated rather than a complex issue.

The Cochrane review on routine antenatal care also addressed the effectiveness of care providers for low-risk pregnancies (Villar et al. 2001b). Three RCTs comparing midwife/GP with gynaecologist led care were included (Giles et al. 1992, Tucker 1996 et al., Turnbull et al. 1996). Clinical effectiveness concerning perinatal outcome was similar for both groups. Midwife/GP led care, however, resulted in a lower rate of pregnancy-induced hypertension and pre-eclampsia, preterm delivery, antepartum haemorrhage and even perinatal mortality. On the other hand, foetal malpresentation was underdiagnosed in this group. Consumer satisfaction with midwife/GP led care was equal to or higher than with gynaecologist led care (Shields et al. 1998).

At the same time as these international efforts to find evidence of the effectiveness of antenatal care, concerted concern led to comparative, observational and epidemiological studies evaluating antenatal care practice in Europe, in particular amongst member countries of the European Union (Chapter 2.3). These studies aimed to reduce maternal and perinatal mortality and morbidity, increase evidence-based practice, harmonise the cross-national content of the programmes and improve the attendance of pregnant women. Their findings, however, continuously showed a wide variety of content in antenatal care programmes with similar pregnancy outcomes throughout Europe over the preceding decades, and insufficient evidence of effectiveness in the literature on which to base each of the interventions (Heringa & Huisjes 1988a, Heringa & Huisjes 1988b, Langer et al. 1999). While these comparative studies failed to achieve their aims, the exploration of the effects of the content of antenatal care was pursued further in several international studies with varying designs.

3.4.7 Evaluation of the content of antenatal care

Up to this point antenatal care had been viewed as a multiphasic screening procedure (Cochrane 1999), and thus medical evaluation of its content had focused on the effectiveness of screening procedures during pregnancy. Most of these procedures had been introduced without proper evaluation and evidence of effectiveness was gradually generated through reviews in the Cochrane Database. These reviews were based on the WHO criteria of Wilson and Jungner (1968) (Chapter 3.4.2). In the meantime, however, the selective screening of identified high risk groups had

gradually been replaced by general screening, reducing the sensitivity and specificity of the procedures (Chapter 3.4.2). Predictive value and total yield thus decreased, while false-positive results and, consequently, other interventions increased (Grant & Mohide 1982, Hall et al. 1985, WHO 1987, Mohide & Grant 1989, Peters et al. 1996, Luyben 1997, Heringa 1998, Langer et al. 1999).

Heringa (1998), while studying the effectiveness of a computer programme (PRELAB) designed to steer and control the performance of antenatal care in the Academic Hospital in Groningen (AZG), was one of the few researchers to evaluate the total yield of several screening procedures. As a RCT could not practically be carried out, the experimental design was balanced with the existing normal antenatal care programme. A “before and after” design comparing data from 1985/1986 and 1991 was chosen to evaluate the programme, and the yield study included the medical data of all women entering antenatal care after 1986. The compliance rate amongst both the antenatal care providers and the 6850 women involved in the study was high (80 to 90%). Although the design made the study susceptible to bias through changes in contextual factors and the prevalence of diseases (Chapter 3.4.6), the findings clearly showed the dubious effectiveness of the procedures. Fifty percent of the test results were abnormal, the tests were clinically relevant for only 2% of all the children, and interventions following the tests were only successful in about 75% of these cases. Routine medical screening was therefore found to contribute little to an optimal outcome of pregnancy, while at the same time little was known about possible harm. Heringa (1998 p. 7) thus hypothesised that antenatal care had to be more than medical care, and proposed a definition of antenatal care as “every intentional intervention during pregnancy, from which can be expected that this will result in health gain (or benefit) for the woman and/or her child”. Recommendations involved a reduction in the number of medical visits and an evidence-based revision of the screening package, including removal of some controversial and complementary tests, while still complying with Dutch legal guidelines. Heringa (1998 p. 47), however, particularly highlighted his doubt about several aspects of the current approach to evaluation: “Maybe the effectiveness of prenatal care can not be proved, because we do not do what we think we do (..), or because what we do is not important (..), or because we do not measure what we think we measure”.

In the meantime, women recurrently emphasised information as the most important component of content of antenatal care for them (Oakley 1979, Garcia 1982, Oakley 1986, Reid & Garcia 1989; von Rahden 2003). Although care providers made numerous efforts to supply written information, women expressed their need for varying formats (Williamson & Thomson 1996, Proctor 1998, Villar et al. 2001a). They wanted information tailored to their individual needs and complained specifically about not having personal questions answered, mainly in regard to their pregnancy and general health (Cartwright 1979, Oakley 1979, Lundgren & Wahlberg 2001, von Rahden 2003). First-time mothers mentioned a need for general information, which they would prefer to be passed on through personal conversations (Reid & Garcia 1989, von Rahden 2003). While the quality of the woman-care provider relationship and interaction played an important role in the effective provision of information (O'Cathain et al. 2002a, O'Cathain et al. 2002b, Stapleton et al. 2002b), the woman herself, and her world, was another significant influencing factor. In a grounded theory study of women's processes of making informed choices in England, Levy (1999) noticed that women used different means to maintain equilibrium while coping with information. In short they regulated when they accepted the information, personalised it by adapting it to their individual situations and then acted upon it. How decisions were reached and who (woman or provider) reached them was related to women's individual situations. As the focus was on the women's processes, particular aspects of these situations were not reported.

Explanations of abnormalities, complications or procedures were an important part of information needed (O'Brien & Smith 1981, Garcia 1982, Reid & Garcia 1989). As the number of screening procedures increased, several studies addressed the nature of information needed regarding them. Routine screening procedures such as the monitoring of blood pressure and urine testing were not explained in detail. Most women hardly noticed these procedures, and more experienced mothers understood that "all is well, unless they are told otherwise" (Reid & Garcia 1989 p.135). More frequent explanations were provided about non-routine tests, although these also caused more anxiety. Studies on ultrasound and foetal abnormalities showed a positive relationship between the provision of information and levels of anxiety (Reid & Garcia 1989, Schönholzer & Götzmann 2001, Garcia et al. 2002).

Women's' complaints about the lack of personal information, however, were consistent and strongly related to the quality of professional human interaction.

Women's involvement in and control of their own care was therefore closely linked to the provision of information (WHO 1987) (Chapter 2.3). Women who held their own maternity records during pregnancy felt themselves to be more in control and to be able to communicate better with their care providers (Reid & Garcia 1989, Enkin et al. 2001). In England and Wales, the Changing Childbirth Report (DoH 1993) emphasised the empowerment of women through the provision of greater choice and control. As a consequence the "Informed Choice" initiative was launched (Rosser et al. 1996, Rosser 1997). This initiative aimed to provide women with adequate information for decision making through topic-related evidence-based leaflets. Other European countries followed this example (Klein Remane 2003).

The effectiveness of the provision of "Informed Choice" leaflets during pregnancy was studied in a RCT, using cluster randomisation in order to reduce contamination bias, of 13 maternity units in Wales (O'Cathain et al. 2002a, O'Cathain 2002b). An antenatal sample of 1386 women at 28 weeks was surveyed with a questionnaire about three decisions during pregnancy: ultrasound; screening tests for foetal abnormalities; and place of birth. With the postnatal questionnaire, 1741 women at about 8 weeks after birth were surveyed about five decisions during birth and the early postnatal period: foetal monitoring; the kind of care provider and positions during labour; epidural anaesthesia; and breast or bottle feeding. The questionnaire distinguished between prior preferences and informed choice and decision points, but not timing of provision of information. The provision of the leaflets, however, failed to increase the number of women making an informed choice.

A qualitative study using a grounded theory approach was carried out alongside the RCT in order to understand the context in which the leaflet provision took place (Stapleton et al. 2002b). This study also highlighted some of the flaws in the implementation of this RCT. Observation of 886 antenatal consultations and 383 in-depth interviews with women and providers were included. Although care providers were positive about their introduction, the leaflets were often invisible as they were provided as part of a package, and midwives rarely highlighted their content. Lack

of time, predefined norms in clinical practice regarding right and wrong choices, hierarchical power structures and women's limited choices all prevented the adequate provision of information and opportunity for discussion (Stapleton et al. 2002a, Stapleton et al. 2002b, Stapleton et al. 2002c, Stapleton et al. 2002d). Women rarely asked questions or made alternative requests. In this way their trust in care providers led to compliance with professionally defined choices rather than informed choice. Despite the fact that these findings are similar to those of previous studies (Chapter 3.4.4, 3.4.6) they also raise questions about the reasons for antenatal care attendance.

3.4.8 Evaluation of attendance of antenatal care

In spite of a lack of evidence of effectiveness and the fact that a variety of programmes resulted in similar medical outcomes, observational studies had suggested a link between inadequate antenatal care and poor birth outcome (Richardus et al. 1997, Enkin et al. 2000) (Chapter 2.3, 3.4.1). Utilisation of antenatal care was, therefore, desireable. Several descriptive studies in Europe and the USA tried to link the organisation of antenatal care provision to available demographic and epidemiological data (Chapter 2.3). None of them, however, succeeded in identifying the effective components of antenatal care provision and, as a result, highlighted the need for further study.

At the same time, nurse researchers in the USA were studying attendance of antenatal care from the women's perspective. The study of Patterson et al. (1990) used a grounded theory approach, and found that women utilising antenatal care were seeking "safe passage". Fourteen women attending antenatal care in a public hospital, nine receiving private care, and four non-attending women were interviewed about the beginning of their pregnancy and their decision about whether or not to seek medical antenatal care. Their own assessment of their health status, their degree of self-reliance and the influence of family and friends were important factors in this decision. Their expectations of antenatal care included receiving information, reassurance and medication, and the early detection and treatment of problems. Even if it was not the initial concern of a woman, "safe passage" was ultimately sought, either when danger to the health of mother or child arose during pregnancy, or at the start of labour. Although the women's responsibility in process

of becoming mothers was described, the study focused on medical rather than comprehensive care during pregnancy.

Under the same title of “Seeking safe passage”, a descriptive qualitative study addressed the use of routine antenatal care amongst 17 hospitalised Argentine women (Coverstone et al. 2003). The interview guide was based on the literature review, which had an influence on the inductive generation of data. The representativity of the findings for routine antenatal care was limited by the fact that women were hospitalised. As in the earlier study of Patterson et al. (1990), however, women highlighted the role of the cultural knowledge of other women in their direct environment in their decision making processes. These other women’s experiences led to the construction of a referential framework for a normal pregnancy, which in turn had a direct influence on the subjects’ utilisation of care. The integration of culturally sensitive and personally relevant components in care was therefore recommended. The researchers did not, however, question the existing concept of antenatal care.

Internationally, the negative aspects of antenatal care attendance which women reported involved its poor organisation. Within this general complaint particular reference was made to specifics such as problematic access to clinics, the distance to their home, transport and waiting times (Garcia 1982, Reid & Garcia 1989). Although the majority of these studies were carried out in the United Kingdom (Reid & Garcia 1989, Proctor 1998), the issue of dissatisfaction with the organisation of antenatal care was also mentioned by women in Argentina (Coverstone et al. 2003). Women in the USA, however, hardly reported any dissatisfaction with organisational aspects of care, which may have been due to the availability to them of a choice of care provider (Patterson et al. 1990, Milligan et al. 2002). A choice of care provider was not been raised as an issue in the United Kingdom. The findings from studies of women's views were, however, descriptively reported as existent indicators were limited. The effective evaluation of the content of antenatal care also requires therefore valid, reliable and comparable indicators for measurement.

3.4.9 Evaluation of indicators of antenatal care

Several researchers had questioned the validity of existing traditional indicators for the determination of effectiveness (Enkin & Chalmers 1982b, Hall et al. 1985, Heringa 1998, Enkin 2006). No studies, however, considered the construction of alternative comprehensive indicators, which could have been related to the prevailing medical perspective on antenatal care. While the PERISTAT project aimed to develop an indicator set for monitoring maternal and perinatal health in the European Union (Zeitlin et al. 2003) (Chapter 2.3), it focused on the international availability and comparability of indicators rather than their relationship to the performance of care. Similarly, Devane et al. (2007) devised an international core set of indicators based on the results of a three-stage Delphi survey of 320 maternity care professionals from 28 countries. Both studies however only involved one particular group of stakeholders (providers of care), and resulted in indicator sets largely comprised of traditional medical outcome indicators. Most of these indicators reflected complications in pregnancy in terms of death and disease (Lohr 1988, Lundgren & Wahlberg 1999) rather than the effects of antenatal care on healthy pregnant women. Although the PERISTAT-indicators included “support” and “maternal satisfaction”, these could not be used in practice due to a lack of information (Chapter 2.3).

Observational studies of client-centred outcomes indicated, however, that women themselves might define a different set of effectiveness indicators for maternity care than the traditional ones. Most of these, however, were still determined after childbirth (Proctor 1998, Kline et al. 1998, Issel 2000). Preference studies also showed that women and care providers preferred different birth outcomes (Vandenbussche et al. 1999, Pham & Crowther 2003). A focus group study by Proctor (1998) found similar opinions in both midwives and women regarding the importance of relationships, the attributes of staff and the environment of care. Differences, however, were noticed with regard to information, the importance of continuity of care, the need for control, confidence in adaptation to the maternal role and the role of the partner. Client-centred outcomes for the effects of pregnancy and childbirth on the postnatal health of women were developed by Kline et al. (1998) through focus group interviews with mothers, clinicians (gynaecologists and midwives) and family practitioners. Four common important outcome areas were

found: physical, psychological, sexual and social outcomes.Care providers and women, however, emphasised these differently. Care providers tended to emphasise maternal and neonatal health outcomes, while women focused on the impact of pregnancy and childbirth on overall long-term function. Perception of effectiveness was therefore strongly related to the perspective of the stakeholder.

This lack of valid comparable indicators reflecting the performance of antenatal care was underlined by Enkin (2006 p. 267): “We have to study the outcome that we can study, rather than the outcome we would like to study.” At the same time, however, he also emphasised the need for a different approach to the evaluation of effectiveness in obstetrics and midwifery.

3.4.10 Changing views on the evaluation of maternity care

In recent years, the dominant approach to the evaluation of maternity care has been questioned (Thomas et al. 2004, Enkin 2006). Publications expressing changing views on the evaluation of maternity care increased especially after the Term Breech Trial (TBT) (Hannah et al. 2000, Kotaska 1004, Glezerman 2006). The limitations of RCTs for evaluating some disciplines had already been highlighted before this time however (Hicks 1998). Researchers reported concerns regarding the appropriateness of using RCTs for evaluating a variety of questions. They also highlighted a failure to include context, interaction and the view of all stakeholders in the first place, and a failure to relate all these aspects to others while determining effectiveness. Some consequently suggested dealing with the complexity of the area under evaluation through the use of a variety of different methodologies and methods (Bradley et al. 1999, Enkin 2006), while others proposed methods of integrating the results of qualitative studies into systematic reviews (Thomas et al. 2004). Antenatal care however had not been subjected to such forms of evaluation up to this point.

In the next section, further analysis of the findings from section 3.4 and comparison with previous findings from Chapter 3.2 and 3.3 will be carried out in order to define the approach to studying the provision of effective content in antenatal care in the current study.

3.5 Application of the framework of effectiveness in antenatal care

The application of the concept of effectiveness and methods used in the evaluation literature on antenatal care are now analysed and compared with the results of the analysis of the evaluation of effectiveness in industrial technology and education (Chapter 3.3). This analysis is then summarised and presented in an overview in Table 3.5.

3.5.1 Attributes and associated expressions

As in the disciplines of industrial technology and education, effectiveness was viewed as a characteristic of the performance of the content of antenatal care ("agent") which was defined through its ability to achieve a desired effect. This effect depended on the researcher's perspective on antenatal care ("antecedent") (Chapter 3.5.2) in which the epidemiological and biomedical perspective was dominant. Agents thus involved a variety of different individual clinical screening, diagnostic and therapeutic procedures, as well as sequences of procedures and whole programmes. Consequently, desired effects for each agent were defined as reductions in maternal and perinatal mortality and morbidity ("clinical (or medical) outcome"). Other effects and complexity of certain agents were hardly considered. Effectiveness was evaluated in a standardised clinical environment in accordance with the definitions in medical dictionaries (Chapter 3.4.1).

The associated expressions of "quality" or "satisfaction" (Chapter 3.2) were used for evaluation studies of women's, and sometimes care providers', views. Comparability was limited by methodology as well as available indicators (Chapter 3.5.3, 3.5.4). Women, however, emphasised the effects of different agents than those making up the medical content of antenatal care, such as information and the relationship with their care providers.

3.5.2 Antecedents

The most important antecedent was the perspective of the researchers which determined the agent and the effects to be evaluated (Chapter 3.5.1). Epidemiological and biomedical perspectives dominated. In contrast to evaluation in education and industrial technology, but in line with these perspectives, the aim of

effectiveness was linked to outcome rather than performance (Chapter 3.3). The definition of objectives consequently emphasised deficits such as death and disease rather than the health and resources of mother and child. Specific objectives were defined for certain components of content (for example reduction of smoking). Little was discovered regarding other stakeholders' objectives (Chapter 2.3).

Knowledge was available regarding agents, indicators used and the professionals providing antenatal care. Information about the context was limited to available demographic and epidemiologic data. As in education (Chapter 3.3), little was known about performance of the agent, its relationship with possible effects, objects of change (women) and the influence of the woman-provider relationship. Studies had shown however, that components of content could be reduced and changed without significant effects on clinical outcomes, and that these effects were influenced by the general health and social well-being of objects (for example high risk/low risk).

3.5.3 Consequences

As aims were outcome-based, indicators of effectiveness were standardised and reflected maternal and perinatal mortality and morbidity, most often measured after childbirth (WHO 1994, WHO 1997, Zeitlin et al. 2003). Availability, comparability and quantifiability determined the use of these indicators. Process indicators of effects were rarely described. If single components of content were evaluated, specific indicators were often additionally defined.

In contrast to industrial technology and education (Chapter 3.3) however, a causal relationship with the "performance of the agent" was insufficiently established. It could therefore be questioned whether "effectiveness" was a result of the performance of the procedures in the content of antenatal care or other influencing (confounding) factors such as context or the interaction between women and providers. The effects of antenatal care on women were often separately reported (Chapter 3.5.1). Some studies, however, suggested that women would define different care indicators than care providers.

3.5.4 Methods of evaluation

In contrast to evaluation in industrial technology and education (Chapter 3.3), two approaches to the evaluation of antenatal care were found: performance-orientated and outcome-orientated. In accordance with the prevailing perspectives (Chapter 3.5.2), epidemiological and biomedical research methods were used for evaluation, with a preference for RCTs. This preference for one specific evaluation approach was a further contrast with the two other disciplines (Chapter 3.3), in which evaluation methods were based on aim, performance of the agent, and expected effects. In this respect, the complex nature of antenatal care was not really taken into account. Some researchers had therefore recommended evaluating maternity care in developed countries with a combination of biomedical, epidemiological and psychosocial research methods. Methodological incompatibilities, however, had until recently inhibited combining these methods in reviews of effectiveness.

Table 5. Overview of the application of the framework of effectiveness in the evaluation of antenatal care (Chapter 3.4). The currently prevailing approach to the evaluation of effectiveness is indicated in blue.

Antecedents			
Perspectives on nature of antenatal care	women's views	biomedical/ epidemiological	others; several other disciplines/ individual
Aims	becoming a mother, own and family health	reduction of PMR, MMR and morbidity	several- depending on each stakeholders
Knowledge	aims, object, context, expectations	outcome, epidemiologic and demographic data, agents, providers,	a variety of elements of antenatal care, such as information, informed consent, interaction, attitude
No knowledge	agents, providers	performance, object, interaction, context	depending on perspective; little of biomedical outcome
Attributes			
	quality, satisfaction experience with (effective) antenatal care	(clinical) effectiveness agent, performance, standardised context	terminology different, "evaluation" rather than "effectiveness" agent, effects
Consequences			
Indicators	(dis-) satisfaction experience with agent, performance, interaction	biomedical/ epidemiological outcome; MMR, PMR, dieases and complications	variable indicators, depending on effects, qualitative, quantitative, little available and (international) comparable
Evaluation methods			
	surveys, qualitative, interpretive methodology	quantitative, deductive methodology, reviews of several study designs, but preference for RCTs	qualitative and quantitative, depends on perspective and agent

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3.6 Conclusion

In the present study, the term “effectiveness” as used in evaluation studies on antenatal care was clarified, in order to pursue its aims. Primarily, the concept of effectiveness was analysed, which resulted in an operational concept for effectiveness. Following this, the application of this concept and related evaluation methods were analysed in the disciplines of education and industrial technology. The results of this analysis were consequently compared with evaluation literature in antenatal care. All disciplines had a similar understanding of the concept of effectiveness, in that it reflected the performance of an agent.

Unlike the other disciplines, the evaluation of antenatal care was determined by particular perspectives (biomedical/epidemiological), through which attributes (including agents), antecedents, consequences (including indicators), and evaluation methods were defined. This merely deductive, quantitative approach to evaluation, however, had only been partly successful in generating evidence of effectiveness of antenatal care to date. The problem of insufficient evidence of effectiveness was multifaceted. Firstly, limitations were experienced with regard to the validity and accuracy of medical content, including insufficient proof of the causal relationship between content and effects. Secondly, through emphasising medical content only, the complex nature of antenatal care, including context, relationships between components of content, and all human stakeholders and interactions, were not really taken into account. Thirdly, the availability, comparability, validity and reliability of indicators of effectiveness were limited.

Based on these conclusions, a different approach to a study of the evaluation of effective content in antenatal care is needed. As three European countries are involved in this study, a comparative approach was preferred, which had to account for the complexity of antenatal care. This approach and the research methods used are described in the next chapter.

CHAPTER FOUR- APPROACH TO THE STUDY AND THEORETICAL FRAMEWORK

4.1 Introduction

In this chapter the approach to the current study and the framework providing the context for it will be described. In order to outline the assumptions that underpin the research, this description will include information about the epistemological and ontological perspective as well as the methodology and methods.

4.1.1 Aim of the study

The current study was designed to provide data for the development of a conceptual model of effective content of routine antenatal care constructed by women in three European countries: the Netherlands; Scotland and Switzerland (Chapter 1.3, Appendix 3). Based on the findings of previous European evaluation studies (Chapter 2.3), it was unclear whether this study would result in one or multiple models.

The initial intention had been to compare and contrast this model with European guidelines on routine antenatal care in the second stage of the study (Appendix 3). The divergent data found during the first (MPhil) stage of the research (Chapter 4.8.1) however, indicated the existence of a model for each of the countries which had to be explored in more depth in the second stage of the study in accordance with the chosen approach (Chapter 11.5, Appendix 4). Consequently, the aim of the first stage of the research design was pursued throughout the current study.

The overall aim was, therefore, to investigate the provision of effective content of routine care during pregnancy in the three countries from women's points of view, in order to be able to inform maternity care professionals and policy makers of essential requirement for the provision of effective content in routine antenatal care programmes. The specific objectives of the study were: firstly, to explore important aspects of care during pregnancy from the woman's perspective; secondly, to construct a conceptual model (or models) of effective content of routine care during

pregnancy based on women's views; and thirdly, to compare this model (or models) with existing literature.

4.1.2 The research question

While the research question arose from a survey of maternity care professionals and initial literature consultation (Chapter 1.1, Chapter 1.3), it was modified and refined following the planning of a schedule and choice of settings for the study and further literature review (Chapter 3.4). As a consequence, "care during pregnancy" rather than the term "antenatal care" was used, as the study aimed to address the complexity of care during pregnancy (Chapter 1.4). The final research question developed was therefore:

"What is effective content of routine care during pregnancy in the Netherlands, Scotland and Switzerland from women's points of view?"

4.1.3 Background

The topic for the current study arose from a survey of maternity care professionals in several European countries and an initial consultation of literature on antenatal care (Chapter 1.1).

At the start of this study the researcher's thoughts, (Chapter 4.12.1), like those of most professionals, were framed by prevailing medical perspectives on effectiveness (Chapter 2.4, 2.5). Other perspectives, such as holistic approaches to pregnancy and childbirth as described in some midwifery studies (Bryar 1995, Fleming 1998a, Fleming 1998b, Kennedy 2000, Kennedy et al. 2003), were not really taken into account. A lack of proof of effectiveness was therefore blamed on a lack of data, although some studies noted a mismatch between theory and practice. Clarification of the concept of effectiveness and a subsequent review of available literature (Chapter 3.4) showed that researchers repeatedly emphasised that the evaluation of effectiveness had to be expanded beyond the medical horizon so as to address the complex nature of antenatal care (Enkin & Chalmers 1982b, WHO 1987, Heringa 1998, Enkin 2006). Although the evaluation of some components had been

approached from different perspectives, these had not been used to determine the effective content of routine antenatal care.

4.1.4 Constructionist epistemology

Epistemology deals with the philosophical groundings of scientific method, in which it is concerned with the nature of knowledge, its scope, and possibilities of knowledge generation ("how do we know what we know") (Lincoln & Guba 1985, Crotty 2005). Its importance for the current study concerns understanding the philosophical underpinnings of knowledge generation with regard to effective content of antenatal care during the last century, including strengths and limitations, in order to determine a different approach. Like much research in health care and social sciences during the 20th century (Parahoo 1997, Oakley 2000, Downe & McCourt 2004), most evaluation studies of antenatal care were based on a positivist epistemology informed by a biomedical perspective (Chapter 3.6, Chapter 4.1.5).

The origins of positivism can be traced back to the period of Enlightenment in the 18th century, primarily in France and Germany (Lincoln & Guba 1985, Downe & McCourt 2004). Following, a subsequent "paradigm shift" (Kuhn 1996) positivism was embraced as a simple, elegant and unified way of analysing, understanding and explaining functioning of the natural and human world and its phenomena "by reducing it to its constituent building blocks" (reductionism) (Downe and McCourt 2004 p. 5). Positivist epistemology holds that meaning exists apart from consciousness and can be discovered as facts, and thus an objective reality ("truth") exists. The influence of empirical sciences is highlighted by the top-down fashion of research in this tradition, in which theories are tested and verified in deductive, experimental processes as well as the (mathematical) interpretation of data. Other key assumptions of positivist epistemology characterising research in antenatal care during the last century involve the researcher being detached from the research subject; research being temporally and contextually independent and results compared and generalised. All things are ultimately measurable; existence of a linear relationship between causes and effects and vice versa is demonstrated; and results of research is essentially free of values of the system (bias) (Lincoln & Guba 2000, Oakley 2000).

In this positivist tradition, the concept of evidence of effectiveness in antenatal care was constituted (Chapter 3.4) (McCourt 2005, Enkin 2006). The generation of evidence based on a defined hierarchy of study designs, with a preference for RCTs as the golden standard (Chapter 3.4.3). The positivist epistemology however also influenced the choice and relevance of research questions, the way these questions were framed, the terminology used (for example effectiveness), what is viewed as data, and primary and secondary outcome measures.

The linear, reductionist approach characterising "the toolkit of this evidence based paradigm" (Enkin 2006 p. 267) has been successful in solving many problems by providing effective ways to prevent and cure many serious diseases, which led to a decrease of maternal and perinatal mortality and morbidity (Chapter 3.4). This approach has also proven to be of great value in evaluating well- established interventions, and thus improving the effectiveness of maternity care services, which included the reduction of the number of ineffective interventions (Enkin et al 2000). Limitations however are posed by the nature and the complexity of some of encountered problems in pregnancy and childbirth (Downe & McCourt 2004, McCourt 2005, Enkin 2006). The complexity of the relationships between the physical process of pregnancy and women, environment, care providers and contextual and cultural factors cannot be evaluated by focusing solely on, and reducing it to the biomedical process and its components. In order to study effective content of antenatal care, it was therefore necessary to expand research beyond the biomedical scope by including different perspectives, such as sociological and psychological, and include different methodologies (Chapter 3.4).

As "the way of seeing is also a way of not seeing" (Oakley 1974 p. 27), the epistemology underpinning the current study was constructionism. This epistemiological stance based on the assumed existence of multiple individual realities of antenatal care, and involved that "all knowledge, and therefore meaningful reality as such is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty 2005 p.42). Each maternity care professional and woman gives meaning to the experience of antenatal care, influenced and constructed by beliefs and practice within their social world. Their

engagement in this experience is based on several factors including their own personal knowledge, experiences, values, social context and mutual understanding. The result of the interaction between women and maternity care professionals is thus a “bottom-up” construction of a meaningful reality in which provision of antenatal care takes place.

The social dimension of constructionism emphasises the importance of cultural and social context in understanding human behaviour and developing knowledge. From this point of view, human beings construct meaning dialectically as they engage with the world they are interpreting, as this shapes the human mind and actions. Knowledge is therefore not static, but fluid. The individual and cultural-societal context therefore is the basis for the social construction, maintenance and adaptation of a meaningful reality.

4.1.5 Interpretive view of reality

In the positivist tradition (Chapter 4.1.4), the existing concept of effective content of antenatal care is informed by a biomedical ontology. Ontology is concerned with the nature of existence (“what is”) (Crotty 2005), and thus how one views reality. Within the biomedical model, the biological process of pregnancy is focused on, in which antenatal care is viewed as basically a medical activity aiming to screen for risks, and diagnose and treat diseases in order to reduce maternal and perinatal mortality and morbidity and thus improve health (Chapter 3.4.3). The meaning of effectiveness has been framed by this model. Some researchers thus claimed that antenatal care was a medical construct (Wagner 1994), whereas the historical development highlighted its social origins, in which women were informed and educated as to take care of themselves and their children (Chapter 2.3, 3.4). The analysis of the literature review (Chapter 3.5), the holistic view of health (Bowling 2005), as well as reflections on the nature of pregnancy and childbirth (Downe & McCourt 2004, Walsh & Newburne 2002a, Walsh & Newburn 2002b, Mansfield 2008) however indicated that effective content of care in pregnancy is influenced by both the existing biomedical reality as well as other perspectives (such as women’s or those from other disciplines) (Chapter 3.4, 3.5). The constructionist epistemology underpinning the current study therefore bases on a relativist ontology, in which the existence of multiple realities is assumed (Denzin & Lincoln 2000).

Researchers within the interpretive paradigm advocate that a “view from within” is needed as people are different than things (Robinson et al. 1992 p. 48), while the construction of a meaningful reality of antenatal care is influenced by individual factors as well as historical and sociocultural beliefs and practices. This viewpoint allowed the uncritical exploration of the meanings constructed by the women participating in this study. The complexity of the research field (Chapter 4.1.4) was taken into account in the current study through the researcher's personal engagement with the women's social worlds.

During this study the researcher engaged in conversations with women in order to understand their existing situation (Chapter 4.7.4). She then acted as an interpretive “quilter” (“bricoleur”), who put together multiple individual pictures in order to recreate the realities of the women under study (Denzin & Lincoln 2000 p. 4). Meaning was therefore constructed by the researcher and women together through a reciprocal and dialectical process of interaction during interviews, in which concepts and their alternatives and differences were proposed and discussed. As the researcher's own preconceptions influenced the construction of these realities, these are acknowledged and discussed in relationship to their possible impact on the data (Chapter 4.12, 11.5). In this study listening, openness and a genuine interest in the women and their social worlds resulted in the acquisition of a wide range of information and aided understanding of their experiences and needs for effective content of care during pregnancy.

4.2 Grounded Theory

The current study aimed to explore and analyse the effective content of care in normal pregnancy from a constructionist perspective. Grounded theory was chosen as it offered a different perspective in which theory was generated from data grounded in everyday reality. This approach had been described by Schreiber and Stern (2001 p. xvii) as a framework particularly useful for accessing the field, and collecting and analysing data “in situations that have not previously been studied, where existing research has left major gaps, and where a new perspective might be desirable to identify areas for nursing intervention.” While enabling the complex nature of antenatal care and the magnitude of the research area, in which both quantitative and qualitative data could be integrated, to be understood, this approach

also allowed for increased focus on significant topics during subsequent stages of the study. Traditionally, grounded theory is underpinned by the interpretivist perspective of symbolic interaction (Glaser & Strauss 1999) (Chapter 4.1.5).

Symbolic interactionism has its roots in social psychology. Early antecedents were found in ideas of 18th century Scottish moralists and 19th century German idealists (Benzies & Allen 2001). The strongest influences however were early 20th century pragmatists such as James, Dewey, Cooley and, in particular, Mead. The pragmatist's view is that knowledge of the world is created through the active interpretation of the meaning of objects. This meaning does not reside in the objects themselves, but is determined by behaviour towards them. As this knowledge is probed for its usefulness through application to new situations and then reconsidered, truth for pragmatists is not absolute, but relative.

As additional bases for symbolic interaction, James suggested the development of a sense of “social self” through the visualisation of the reactions of others, and Cooley differentiated between “self” and “mind”, directing the use of symbols toward “self” (Benzies & Allen 2001). Additionally, Dewey emphasised the human symbolism expressed in language and its meaning for society. This fundamental work and the concepts arising from it were refined into a means of understanding human behaviour by Mead (1967). He described the mind as a result of social interaction, including the use of verbal and non-verbal symbols. He divided the “self” into an impulsive, spontaneous “I”, and a “me” whose behaviour was modified by the expectations of others. Eventually Blumer (1998) developed the work of Mead and proposed the term “symbolic interactionism”.

Essentially, symbolic interaction is based on the assumption that individuals construct their own reality by interpreting and attaching meaning to objects and situations in their social world. Then, based on this meaning, they interact with this world, using symbols for communication and understanding (Blumer 1998, Benzies & Allen 2001, Crooks 2001). Although symbolic meanings are individual, dynamic constructs shared symbols and meanings within groups lead to the development and identification of collective forms of understanding and action (Mead 1967, Blumer 1998). Women's individual experiences, such as their changes of self in becoming a

mother and related needs from care during pregnancy, were important issues in the current study alongside commonly shared experiences.

The grounded theory approach in this study was used for understanding women's views on content of care during pregnancy, and the social interactions within which these views gain meaning and insight (Blumer 1998, Crooks 2001). The researcher-woman relationship, as experienced during interviews, participation and observation, shaped the interactive context within which understanding was gained during the study. The underlying assumption of the approach was that a social process occurs which accounts for all data. As this process is timeless and relevant, it had to be recognisable for women in similar situations as well as researchers and care providers.

Grounded theory was introduced during the 1960s in the United States by Glaser and Strauss (1999 p. vii) as an alternative approach to theory generation designed to close “the embarrassing gap between theory and empirical research”. Strauss' ideas originated from the “Chicago School” of social pragmatists and interactionists (Mead and Blumer). Glaser on the other hand, was influenced by the positivist perspective of Lazarsfeld, known for his early use of both qualitative research methods and (quantitative) factor analysis (Lazarsfeld et al. 1967, Morse & Field 1998). This resulted in similarities between grounded theory and factor analysis, such as “categories” and “variables” (Strauss & Glaser 1999).

Confusion exists regarding whether grounded theory is methodology or method (Glaser 1978, Strauss & Corbin 1990, Glaser 1992, Strauss & Corbin 1998, Glaser & Strauss 1999, Strauss 1999). According to Blumer (1998) social interactionist methodology has to embrace the empirical world under study. This ultimately provides the answer to the scientific inquiry. Although he recognised two stages of inquiry (“exploration” and “inspection”), clear research procedures were not provided. The grounded theory approach used in the current study, however, contained both the idea of the emergence of theory from the empirical world under study so that it is grounded in this world, and a set of procedures as a means for exploration, interpretation and validation in a step-by-step fashion of. In this way

women's empirical worlds were taken into account, while simultaneously approaching the research problem in a systematic way.

Although Glaser and Strauss introduced grounded theory collaboratively, in later years they held conflicting views (Strauss & Corbin 1990, Glaser 1992, Babchuck 1997). Despite an apparent reversal of approach (Morse & Field 1998, Charmaz 2000, Cutcliffe 2000), methodical rather than methodological issues were at the centre of the controversy. According to both Glaser and Strauss, a constant comparative method of analysis and concurrent theory building is the heart of grounded theory. Central to the conflict between the founders were the analytical coding procedures described by Strauss and Corbin (Strauss & Corbin 1990, Glaser 1992). While Glaser emphasised “emergence” with as few rules as possible, Strauss increased rigour and structure through the introduction of a set of analytical techniques and procedures. As this development seemed to introduce positivist methodical procedures into grounded theory, Glaser (1992) called Strauss' version “forcing”. Additionally, Strauss and Corbin (1990) focused on searching for details and variation (“what if?”), whereas Glaser (1992) emphasised a focus on a main theme (“what is going on?”). Cutcliffe (2000 p. 1483), therefore, argued for a “richer and more complete” grounded theory by deciding on one of the approaches while at the same time augmenting it through the integration of both of these questions, as well as a third: “What categories, concepts or labels do we need to account for the phenomena?” As the researchers' creativity is another important asset in theory generation however, variations in both approach and procedures have been observed (Morse & Field 1998, Glaser & Strauss 1999, Cutcliffe 2000, Harris 2002).

The decision to choose the approach of Strauss and Corbin (1998) in the current study was based on the magnitude and complexity of the research area, plus the fact that the researcher was a novice to grounded theory (Strauss & Corbin 1990, Kendall 1999). There were concerns, however, that too much structure would hinder emergence, and force the results in a specific direction (Wilson & Hutchinson 1996, Kendall 1999). The focus of the study, therefore, was an exploration of what was going on, while as a consequence details and variations were sought. Regular reflection was used to keep a balance between methodical guidelines and emergence (Chapter 4.8.5). All other procedures, including sampling and data collection, were

derived from the central act of a constant comparative analysis. Before describing the methods used in this study, the implications of addressing three countries with different languages are discussed in the next section.

4.3 Culture and language

Most comparative research involving two or more European countries was described as "cross-cultural" because each country was viewed as a separate "culture" (Beuselinck 2000, Broadfoot 2000). Culture, however, had been more specifically defined as "A set of explicit and implicit guidelines which people learn as members of a particular society, and which informs them on how to view the world, how to experience it emotionally, and how to behave in it in reaction to other people, to the supernatural, and to the natural environment." (Helman 2007 p.2). From a symbolic interactionist perspective in the current study, culture was therefore the self-defined social world of the participant based on joint meanings of symbols. As these meanings were a consequence of the research process, they were not defined in advance (Mead 1967, Glaser 1978, Barnes 1996). Accordingly, the research field was addressed as one unit, and every "variable", such as age, culture and social class, has to earn its place in the theory based on its relevancy for women (Glaser 1978 p. 60). Upon its emergence during the research process, however, the role of a variable in the social process had to be studied as a consequence of theoretical sampling (Goulding 2002, Boufoy-Bastick 2003) (Chapter 4.6).

Despite addressing the research field as one unit, Barnes (1996) mentions that cultural neutrality and sensitivity are necessary conditions for performing grounded theory research so as to avoid any cultural bias based on preconceived assumptions. Firstly, for cultural neutrality the researcher had to move away from her own preconceived assumptions through reflective bracketing (Ahern 1999) (Chapter 4.12, 11.5). Being the research instrument, however, complete removal of cultural bias was impossible and therefore all interpretations are provisional and analyses incomplete (Barnes 1996). In the current study cultural neutrality was increased by using the data from the three countries involved as each other's reference points and thus reducing the role of the researcher's cultural orientation. Secondly, culturally sensitivity involved closeness with the world under study through engagement (Barnes 1996). This was increased by personal and professional experiences in the

women's world in the current study. In this way, cultural familiarity was gained through spending time in the company of and talking to both professionals and lay people in each of the countries (Chapter 4.12).

Some researchers claimed that culture and its boundaries are largely defined by language (Barnes 1996, Goulding 2002), which was the reason why the current study was initially viewed as a multi-case design (Luyben & Fleming 2005). As the formal languages of the countries involved, Dutch, English and German were the three languages used in this study. Although the number of multilingual studies had increased over the past decade (Lüschen et al. 1995, Beuselinck 2000), little was known about the comparability of different languages in comparative research.

Symbolic interactionism, however, defined language as joint meanings of symbols created through interaction with the social world (Mead 1967). Accordingly, Dey (1999 p. 129) described coding in grounded theory as “translating language into a secret set of symbols”. Symbols such as language therefore, had to be interpreted within their context in order to understand and then construct meaning (Noblit & Hare 1988, Schwandt 2000). Some comparative studies carried out in varying English language cultural groups highlighted differences in joint meanings (Barnes 1996, Houston & Venkatesh 1996) even when comparibility of this language was generally accepted (Beuselink 2000, Ryan et al. 2004). In the current study therefore, symbolic meanings were dialectically constructed with women during the interviews within one language and between languages, which enhanced consistency of meaning and allowed comparison. In particular consistency was achieved by having one researcher for all languages involved (Chapter 4.13.3).

Comparison of language in this study concerned two stages of the data collection: interviewing and data analysis. Barnes (1996 p. 433) recommended as little translation as possible during interviewing, as a language barrier between researcher and participant “disarms a researcher's ability to assess meanings, intent, emotions, and reactions and creates a state of dependency on the interpreter or translator.” In the current study therefore, the researcher performed interviews in one of the three languages allowing interviewees to choose the language they preferred. Verhoeven (2000), however, pointed out that understanding participants in a cross-cultural

context was not only a matter of knowing their symbol system, but also an attitude of respect, sympathy and interest. Thus in the current study, an atmosphere of confidence could be created in which appropriate expressions and meanings in each of the languages were suggested, negotiated and created dialectically with women.

As “there are several reasons for minimal translation” (Strauss & Corbin 1998 p 285), in particular loss of specific cultural meaning, the interviews were transcribed and coded in the language of execution. Meta-concepts resulting from established meanings in each language were then translated and used for cross-language comparison. Accordingly, Noblit & Hare (1988 p.14) stated that “cross-cultural studies involve translation at another level”. Brislin (1973) suggested a similar process, while using the etic-emic distinction. While “etic” meaning derived from general concepts shared by all cultures, “emic” referred to specific cultural meanings (Beuselink 2000). This process allowed comparison of concepts at a higher abstraction level, while specific cultural similarities and differences were left intact and comparable. The fact that one researcher managed the collected data in all three languages enhanced translation and comparison. In line with symbolic interaction, resulting concepts were validated by checking these with women within, as well as across languages (Chapter 4.13.1).

Criteria influencing the design of this study were: minimal translation; optimal interpretation of meaning during analysis within as well as between language units; maximal use of sampling on the basis of emerging concepts (Chapter 4.6); and optimal integration of results from all countries. While the research area was considered to be one unit, consistency of meanings in each language had to be established before all data could be compared and integrated. Principally, grounded theory advocated a step-by-step approach going from one unit to another for data collection so as not to miss opportunities for theoretical sampling, Glaser and Strauss (1999 p. 21), however, stated that these units could be “any size”. While using grounded theory in a multi-site design, once initial sampling had taken place, theoretical sampling defined the sites needed, as well as the samples and their sizes (Strauss 1999).

In the current study each sample carried out in one of the languages was treated as a unit of meaning in which consistency was achieved by the construction and identification of similar concepts amongst women in one language. While units for initial open sampling were convenience samples defined by the researcher, subsequent units were determined by theoretical sampling (Chapter 4.6). Depending on access, Strauss (1999) mentioned two modes of initial sampling and data collection: subsequent and concurrent. As access was allowed for each site in this study, the concurrent mode was followed. Because of the limited time available for each site visit, simultaneous analysis was often started but not necessarily completed at one site. Field notes therefore assisted data collection (Chapter 4.8.1). After the analysis of each of the language units, concepts from these units were integrated in the overall unit through constant comparison. Further methodical aspects of this study are outlined in the following sections.

4.4 Gaining access

The current study was carried out in three European countries (the Netherlands, Scotland and Switzerland) because the researcher was fluent in the regional languages as well as the comparability of healthcare systems and medical standards and statistics (Chapter 1.3, 2.4). Based on accessibility, the regions in which the study took place were the West of Scotland, the German speaking part of Switzerland and the Western and Eastern part of the Netherlands.

Routine care during pregnancy was defined as attending for the normal number of antenatal visits as defined by the health system of the country involved. Access was gained through the principal maternity care professionals in each of the countries. As they subsequently recruited women for the study, their consent for participation was sought for. All these professionals were provided with the Information Form for the Care Provider (Appendix 3) containing the research proposal, and the form containing the ethical considerations relating to the research (Chapter 4.5.4). Additional explanations and answers to questions were given in personal discussions. Participating care providers were kept informed of the progress of the research throughout the study.

4.4.1 The Netherlands

Two professional parties were engaged in routine antenatal care in the Netherlands: GPs and midwives (Chapter 2.4.2). The main practitioners were independent midwives, who were contacted in both urban and rural areas. They were individually approached and visited during December 2001. Two midwifery practices were located in cities (Enschede, The Hague) and one in a rural area (Western part of the Netherlands). Through the Vereniging Verloskundig Aktieve Huisartsen (VVAH), a GP was contacted in Spring 2002. Based on theoretical sampling however, his participation was not required.

4.4.2 Scotland

Initial access to the Scottish sample of women based in the Western part of Scotland was gained through the networks of the two supervisors of this study. For the first theoretical sample, access was sought through independent midwives as this service was not formally provided through the NHS. For the second theoretical sample, access to Blantyre Health Centre and their clients was gained through the NHS in Lanarkshire (Chapter 4.5.4, Appendix 8).

4.4.3 Switzerland

The main care providers in Switzerland were gynaecologists and midwives and recruitment was carried out via them. The inclusion of GPs was initially considered but, based on the study results, was not needed. Cantonal differences for both women and antenatal care were expected (Chapter 2.2). Four gynaecologists in private practices and hospitals in the Eastern, Central and Western regions of Switzerland (Bern/ Luzern/Graubünden), and two midwives (birth centre/independent) in the Western and North Eastern regions were contacted.

Ethical approval was sought in order to access the research field. Ethical considerations and the approval needed to conduct this study are described in the following section.

4.5 Ethical considerations and approval

Research in healthcare is guided by ethical guidelines which regulate professional conduct in healthcare and research while aiming to protect participants and their rights. The current study satisfied the five basic ethical principles of beneficence, non-maleficence, justice, veracity and autonomy, which are integrated into both the International Code of Ethics of Midwives (ICM 1999.) and the Nuremberg Code of 1947 (Mitscherlich & Mielke 1995).

Ethical guidelines in social research aim to produce non-judgemental social science. In the Belmont report from the US National Commission for the Protection of Human Subjects in Biomedical and Behavioural Research, three main ethical principles were defined as a guideline for research involving human subjects (U.S. Department of Health, Education and Welfare 1979, Christians 2000, Carpenter 2003b). This framework, which guided the description of the ethical issues of the current study, included:

- Respect for persons
- Beneficence
- Justice

4.5.1 Respect for persons

Respect for persons means both treating individuals as autonomous human beings and protecting persons with diminished autonomy (U.S. Department of Health, Education and Welfare 1979). Based on the International Code of Ethics of Midwives (ICM 1999) women in this study were treated as autonomous persons. Participation therefore needed their informed consent (Mitscherlich & Mielke 1995). The process of obtaining informed consent in the current study included three elements: information; comprehension and voluntary participation (U.S. Department of Health, Education and Welfare 1979).

Information about the study was provided in a leaflet which described the research procedure, purposes, risks and anticipated benefits in each of the languages involved (Appendix 5). The women were informed about their rights to ask questions or to

withdraw at any time both in this information form and in the consent form (Appendix 6).

The opportunities to ask additional questions during the first telephone contact with the researcher, one week after sending the information form and before starting the interview, supported comprehension. Most women did not have additional questions.

It was essential that the decision to participate was made voluntarily and not under any pressure (Mitscherlich & Mielke 1995). The researcher did not therefore recruit women herself, but did so indirectly through care providers who had consented to participate (Chapter 4.4). Women were free not to join the study at all or to withdraw at any time. Participation or non- participation did not affect the service they were receiving.

Three women in the Netherlands and one woman in Scotland verbally agreed to participate but then withdrew before the interview. Two of them were experiencing family problems and rescheduling not possible. Another decided that she did not want to participate after her husband had initially told the care provider that she would. The fourth was hospitalised shortly before the interview. All other women gave their written consent at the beginning of the interviews. No one withdrew consent during the interviews (Chapter 4.7.4).

4.5.2 Beneficence

Beneficence involved positively doing good rather than just preventing harm (Carpenter 2003b). The expected long-term benefits of this study were adaptations of the antenatal care programmes in order to meet the actual needs and expectations of women. Growing awareness of their needs and expectations as a consequence of the interviews was viewed as possible harm. Care providers were therefore contacted after the woman's next antenatal care visit and asked about positive or negative effects arising from the study. No particular effects were reported. Other issues in regard to the principle of beneficence were privacy, confidentiality and anonymity.

Conducting the interview (s) in a place that was agreeable to the subject, where she felt free to talk without interruption, safeguarded privacy. Most interviews were carried out in the women's homes (Chapter 4.7.3). None of the interviews took place in the setting where women had antenatal care.

Confidentiality meant that any information from the women was not made public or accessible to any third parties, other than those directly involved in the research (Carpenter 2003b). The information was only available to the researcher and her supervisors at Glasgow Caledonian University. Because of the gender and profession of the researcher (Chapter 4.12.1) it was expected that confidentiality issues would arise. Confidentiality was always maintained, and, if necessary, the woman referred to a professional care provider. With questions relating to the content or organisation of antenatal care, the woman was referred to her own care provider. No issues requiring referral came up during the interviews.
In order to secure anonymity it was not possible to link collected data to the women. The research adhered to the principles of the United Kingdom Data Protection Act (Public Record Office1998), based on EU Directive 95/ 46/ EC. Data were stored in a locked filing cabinet in order to prevent unauthorised or unlawful access (Public Record Office 1998). The transcript was only accessible to the researcher, the supervisors and the woman herself. After analysis, personal data were coded. All written material containing personal data of the women which could possibly lead to recognition was shredded and tapes of interviews were destroyed. Data were not transported outside the European Economic Area.

4.5.3 Justice

The criterion of justice meant that there were "fair procedures and outcomes in the selection of research subjects" (U.S. Department of Health, Education and Welfare 1979). This included fair treatment and the right to privacy and anonymity.

Fair treatment involved an unbiased selection of women, equal treatment of each of them and reflection on the influence of the researcher-woman relationship. The research approach initially required access to a wide range of women attending antenatal care (Strauss & Corbin 1998, Glaser & Strauss 1999). All kinds of women were addressed. Theoretical sampling subsequently defined the sample.

All women were treated equally and received the same information. Transcripts and a summary were provided on request. Participation did not influence the care they received. Participation in multiple studies was prevented by research ethic committees (Chapter 4.5.4) and care providers. Two women in the Netherlands had joined another study.

As the researcher was the instrument for data collection, she came to know the women personally. Her role as both researcher and professional was carefully balanced, with the primary concern being the woman's well-being (Carpenter 2003b) (Chapter 4.12.1). The researcher-woman relationship was positively influenced by the researcher not being part of the official healthcare system in any of the countries in the study, which increased confidentiality and enhanced interaction. However if women had had negative experiences with midwives, the effect of being part of a professional group was also experienced (Chapter 11.5).

The right to privacy and anonymity was safeguarded for all women equally (Chapter 4.5.2). Complete privacy and anonymity was not achieved however, due to the personal nature of data collection in qualitative research in which the participant was known to the researcher.

4.5.4 Ethical approval

The design of the study was presented to the Departmental Research Ethics Committee of the Glasgow Caledonian University in order to seek ethical approval (Appendix 7). After approval was granted, access was sought through the appropriate channel in each locality as the study involved several countries with their own specific ethical guidelines (Chapter 4.4). In Scotland formal ethical approval was required for three interviews in Lanarkshire, and was obtained from the LREC, NHS Lanarkshire (Appendix 8). For access to women cared for by an independent midwife in Scotland and women in the other two countries, consent was given by the care providers and the women directly. In both the Netherlands and Switzerland institutional or regional ethical approval was not required. In this way each country had specific patterns for gaining ethical approval. While filling in the forms for ethical approval was time consuming in Scotland, in Switzerland and the

Netherlands this time was invested in personal meetings with care providers. Subsequent sampling procedures are described in the next section.

4.6 Sampling procedures

Grounded theory involved non-probability sampling, led by the research question and the type of data required for further development of the theory. The sampling procedures used were open sampling and theoretical sampling (Glaser 1978, Glaser 1992, Strauss & Corbin 1998).

Initial open sampling was done by convenience sampling, and aimed to provide maximum opportunity for discovering concepts through the inclusion of a large variety of persons, places and situations relevant to the topic (Strauss & Corbin 1998). The participants were defined as healthy women either at different stages of uncomplicated pregnancies or within 6 months after giving birth. The size of the open sample was based on the number needed to determine consistency of meaning (Chapter 4.3), while accounting for uncertain organisational factors as this size had to be planned in advance. Accordingly, five interviews were organised in Switzerland, five in Scotland and seven in the Netherlands.

Some authors mentioned that open sampling always included purposeful elements (Cutcliffe 2000, Strauss & Corbin 1998). This was also observed during this study. While the researcher aimed for variation in care provider, weeks of pregnancy and occupations in Switzerland and the Netherlands, both supervisors in Scotland sought variation in social class (Chapter 4.4.2). Morse (1991) emphasised that the sample determined the quality of the study. The experience of the current study, however, confirmed the arguments of Lincoln and Guba (1985) that any initial sample served the purpose, as the emerging theory emphasised what was important, but also defined missing elements.

Subsequent theoretical sampling was cumulative. It was aimed at densifying emerging categories, in terms of their properties and dimensions, and the discovery of variations in the developing theory. The theoretical concepts and categories which emerged guided the researcher's decision on what data to collect next, and where to find them (Glaser & Strauss 1999). Theoretical sampling was therefore started after

initial categories had been developed, and assisted and guided further development of the theory during which the study became more focused. Within the current study, theoretical sampling did not direct the researcher towards other sources than interviews with women. Based on the analysis of the first theoretical sample, the definition for sampling was extended to include women one year after having given birth to a first child. Reasons for theoretical sampling are described in Appendix 9. Theoretical sampling was stopped as theoretical saturation of categories was achieved (Glaser & Strauss 1999) (Chapter 4.8.8). The samples in terms of women participating in the current study are described in the next section.

4.6.1 Description of the participants

In grounded theory, participants themselves defined what characteristics were important to them and the research (Glaser 1978, Glaser & Strauss 1999). As the current study addressed effectiveness in antenatal care, women are also described in demographic terms in order to facilitate understanding. These demographics included age, number of pregnancies, number of miscarriages, number of children, point of time in motherhood that the interview took place, profession, marital status and type of care provider. All names are pseudonyms. Appendix 10 presents this description in a tabular form.

4.6.1.1 The Netherlands

In the Netherlands, care during pregnancy mainly involved either women and their midwives or women and their female environment (relatives or friends). The participants were:

1. Erin: 27 years old, one pregnancy, one child, interviewed two months after giving birth to her first child, receptionist, partner, independent midwifery care
Interviewed a second time at 30 weeks during her second pregnancy
2. Marianne: 32 years old, two pregnancies, one child, interviewed at 16 weeks during her second pregnancy, farmer's wife, partner, independent midwifery care
3. Hannah: 35 years old, three pregnancies, one miscarriage, two children, interviewed at six weeks after giving birth to her second child, medical doctor, partner, independent midwifery care.
Interviewed a second time at 16 months, and a third time at almost five years after

having her second child. Between the second and the third interview, she had given birth to her third child.
4. Mireille: 29 years old, one pregnancy, no child, interviewed at 26 weeks during this first pregnancy, desktop publisher, partner, independent midwifery care
5. Saskia: 22 years old, two pregnancies, one miscarriage, no child, interviewed at 11 weeks during her second pregnancy, unemployed, partner, independent midwifery care
6. Ariane: 33 years old, two pregnancies, one child, interviewed at 34 weeks during her second pregnancy, housewife/army officer, partner, independent midwifery care, had gynaecologist/hospital care in first pregnancy
7. Joëlle: 29 years old, two pregnancies, two children, interviewed two weeks after giving birth to her second child, salesperson, partner, independent midwifery care
8. Kerstin: 35 years old, five pregnancies, one child, four miscarriages, interviewed at eight weeks after giving birth to her first child, massage therapist, partner, independent midwifery care, was referred to hospital during birth
9. Laura: 37 years old, three pregnancies, two children, interviewed at 33 weeks during her third pregnancy, human resource (HR) manager, partner, independent midwifery care
10. Maren: 32 years old, one pregnancy, one child, interviewed one year after giving birth to her first child, farmer, partner, independent midwifery care, was referred to hospital during birth
11. Elena: 31 years old, two pregnancies, two children, interviewed five months after giving birth to her second child, teacher, partner, gynaecologist/hospital care
12. Nicole: 25 years old, one pregnancy, no child, interviewed at 29 weeks during her first pregnancy, home care assistant, partner, independent midwifery care

4.6.1.2 Scotland

Most Scottish women had shared antenatal care, in which they were cared for by a midwife at their GP's practice, and visited the hospital about twice during pregnancy. During pregnancy, the environment in which they were embedded played another important role. The participants were:
1. Heather: 35 years old, two pregnancies, one child, interviewed at 29 weeks during her second pregnancy with twins, housewife/nurse, partner, shared care

2. Megan: 36 years old, one pregnancy, no child, interviewed at 30 weeks during her first pregnancy, radiographer, partner, shared care
3. Nora: 34 years old, three pregnancies, two children, interviewed at 24 weeks during her third pregnancy, housewife/midwife, partner, shared care
4. Susan: 34 years old, two pregnancies, two children, interviewed at five months after giving birth to her second child, housewife/shop manager, partner, shared care
5. Jan: 37 years old, two pregnancies, two children, interviewed at four weeks after giving birth to her second child, HR manager, partner, shared care
Interviewed a second time at nine months, and a third time at five years after having her second child.
6. Lynn: 38 years old, five pregnancies, two miscarriages, three children, interviewed five months after giving birth to her second child, teacher, partner, independent midwifery care
7. Vanessa: 33 years old, four pregnancies, two miscarriages, two children, interviewed at six months after giving birth to her second child, journalist, partner, independent midwifery care
8. Emily: 20 years old, one pregnancy, no child, interviewed at 32 weeks during her first pregnancy, waitress, partner, shared care
9. Deborah: 33 years old, two pregnancies, one child, interviewed at 33 weeks during her second pregnancy, nurse, partner, shared care
10. Holly: 36 years old, three pregnancies, three children, interviewed at eight weeks after giving birth to her third child, cashier office supervisor, partner, shared care

4.6.1.3 Switzerland

Most Swiss women were officially cared for by gynaecologists, although in practice many had arranged the additional involvement of a number of other health care professionals. The participants were:
1. Paola: 38 years old, two pregnancies, one miscarriage, one child, interviewed at five months after giving birth to her first child, secretary, partner, gynaecologist/hospital
2. Yvonne: 37 years old, three pregnancies, three children, interviewed at five months after giving birth to her third child, physiotherapist, married, private gynaecologist
Interviewed a second time at 16 months after having her third child

3. Lilian: 31 years old, two pregnancies, one miscarriage, interviewed at eight weeks during her second pregnancies, midwife, partner, private gynaecologist
4. Verena: 34 years old, two pregnancies, two children, interviewed at two weeks after giving birth to her second child, housewife/ salesperson, partner, private gynaecologist/midwife
5. Barbara: 29 years old, three pregnancies, two children, interviewed at 30 weeks during her third pregnancy, farmer's wife, partner, independent midwifery care/ birth centre
6. Sarah: 34 years old, two pregnancies, two children, interviewed at six weeks after giving birth to her second child, teacher, partner, private gynaecologist
7. Rosemary: 30 years old, one pregnancy, no child, interviewed at 36 weeks during her first pregnancy, shop manager, partner, private gynaecologist
8. Catharina: 33 years old, one pregnancy, one child, interviewed at one year after giving birth to her first child, salesperson, partner, private gynaecologist
9. Lea: 34 years old, four pregnancies, two miscarriages, two children, interviewed at eight weeks after giving birth to her second child, florist/medical masseuse, partner, private gynaecologist
Interviewed a second time three and a half years after giving birth to her second child
10. Sonja: 35 years old, two pregnancies, one child, interviewed at 22 weeks during her second pregnancy, commercial assistant, partner, private gynaecologist

In the next sections the organisation of the data collection, which involved the interviews with these women, is described.

4.7 Data collection procedures

As everything in grounded theory is data, this study distinguished between formal and informal data (Glaser 1978, Swanson 1986). The interviews were the primary data sources for analysis, and thus the formal data. Informal data were not analysed, but were required to understand the context, support development of concepts, develop theoretical sensitivity and as secondary data sources for writing.

4.7.1 Informal data

Important sources of informal data were field notes and conversations with different people in each of the countries involved, such as professionals as well as mothers. These stimulated reflection on the theory under construction. Another body of informal data was non-technical literature such as the information that women received during their pregnancies. Understanding of the cultures, countries and healthcare systems was based on this literature as along with legal documents and web-based information. Dictionaries and thesauri were used for the clarification of names of concepts.

4.7.2 Formal data

Grounded theory uses a variety of methods including interviews, participant observations, written documents or even quantitative sources such as statistics (Backman & Kyngäs 1999, Schreiber 2001, Charmaz 2002, Goulding 2002). With a focus on the human experience (Chapter 4.1.4), interviews in the three countries involved were the main method used in the current study.

4.7.3 Organisation of formal data collection

The information form and the informed consent form for women were initially designed in English (Appendix 5, 6). Once ethical approval was granted (Chapter 4.5.4), the researcher translated all forms into Dutch and German. The translations were checked by native German and Dutch speakers (but not healthcare professionals) in Switzerland and the Netherlands.

Once access was gained through the official channels in each country (Chapter 4.4), women were recruited through their care providers who passed their names to the researcher. One week after they were sent information and consent forms, women were contacted by telephone. They were asked whether they had any questions about the research, and a time and place to meet were arranged. Women were supplied with the researcher's telephone number and e-mail address should any further questions occur to them or in case they needed to change any arrangements.

Women were free to choose the location for the interview. Although Nigenda et al. (2003) had described cross-cultural differences in the choice of interview settings, most women in the current study chose to be interviewed at home. Through her presence in the women's' house during the interviews, the researcher's knowledge of the social world under study increased and the interviewer-interviewee relationship was positively influenced. Oakley (1981 p. 49) emphasised the importance of this relationship on the quality of data collection, stating that there is no "intimacy without reciprocity". The visibility of the researcher was an important aspect of this study which enhanced the interaction with the women. The researcher's gender and her professional status as a midwife were other influencing factors (Chapter 4.12.1).

Most women were interviewed once, but all of them were asked whether they would participate in another interview. None of the women refused. All except one were interviewed alone (except for the presence of children). One woman in the Netherlands explicitly wanted her partner to be with her in order to share and discuss the experience.

Women were initially told that the interview would approximately last one hour. Experience during the study showed, however, that some interviews required more time, particularly for "warming up" and "cooling down". Although no problems in this regard were experienced, this was communicated with the women in subsequent interviews.

The quality of the interview as well as generated knowledge is only as good as the interactive skills of the interviewer (Fontana & Frey 2000). In the current study, skills required involved asking the right kind of questions as well as supporting the woman in constructing her knowledge. Although several authors describe these skills in detail (Swanson 1986, Kvale 1996), Schatzman (1973 p. 74) stated that "There is no more important tactic than to communicate the idea that the informant's views are acceptable and important." Being an experienced midwife, the researcher brought prior skills into the study. Of these offering personal time and listening appeared to be the most significant.

All interviews were recorded using mini-disk recorder (Sony Recording Mini- Disk Walkman MZ-R700) with the informed consent of the women. The women were informed that they were free to refuse to answer any question without explanation and leave or terminate the interview or stop recording, if and when they pleased. No woman terminated the interview prematurely. On the contrary, most of the women found it hard to stop telling their story, particularly in Scotland and the Netherlands.

4.7.4 Interviewing

Interviewing for grounded theory work is a purposeful conversation in order "to understand the concerns, actions and behaviour of a group and explain those patterns of behaviour at a higher level of abstraction, a theory" (Chenitz 1986 p. 79). This method allows control for focus, flexibility and facilitation of the emergence and pursuit of new ideas and issues (Swanson 1986, Charmaz 2002). In this way issues from the subjects' worlds were explored in detail in the current study. One problem of flexibility was that women could deviate from the interview questions and focus on other topics. Birth and postnatal care came up as topics in this way. The following analysis, however, showed their relevance for antenatal care.

Semi-structured interviews were chosen as they include direction as well as openness (Kvale 1996). Because of the sample, topic and each individual however, the degree of direction and openness varied. The term "guided interviews" was therefore more appropriate for the interviews in this study. In "guided interviews" the "major purpose is to provide a minimally directive framework that enables both researcher and informant to access and identify key areas" (Grbich 1999 p. 94). This approach applied to interviewing during both the open and theoretical sampling.

An interview guideline was developed describing topics and themes (Appendix 11). The initial guideline was translated into each language. Interview guidelines were designed at each stage of sampling in order to document the theory development and questions as arising, and for communication with both supervisors. Attention was given to the neutral and non-judgemental construction of the questions used for interviewing (Smith 1995, Swanson 1986), which included reducing medical terminology. Listening carefully to what interviewees said helped in the construction of an appropriate language to increase researcher engagement.

Before starting each interview, the important issues of the study were summarised and any remaining questions were answered. Although Swanson (1986) advised obtaining demographic information at the end of the interview once the relationship was established, in this study it proved to be a good warm-up.
The language spoken during the interviews was English, Dutch or (Swiss-) German depending on the woman's choice. Interviews allowed women to clarify and explain their opinions, and, at the same time, the researcher to probe and negotiate words and meanings. This was an optimal solution for cross-language research (Chapter 4.3).

After warming up, all interviews started with the question "Imagine you can determine the content of care during pregnancy yourself based on your needs and expectations, what would be important to you?" Women were then encouraged to tell their stories, at which point the interviewer introduced some of the topics such as expectations at the beginning of pregnancy. Most questions were open-ended in order to allow data to emerge (Hutchinson & Wilson 1992, Strauss & Corbin 1998).

The interviews lasted between 21 and 126 minutes. The shortest interview was performed in Switzerland and the longest in Scotland. Generally Swiss women were less talkative than Scottish women, because of differences in information need and supply (Chapter 8.3.2).

At the end of the interview women were asked whether they wanted to add anything particularly important to them to the interview. This produced very little response. Officially stopping the interview by pressing the button of the mini- disk recorder, however, often launched a totally new conversation. This had also been experienced by Schreiber (2001). Information from these conversations was documented in the field notes and formed part of the informal data. Although post-interview contact with the researcher for further questions, problems or information was offered, none took this up. Data collection was followed by analysis, which is described in the next section.

4.8 Data analysis

Data analysis had often been described as the heart of the grounded theory method and was performed simultaneously with data collection (Polit & Hungler 1995, Babchuck 1997, Strauss & Corbin 1998, Glaser & Strauss 1999, Strauss 1999, Schreiber 2001). Analysis in grounded theory consisted of two key processes: coding and categorising (Strauss & Corbin 1998, Schreiber 2001). In the current study five procedures contributed to analysis: writing field notes; transcribing; coding; classifying or categorising in one language; and finally the cross-language classification. The researcher performed analysis in each of the languages concerned. This continuous interaction with the data led to increasing in-depth reflection.

4.8.1 Field notes

Field notes were written after each interview to reflect on the situation of data collection as well as the content of what the women said. They contained the reason why a woman was chosen, a summary of the most important concepts, a description of the situation and what happened during the interview. The field notes were not analysed, but used to guide data collection in subsequent interviews, and describe events and situations during writing down the theory.

The example presented here is part of the field note from the first Scottish interview (Heather, Scotland):

> Continuity: she described antenatal care as a “conveyor belt” (Garcia 1982 includes a quote about the conveyor belt). Although she did not want to change that (“antenatal care is very important, I could **not not** have antenatal care.”), I know it just got me afterwards, the way she described the impersonal treatment; I just felt so sorry, but I just couldn`t imagine that you just did not want to do anything about it. She actually wanted to know HER midwife before birth. When she knew this, she couldn’t stop talking about it anymore, this is what she would go for and ask. She almost ran away from the interview then.

4.8.2 Transcription

After data collection, the researcher transcribed the recorded interviews verbatim in each of the original languages involved. Understanding and theoretical sensitivity for the data, as well the interpretation of their meaning increased during transcription through the repeated interaction between record and transcript (Silverman 2003). The way and in which context things were said made a difference for analysis. Transcription by another person might have caused a loss of concepts, and this, in its turn, influenced analysis and thus validity and reliability of the study (Chapter 4.13).

4.8.3 Coding procedures

Analysis aims to retrieve concepts from collected real world data (Goulding 2002). In the current study, coding techniques were used to break the collected data down into small units of meaning and label them in order to generate concepts. Subsequent clustering resulted in categories and, finally, the grounded theory. The coding techniques specified by Strauss and Corbin (1998) were used, as the study was based on this grounded theory approach. They involved the stages of open, axial and selective coding.

4.8.4 Open coding

Open coding started the chain of theory development. In this transcripts were carefully examined, broken down into discrete units, compared for similarities and differences and labelled (Strauss 1999, Charmaz 2000). A thorough examination of the data was critical at the start of the study in order to allow the best explanations ("fits") to emerge (Glaser 1978, Charmaz 1995, Strauss & Corbin 1998, Strauss 1999, Carpenter 2003a).

The transcripts of the interviews were coded in a line-by-line, and sometimes word-by-word, fashion, which was of particular importance when meanings in the three languages were determined. Several authors recommended using this method during open coding (Glaser 1978, Charmaz 1995, Strauss & Corbin 1998), because full theoretical coverage of the research area was achieved resulting in a rich theory. The main procedures used during this stage were constant comparison and questioning.

Conceptual labels were provided by two sources: expressions used by the women ("in vivo codes"); and interpretation of what was happening in the data (Charmaz 1995, Strauss & Corbin 1998). These codes became increasingly theoretical during the continuing process of the study because of cross-language comparison, comparison with literature, and the development of theoretical sensitivity. The codes were revised and refined through continuous re-examination.

During categorisation, the codes in each of the languages were printed on different kinds of coloured paper, cut out, and grouped into provisional categories on papers on the wall (Appendix 12). This led to a reduction of concepts. These categories were then compared between the language units and translated. While Scottish women emphasised the categories of "information" and "control", the focus of Dutch and Swiss women was on the "relationship" with the care provider. Despite similar categories, saturation of categories was not obtained because of divergent data for each of the countries (Appendix 4).The resulting provisional cross-national model (Appendix 13) therefore led theoretical sampling in all, as well as particular countries.

4.8.4.1 Example of open coding: coding

This example of open coding was a part of the interview with Megan in Scotland:

Interviewer (I): And do you know before, when where to go?	
Answer (A): Well, they tell you... I saw the midwife and she said, well, I want to see you in whatever 3 or 4 weeks time, so she put the appointment down, hm, by that... then you've got the next appointment for the antenatal clinic,	They tell you She wants to see me in 3 or 4 weeks time She puts the appointment down You've got the next appointment for the antenatal clinic
and they make their own appointment again, and	They make their own appointment again

sometimes it turned out like being quite close together, maybe because of Christmas holidays, that I saw them like one and the other during two weeks time, which is like, well and then you have spells of like 4 weeks maybe,	Sometimes turning out being quite close together Maybe because of Christmas holidays That I saw both in 2 weeks time Then you have spells of like 4 weeks
in which they're just doing the same tests and then, why are you bringing a urine sample now again,	They're just doing the same tests again Why bring an urine sample now again
why it is not worth to bring a urine sample but, I think, it is done twice and it is not really necessary.	No problem bringing an urine sample It is done twice Not really necessary
Hm, like, yeah, a minimum of inconvenience like this, that they don't have the duplications of the tests enough, of checking this again.	Minimum of inconvenience No duplication of the tests Checking this again
I: Hm, what do you mean by that ?	
A: Hm, like, that one, the midwife at the GP make the urine sample and the antenatal clinic looks at the urine, it is like a short period of time, that they do the same tests.	The midwife make the urine sample The antenatal clinic looks at the urine The same tests In a short period of time
I: Hm, you have the feeling, that they could reduce that?	
A: That they should make the appointments like working more together, but on the other hand you see the midwife at the GP, and often, well	Making the appointments working more together You see the midwife at the GP

sometimes it is the same midwife, you see at the antenatal clinic, so... It' s not eh... Often they even do different tests, like at the antenatal clinic, they have got the ultrasound, and they do the blood tests there, and what else do they do? They looked at the weight. Normally the, hm, you see the midwife at the GP, that's for 15, 20 minutes. Where the others take more time, when they, they, often a doctor is coming and talking to you for a few minutes, like.	Sometimes Same midwife at the antenatal clinic Often They even do different tests Like at the antenatal clinic They got the ultrasound They do the blood tests there What else do they do? *(?)* Look at the weight You see the midwife at the GP for 15, 20 minutes Others takes more time Often a doctor is coming Talking to you for a few minutes

4.8.4.2 Example of open coding: categorising

These examples originated from the open coding of the first sample of five interviews in Scotland. The first example resulted from the initial categorisation of the concepts.

<u>Having worries</u>

- Stages/dimensions of worry (stress, scary, fear, panic)
- Causes of worrying
- Always there: It is on the back of your mind
- Thinking what if...
- How long: The time of worrying
- Assumptions of care providers that you have to be thinking about it

Through re-examination and re-arrangement, this category was subsumed into the category of "Feelings".

Feelings

- Experiencing Health in Pregnancy
- Experiencing Risk; Perceiving risk/Being at risk
- Experiencing Feelings
- Thinking
- Having worries

4.8.5 Axial coding

In the current study, axial coding was the next level of reduction of data, in which it gradually intertwined with, and overtook, open coding during the analysis of the first theoretical sample. Thus a higher level of abstraction was achieved, while putting "those data back together in new ways by making connections between a category and its subcategories" (Strauss & Corbin 1990 p. 91). Axial coding included several basic tasks, which were to further search and develop categories, relate them to each other through hypotheses, search for further cues in the data and explore variation in phenomena, while looking for a pattern by comparing categories and subcategories (Strauss & Corbin 1990, Strauss & Corbin 1998, Strauss 1999).

Through further comparison, categories were collapsed or subsumed into larger categories. Gradually one model for all countries emerged, in which some categories became larger, but also new categories developed. Three major categories of responsibility, autonomy and confidence were visible after three samples, which were related through a main category of "Creating a picture" (Chapter 6.2).

Axial coding in this study did not rely on the paradigm model for systematic collection and ordering of data as suggested by Strauss and Corbin (1990). Constant comparison and asking questions were used as procedures. The questions "Who? When? Why? Where? What? How? How much? With what results?" (Strauss & Corbin 1998 p. 89) assisted further in-depth development of categories. Asking following questions of the data assisted focusing on relevant patterns during this stage;

"What is this data a study of?"

"What category does this incident indicate?"
"What is actually happening in the data?" (Glaser 1978 p. 57)
Therefore the process of axial coding was a balance between features of both grounded theory approaches (Chapter 4.2), as had been suggested by others (Kendall 1999, Cutcliffe 2000).

While using constant comparison to results of other units, the categories resulting from the analysis of each language unit were consequently integrated. Thus, a tentative overall model emerged during analysis of the first theoretical sample. Not only similarities however, but also differences were highlighted (Appendix 14). During analysis of the second theoretical sample, the categories were rearranged again on wallpapers (Appendix 15). Although categories were similar for all countries all, differences in dimensions between the countries were even at distance visible.

4.8.5.1 Examples of axial coding

In this section, two examples of axial coding are presented: the first one involved the category of "Confidence" after the analysis of the units of the first theoretical sample in each of the countries.

<u>Confidence</u>

- Health feeling: feeling unsure
- Knowledge
- Wants/having wishes
- Being related to/Awareness of Relationships: sharing the experience
- Relationship with the child: bonding
- Feeling sure: being at ease; being confident; balanced awareness
- Needs: Issues and expectations
- Feeling sure (perceiving after the antenatal visit)
- Strategies to feel sure: Empowerment through information

The example below shows the connections between the categories and subcategories based on the analysis of all units included in the second theoretical sample in all countries.

Creating one's own picture/experience of family responsibility

- Feeling responsible for a family
- Feeling/perceiving being an autonomous person: a sense of mastery
- Confidence in the situation, the process (becoming self- assured)

4.8.6 Selective coding

Selective coding finished off the construction of a grounded theory through the integration and refinement of the theory (Strauss & Corbin 1998). In the current study, three steps were identified (Carpenter 2003a). First, a core category was developed through reduction of the number of categories. This was then related to the other categories (Table 5.2). Strauss and Corbin (1998) offered several techniques for facilitating the identification of the core category and integration of concepts, such as writing a descriptive or a conceptual storyline, using diagrams and reviewing and sorting memos (Chapter 4.11). Glaser and Strauss (1999 p. 41), however, stated that "integration is best, when it emerges, like the concepts", which also happened in this study.

Secondly, selectively sampled literature provided data that were woven into the theory, thus leading to a more complete description. Finally, through selective sampling of additional data, categories were further developed and saturated. Refinement of the theory involved reviewing the theory for internal consistency and identifying gaps in the logic. Validation took place through comparison with the raw data and checking with the women for understanding and truth value (Chapter 4.13.1). Through this process, the grounded theory "fitted" the data retrieved from the research field, and "worked" (Glaser & Strauss 1999 p. 3) for a meaningful explanation of the behaviour of the women in the current study

4.8.7 Core category and Basic Social Process (BSP)

The core category in the current grounded theory study stood for the main theme. It accounted for most of the variation in the pattern of behaviour which was relevant to the women, and pulled all categories together to an explanatory whole (Glaser 1978, Carpenter 2003a). It had analytical power, theoretical significance and its development was traceable through the data (Goulding 2002).

All grounded theory studies result in one core category, which can be static as well as dynamic, while reflecting process and change. These last two aspects also characterise a BSP (Glaser 1978), in which two or more emergent stages can be identified which differentiate and account for variation in the pattern of behaviour. Therefore they are labelled with a "gerund" ("ing"). Although two "core" categories of *Becoming a mother* and *Mothering the mother* emerged in the current study, the latter was the most relevant one as it answered the research question (Glaser 1978). This core category was a BSP in which four stages were identified. The core category, as well as most subcategories, indicated process by movement and change over time due to the procedural character of pregnancy, as well as the complete process of becoming a mother. This process lasted until a long time after giving birth, and even more than one pregnancy (Chapter 9).

4.8.8 Theoretical saturation

The criterion for stopping a grounded theory study is theoretical saturation of all relevant categories. Saturation occurs when new incoming data are repeatedly generating similar codes, and therefore not adding additional information (Goulding 2002). Further data collection can even be counterproductive, in that it "only adds bulk to the data and nothing to the theory" (Glaser & Strauss 1999 p. 111).

In the current study, theoretical saturation was achieved through theoretical sampling which drove data collection. Once a category was saturated, new groups of data were focused on in order to saturate the other categories. Saturation relied on empirical limits of the data, integration and density of the theory, and the researcher's theoretical sensitivity. Saturation was achieved when gaps in the major categories were almost filled. *Growing into family responsibility* was the first category to be saturated in this study (Chapter 6.3, 8.5, 9.5).

4.9 Use of software

No computer software for analysis was used in the current study, although the advantage of systematic handling and ordering of the large amount of data through which rigour could be increased was considered. Methodological experience however had unanimously been recommended for appropriate use of programmes (Morison & Moir 1998, Weitzman 2000, Weitzman 2003), but the researcher in this study was a novice to grounded theory. In addition, most computer solutions for integrating multiple language units had so far been unsatisfactory (Weitzman 2003). Last but not least, theoretical sensitivity demanded closeness to the women and their thoughts during data collection as well as analysis. In order to maximise opportunities for theoretical reflection, the researcher was her own database while being the instrument in interpretive research. Data management was not therefore turned over to a computer.

4.10 Role of literature

Grounded theory used two kinds of literature: technical and non-technical (Glaser 1978, Strauss & Corbin 1998). The non-technical literature used was described in Chapter 4.7.1. Technical literature comprised professional and disciplinary literature. Two times for its use were identified: the beginning of the study before data collection; and during the development of the theory.

Only a limited review of literature took place before the study was undertaken, as resulting preconceived ideas could influence emerging theory (Glaser 1978, Strauss & Corbin 1998, Cutcliffe 2000, Schreiber 2001). While some research recommended avoiding any literature, others argued that extensive reviewing had to take place in order to underpin the rationale for the study (Hutchinson 1993, Hickey 1997, Cutcliffe 2000). The extent to which the literature was initially reviewed (Chapter 2.3, 3.4) was best addressed by Smith and Biley (1997 p. 20), when they stated, “General reading of the literature maybe carried out to obtain a feel for the issues at work in the subject area, and identify any gaps to be filled in using grounded theory (…), but it is important that the reading is not too extensive.”

Reviewing the second body of technical literature was deliberately postponed until the stage of selective coding as the major categories were developed and linked to each other. The deductive influence that preconceptions had on the emergence of theory was experienced at this stage, for instance with regard to the word “safe”, which had medically been defined in the antenatal care literature (Patterson et al. 1990, Coverstone et al. 2003) (Chapter 4.1.2). Systematic, comprehensive consultation of the literature, therefore, took place during selective coding, which was late for grounded theory according to Strauss and Corbin (1998), but appropriate for Glaser's (1978) approach. At this stage the literature was used to support further theory development. Memos and diagrams also assisted the emergence of the grounded theory during this study, as described in the next section.

4.11 Memos and diagrams

Memos and diagrams were essential elements of analysis in the current grounded theory study. They helped the researcher to gain analytical distance from the data, while forcing her to “move between working with the data to conceptualising” (Strauss & Corbin 1998 p. 218).

4.11.1 Memos

Memoing was an intermediate step between coding and writing the theory. It served four basic goals: the documentation of theoretical ideas; freedom of thinking; creation of a memo-database; and its “sortibility” for repeated use (Glaser 1978 p. 126).

The memos included code notes about actual findings, theoretical notes from the researcher's thoughts about developing theory, and operational notes with methodological ideas (Strauss & Corbin 1998). In accordance with Glaser (1978), memo writing evolved during the stages of the study. While during open coding most of the ideas were close to the original data, at a later stage their theoretical content with regard to the developing theory increased.

Freedom of thought allowed new ideas to emerge (“running open”) in order to increase theoretical creativity (Glaser 1978 p. 85)). Memos were a personal

documentation of this process (Corbin 1986, Charmaz 1995, Schreiber 2001). In the current study, they were written in each of the three languages involved. The memos created a second database next to the analysed transcripts, as they documented the research process and thus this provided an audit trail (Chapter 4.13.3, 4.13.4). Four memo-books were used due to uncertainty about whether the study would remain as one or multiple units: one for each language and an overarching general book (Chapter 4.3). Although at the beginning the majority of memos were made in the single language books, during the progress of the study the memos in the general book increased. In each of these books the main concept, as well as the date of entrance and the number of the interview, was described in order to allow sorting (Chapter 4.11.2).

4.11.1.1 Examples of memos

The examples presented here include some of the memos about interviews in the different countries as well as a memo from the overall book around the same time.

Switzerland; CH4 Verena, 23. May 2002

- "Mirroring" the words. This means there are connections in the data, which are opposites. The care provider has to meet these and "mirror" them. For instance: "Unsicherheit" (uncertainty) has to be met by "Sicherheit" (certainty, confidence). She/he has to meet anxieties and needs.

Netherlands; NL 4 Mireille, 1. August 2002

- "Begeleiding" (support) is necessary, but "IF I have questions, THEN I will ask the midwife".

This means that because she knows that she can ask her midwife, she has to prepare less.

"If" implies that she thinks about and manages less or more "chance on" (= risk). What are the conditions?

"Terecht kunnen" (to be able to call on somebody) means to her "being able to wait", because it gives peace ("rest") and stability. Therefore: the need to prepare might be lower in the Netherlands (?)

Scotland; SL 4 Susan 5. September 2002

- "Disappointing" (page 4-22) means there was some kind of hope, of expectation. Why does she then add "you know"? Should I know? Is this shared by women? Who is the expert here? "They" or "I"? Is there a power conflict?

Overall thoughts, 20. July 2005

- The content is described at three levels:

- Unterstützung (help, support) (CH, NL, SL)
- Begleitung (guidance) = social= "listening" (NL, CH)
- Betreuung (care) = medical or "zakelijk" (business like) (too much) (CH, SL, NL)

Are these strategies? The three aspects seem interchangeable. How much? Content: what is it, by whom?

To be able to get that, "a meeting in my world" is necessary (eingehen auf/ingaan op/become part of that world). (NL7)

This is possible through a process of "weaving" (literature on how women create group life)- which means getting to know, trust, common ground (CH, NL. SL?)

4.11.2 Theoretical sorting of memos

The theoretical sorting of memos was the key to the grounded theory (Glaser 1978). Sorting of the theoretical ideas in the memos assisted the integration of the theory while linking categories and their properties. This also resulted in memos of a higher conceptual level. A more complete and dense theory was thus achieved (Glaser 1978).

Memos in the current study were sorted into categories during the stage of selective coding once the core category had emerged. The memos in the books were copied and cut, starting with the general book and then each single language book. A theoretical outline was thus prepared, which assisted in the integration of the theory and writing up. The process of theoretical sorting was finished as saturation of the core category had occurred.

4.11.3 Diagrams

Diagrams were used as devices to visualise relationships between theoretical concepts (Strauss & Corbin 1998). They were important tools in creating an overview of data between, as well as within, the language units in the current study. The role of diagrams increased throughout the various stages of coding. During open coding they were of minor importance. Based on the findings of the analysis of the open sample, a diagram of how the concepts could perhaps be linked was created (Appendix 16).

Relationships between categories and their subcategories, as well as between main categories were more apparent during axial coding. The tables in Appendix 17 and 18 were made after the first theoretical sample and highlighted the differences between the language units. Based on findings of the analysis of the second theoretical sample, relationships between the categories were established (Appendix 19). During integration in the stage of selective coding, these diagrams were used to document the relationships between the categories in the theory and identify gaps in logic. The theoretical sensitivity that assisted the development of this theory and the role of the researcher as the main research instrument, are addressed in the next section.

4.12 A reflexive view on the role of the researcher and theoretical sensitivity

The person of the researcher was the research instrument for data collection and analysis in order to represent the women's views (Strauss & Corbin 1998, Schreiber 2001). Through her, a correct balance between objectivity and sensitivity had to be achieved. Bracketing increased objectivity (Strauss & Corbin 1998, Denzin & Lincoln 2000) as the researcher acknowledged and reflected on her personal background and how this could have influenced the study. The next sections contain a reflexive account on the role of the researcher and the development of theoretical sensitivity.

4.12.1 Role of the researcher

The interpretive researcher “understands that research is an interactive process shaped by his or her personal history, biography, gender, social race, class, and

ethnicity, and by those of the people in the setting" (Denzin & Lincoln 2003 p. 9). As what is important emerged in grounded theory, the same can happen to important elements from the researcher's personal background. In the current study, this background included gender, age, experiences relating to the research topic, nationality, profession and research experience.

In the information form the researcher was presented as a midwife, teacher and doctoral student at Glasgow Caledonian University. A picture was intentionally printed next to this information, so that women could have an image of her in advance, as meeting the researcher in person was not possible before the interviews. Most women appreciated this.

Being a midwife was an important part of the researcher's professional background. Its importance was defined by each woman's personal picture of a midwife, and so played a different role in each of the countries, as well as for each woman. The researcher's professional knowledge contributed largely to the design of the study. Prior experience in quantitative research provided a basis for understanding the research processes, even though the researcher was a novice to qualitative research. Although Dutch midwifery education had emphasised normality of pregnancy and childbirth, preconceived medical ideas caused an inner struggle with the data during analysis of the open sample. As the research data were stronger however, these pre-existing ideas were put aside.

Gender, age and personal motherhood experience emerged as important issues regarding the quality of rapport with the women. Being female facilitated the exchange of ideas through similar understandings. As Denzin (1989 p. 116) stated that "gender filters knowledge", being female might also have influenced the data analysis. Personal experience in mothering was another prerequisite in creating a basis for mutual understanding. Despite not having this experience, the researcher's knowledge about the world under study and the language used in the interviews changed through the course of the interviews. Similar levels of knowledge and choice of words were noticed in interviews with women after having their second child.

Moving to Switzerland and integrating into Swiss culture both personally and professionally prior to this study, combined with ten years of experience in translating midwifery research articles, had increased cultural understanding and flexibility. Despite previous knowledge of the German language before moving, the researcher did experience difficulties in understanding. More than language, mutual understanding needed shared experiences and knowledge (Verhoeven 2000). Reciprocal interest and respect however helped in bridging this gap. Previous experience in translating had shown that language related to meanings connected to context and individual backgrounds. Therefore in the current study, thinking took place in each of the languages concerned while constructing an appropriate meaning together with participating women, and Dutch as a language gradually disappeared as a reference framework. These experiences all facilitated coding and analysis in each language in the current study.

4.12.2 Theoretical sensitivity

Not only did the researcher shape the data, the data also shaped the researcher. Developing theoretical sensitivity in the current study involved increasing "the ability to maintain analytical distance while at the same time drawing upon past experience and theoretical knowledge to interpret what is seen, astute powers of good observation, and good interactional skills" (Strauss & Corbin 1990 p. 18). This way, capturing nuances of meaning as well as recognising connections between concepts was facilitated. Theoretical sensitivity therefore influenced data collection, definitions of theoretical samples and allowed the unfolding of the creativity and flexibility needed to develop a comprehensive theory.

Both Glaser (1978) and Strauss and Corbin (1998) described the use of literature as a method of enhancing theoretical sensitivity, although early consultation might block perception and lead to superimposing preconceived ideas on the emerging data (Chapter 4.10). In order to develop theoretical sensitivity, the field was entered with as few predetermined ideas as possible, which was not totally possible due to the professional background of the researcher (Chapter 4.12.1). Although the Dutch cultural reference framework had been decreased prior to the current study, working in three different languages reduced the effects of this pre-existing framework even

more. Although objectivity as well as theoretical sensitivity to the data increased this way, it also negatively affected the personal world of the researcher (Chapter 11.5).

Continuous engagement with the data made the researcher grow sensitive to the words, concepts, issues and problems of the women and situations under study. Time and pacing were necessary conditions for this process, as the “mandate is to remain open to what is actually happening” (Glaser 1978 p. 3). In this study, sensitivity grew in the way described by Strauss and Corbin (1998 p. 47): “insights do not just happen haphazardly, they happen to prepared minds during interplay with the data”.

4.13 Trustworthiness of the study

The reliability and validity of research findings are important within the interpretivist as well as the positivist tradition. Both pursue the question “How do we know that the study is believable, accurate and “right”?” (Creswell 1998 p. 193). Based on assumptions about the character of “truth” underpinning each perspective, the criteria used to evaluate studies differed. Lincoln and Guba (1985) used the term “trustworthiness” rather than reliability and validity for interpretive research. This included the criteria of truth value, applicability, consistency and neutrality.

4.13.1 Truth value/credibility

Truth value or credibility addressed the degree to which the reconstruction by the researcher represents the original multiple realities as constructed by the women (Denzin & Lincoln 2000). Lincoln and Guba (1985) suggested five techniques for achieving this: activities to increase the likelihood of producing credible findings; peer debriefing; negative case analysis; referential adequacy; and member checking.

Activities to increase the likelihood of credible findings in the current study involved prolonged engagement and persistent observation. Prolonged engagement and persistent observation aimed to increase the researcher's understanding of the women and the context in which they lived. Prolonged engagement in the field was achieved by researcher’s engagement in the study over a seven-year period. This

engagement involved personally carrying out all interviews, transcriptions and analyses, as well as the recurrent interviewing of several women.

Persistent observation provided depth for the study. Knowledge about the study field included not only the women who were interviewed, but also personal and professional conversations and visits to the countries involved and different care settings (Chapter 4.7.1).

Triangulation is another technique for improving the credibility of research findings. As grounded theory was used, the current study did not involve triangulation. The use of language units, however, provided multiple sources of information. Within and across unit comparison made the study more robust and increased internal and external validity (Yin 1994).

Peer debriefing was achieved through regular meetings with both supervisors of this study, but also through ongoing discussions with an English, a Scottish, a Dutch and a Swiss midwife, and a Swiss genetic counsellor with international medical experience. These discussions kept the researcher aware of her attitude to the process and helped in developing methodological steps and clearing a confused mind.

Negative case analysis happened throughout the whole process of developing grounded theory, as theoretical sampling aimed for maximum variation and "negative cases" were therefore included. Lincoln and Guba (1985) suggested acceptance of a hypothesis if it accounted for at least 60% of all cases. Theoretical saturation proved that the theory "fitted" and most cases were accounted for.

In order to achieve referential adequacy, recorded materials ("raw data") were used as benchmarks against which findings and interpretations resulting from data were tested (Lincoln & Guba 1985). In line with grounded theory, in the current study referential testing happened through the use of new interviews and going back to archived data.

By member checks, the data, categories, hypotheses and developing theory were validated with women in subsequent interviews (Appendix 14, 26). Although Lincoln and Guba (1985) pointed out that understanding might be difficult due to the theoretical abstraction of the reconstruction, the contrary was actually experienced in the current study. The level of discussion during the interviews was surprising to the researcher. By member checking, the acquisition of additional information, correction of errors of interpretation, summation of emerging theory, and assessment of its adequacy was achieved.

4.13.2 Applicability/transferability

Applicability refers to the degree to which the research findings are representative for the sample and can be generalised, and thus transferred to other groups or similar groups in other contexts (Lincoln & Guba 1985, LoBiondo-Wood & Haber 1996). Although generalisations should be time- and context-free in order to explain and predict, the interpretivist findings in the current study were bound to their time and context. Similarities and differences of these contexts have to be considered when making a judgement about generalisation. The “widest range of possible information” (Lincoln & Guba 1985 p 316) regarding these contexts was provided in their description in Chapter 2, and by using grounded theory, in which context was integrated (Chapter 4.2). The level of abstraction and inclusion of different sites increased the transferability of the theory.

4.13.3 Consistency/dependability

Instead of reliability, interpretive research met the criteria of consistency. Consistency refers to the ability of the research instrument to consistently produce the same results if applied to the same or comparable subject (LoBiondo-Wood & Haber 1996). Statements about the replicability of a study could thus be made.

As complete consistency of the researcher being the research instrument cannot be achieved in interpretive studies, the term “dependability” was used more often (Lincoln & Guba 1985). In the current study, having one researcher to perform, interpret, analyse and translate the interviews for all languages increased consistency. Consistency of the researcher as a research instrument however was

primarily influenced by personal changes, including increased theoretical sensitivity. The second influencing factor was differences in the human interaction between researcher and interviewee, and the third, different individual constructed realities, also caused by differences in contexts.

Dependability in interpretivist research is confirmed by “trackable variance” (Guba 1981). By checking the process in an audit trail, it is determined that the theory was derived logically from the data and adequately explains the phenomenon or process under study. The audit trail for the current study included the verbatim transcriptions of the interviews, field notes, memos, discussions, results of analyses, pictures and diagrams. Chapter Four and the appendices provided a detailed documentation of the process in order to make a judgement. An audit trail was also established through the continuous reporting of every step in the process to both supervisors.

4.13.4 Neutrality/objectivity

Neutrality is the equivalent for objectivity in positivist studies. This criterion determined whether or not the results were biased by the researcher's background or motivations (Lincoln & Guba 1985). The interpretive research findings in the current study represented the social world under study and the women’s views (Chapter 4.1.5). Neutrality involved the ability of the researcher to separate her own views from those of the women as she engaged with them in order to represent their views. This neutrality is documented in the audit trail and in the researcher's reflections on her personal assumptions and their influence (Chapter 4.12.1, 11.5). The audit trail reports on the linkage of the data from the women with the derived theory, which is contained in the process documentation in Chapter Four and the appendices.

4.14 Conclusion

In Chapter Four, the research approach and the methods used in the current study were discussed. Informed by a constructionist, interpretive perspective, the grounded theory approach according to Strauss and Corbin (1998) provided a methodology and methods to explore and analyse the effective content of care during a normal pregnancy from women's points of view. Through this approach the complexity and

magnitude of the research area was captured, while language units were used to assess meaning in the three different languages involved. In this way, another perspective on the research problem could be provided through the inductive generation of theory from data grounded in everyday reality. Within each of the units, grounded theory led the sampling, data collection and analysis. Based on theoretical sampling, previously collected and analysed data determined who and what was explored next, which allowed the research to become more focused during the process. One-to-one semi-structured interviews were used to investigate women's views, and related documentary material in each of the countries was collected in order to increase understanding of women's experiences of antenatal care. The interpretive findings of the current study will be described in the following chapters.

CHAPTER FIVE- INTRODUCTION TO THE FINDINGS

5.1 Introduction

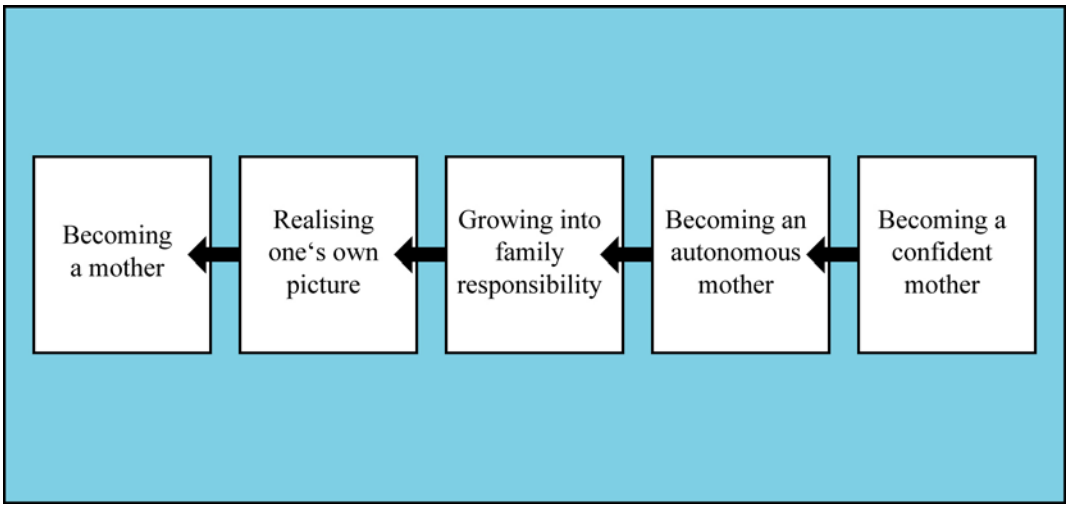
The findings of the current study will be presented in the following chapters. Each chapter contains the literature related to these findings, which are compared and contrasted with the empirical data, and consequently discussed. There will, therefore, not be separate a chapter for discussion in this thesis. In the final chapter (Chapter 11), limitations to the study and recommendations for future development of research as well as professional practice will be addressed.

Reporting the findings of the current study according to the categories which emerged resulted in a repetitive description of processes which took place during the journey towards motherhood (Luyben & Fleming 2005). It was therefore decided to break these categories down into three stages of the overall journey for descriptive purposes (Chapter 5.3). In the following sections, further explanation is given both of what happened during the analytical process of the study and how the findings will be reported.

5.2 What happened

A grounded theory approach was used in the current study in order to capture women's expectations and experiences in three European countries, and to construct a woman-centred model (or models) of content of routine care during pregnancy (Chapter 4.1.1). While highlighting important aspects of content of care, women first described issues and situations in their own process of becoming a mother. This was a transitional journey from the way they were at the beginning of pregnancy, to the way they were going to be once they had a family. The emergence of similar categories in each of the countries following first theoretical sampling led to the development of one process of becoming a mother in all three countries (Figure 5.1).

Figure 5.1 Becoming a mother and sub-processes



Within this process, the subcategories reflected other developmental processes with three identifiable stages of progress: firstly, a stage of expectation and little experience at the beginning of pregnancy; secondly, a stage of familiarisation and personal growth during pregnancy and birth; and thirdly a stage of ultimately living in, and coping with, reality after giving birth (Figure 5.2). “Time”, which initially emerged but was later subsumed as a category, indicated the stepwise development of the processes.

The subcategory of *Realising one’s own picture* involved the stages of expectation, familiarisation and embarking on motherhood, while *Growing into family responsibility* contained stages of feeling responsible, sharing responsibility, and being responsible for a new family (Appendix 20) . Accordingly the process of *Becoming an autonomous mother* consisted of initially lacking and subsequently maintaining and regaining autonomy leading to feeling autonomous as a mother, and *Becoming a confident mother* consisted of lacking and then gaining confidence. All of these categories were included in one over-arching category of *Becoming a mother*, reflecting the process of realising one’s own picture of family responsibility. This dynamic process documented becoming a mother of a new child, and therefore was repeated in subsequent pregnancies, as the family composition changed. The related subcategory of *Creating a bond* described women's search for caring relationships on finding themselves pregnant, and linked their own processes to the

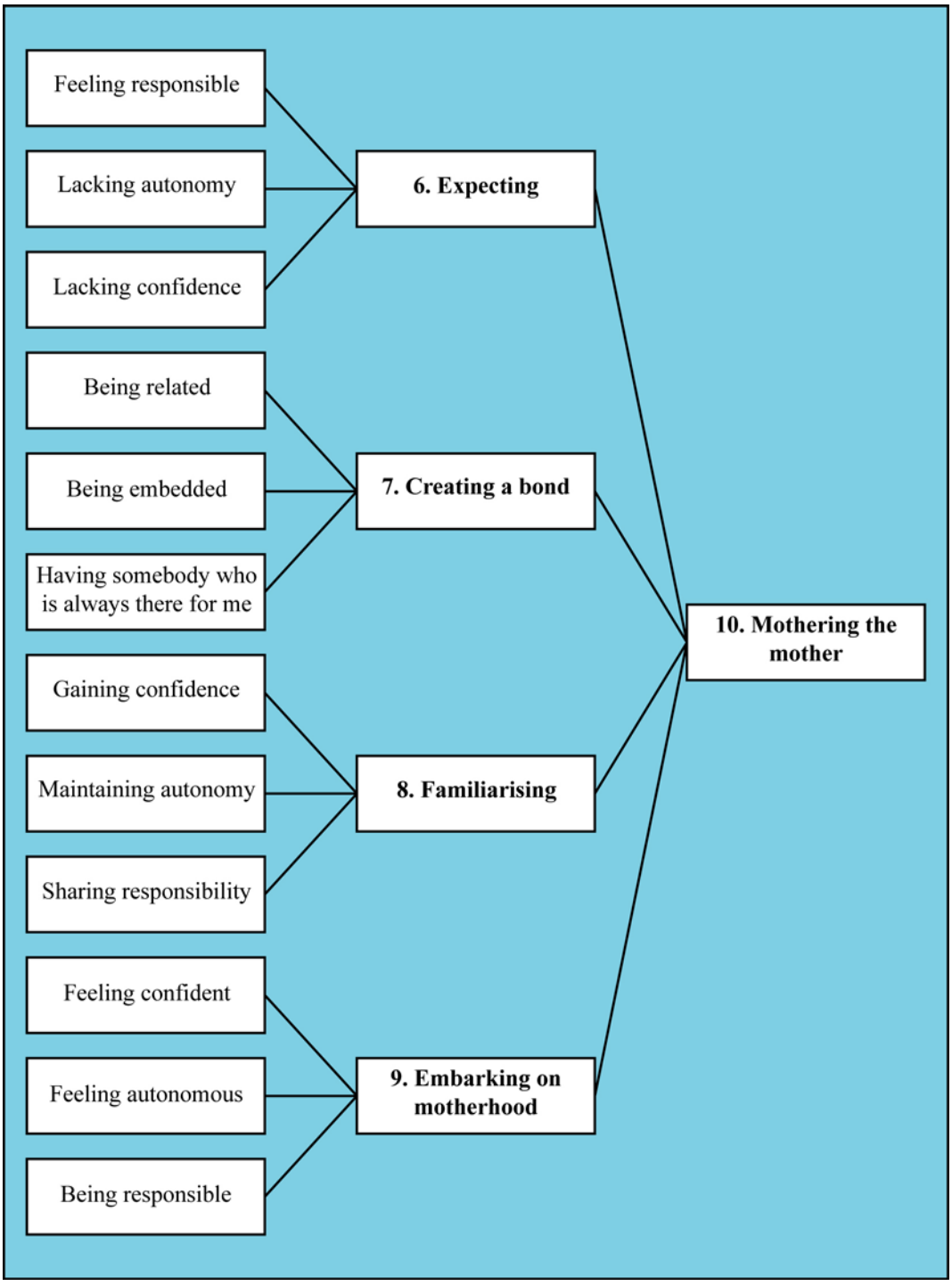
content of care. All the categories were saturated. Differences in the properties and dimensions of these categories, however, were found both within and between countries.

Women described content of routine care during pregnancy as a mirror of their own processes (Figure 5.3), which resulted in one overall model with the core category of *Mothering the mother* (Chapter 10). Content of care was outlined as characteristic of a "vis-à-vis" situation, which was particularly highlighted in the Scottish interviews where women spoke of "I" and "they". For example, "being experienced" as content of care mirrored "lacking experience" at the beginning of pregnancy.

5.3 How the findings will be described

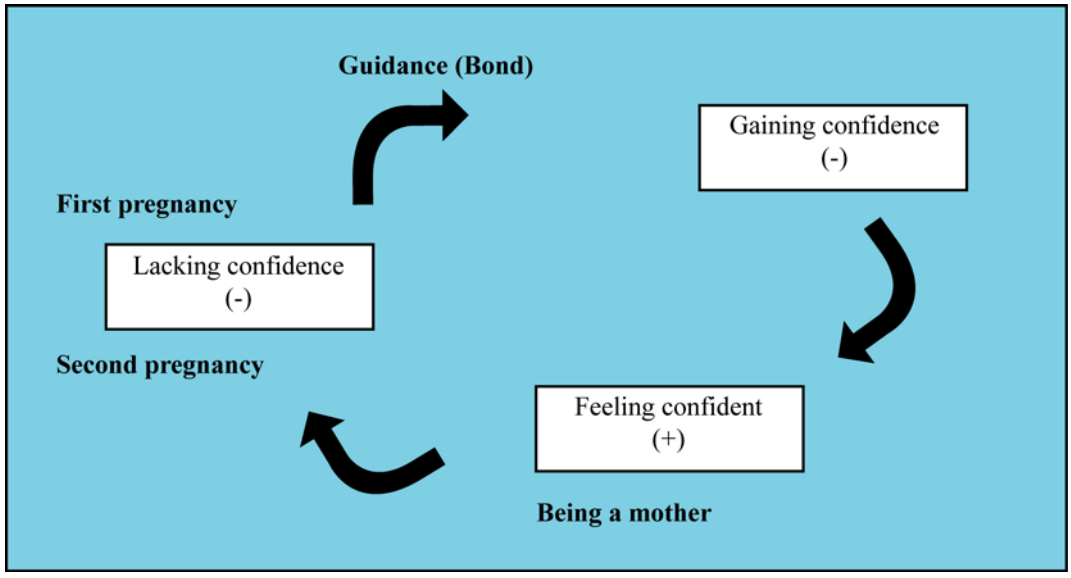
The core category of *Mothering the mother* (Chapter 10) was a basic social process containing several sub-processes (Figure 5.3). In order to avoid repetitive description and breaking the story line, an alternative description of becoming a mother by stages in the process was decided upon. Although all sub-processes were subsumed in one major process, they had to be separated from each other during the stages of the development of family responsibility. At the beginning of the process, women felt that they lacked autonomy as well as confidence even though they felt responsible. As a result of supportive guidance during development, women gained confidence, and subsequently regained a status of autonomy as a mother, resulting in taking up family responsibility at the end of the journey. Chapters 6 to 9 will present these stages in four categories of *Expecting*, *Creating a bond*, *Familiarising* and *Embarking on Motherhood*, with their corresponding subcategories and properties (Figure 5.3, Appendix 20). Consequently, the core category of *Mothering the Mother* and its properties, which provided an answer to the research question of "What is effective content of routine care during pregnancy from women's points of view?" is presented (Chapter 10).

Figure 5.2 Core category and subcategories



As mentioned above, the findings of the current study went far beyond the period during which women attended antenatal care. These findings also included differences between countries and groups of women, as well as differences between first and subsequent pregnancies. Figure 5.4 shows differences in dimensions of confidence between a normal process in first and second pregnancies. In a subsequent pregnancy, the lack of as well as the subsequent gain in confidence is less (-), but the ultimate feeling of confidence once a mother is more (+).

Figure 5.3 Differences in the dimensions of confidence during first and subsequent pregnancies



Thus, a decision had to be made concerning the extent to which all categories with their properties and dimensions could be presented. In order to maintain the framework of the thesis, the research question will be focused upon, meaning that the period of pregnancy (Chapter 8) and related content of care (Chapter 10) will be emphasised, described and discussed in more depth.

In the other chapters, the main characteristics of the categories and their properties are outlined so as to follow the story line, but the description of dimensions and variations, and the discussion of literature will be limited. For the same reasons, all participating women are quoted, but the number of quotes from each woman used differed in accordance with the subject emphasised during the interviews. In the

postnatal period (Chapter 9) discussion was limitable due to the fact that results from most other studies matched the current findings, even though they had not often been viewed as an integrated part of the complete process of becoming a mother, as in the current study. The description of the findings will start in the next chapter with *Expecting*, in which women's situations at the beginning of pregnancy are outlined and subcategories and their properties are defined.

CHAPTER SIX- EXPECTING

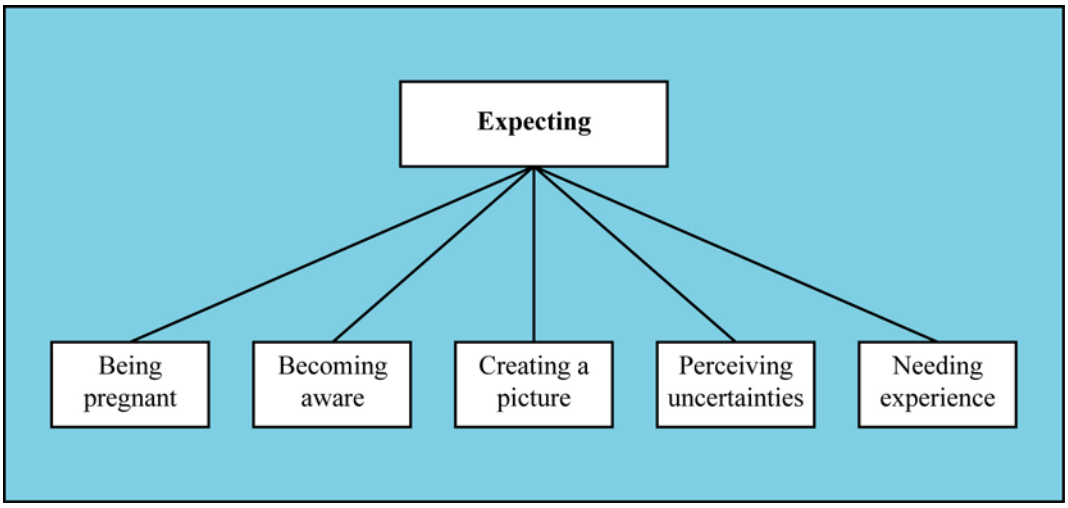
6.1 Introduction

The focus of the current study was the period of pregnancy during which antenatal care was attended. Although women initially started by talking about their situation and the care involved (Chapter 10), they viewed this period as part of a whole journey and thus related it to its beginning and end. As a consequence the categories of *Expecting* and *Embarking on motherhood* (Chapter 9) emerged. Only two women, one in the Netherlands and one in Switzerland, were interviewed before entering antenatal care (Appendix 11). Most women, however, took part while already receiving antenatal care or in the postnatal period, and thus reflected on *Expecting* as the beginning of their pregnancy. Because of the research question, they emphasised aspects that were relevant to the complete process. As the interviews with the two women in early pregnancy did not reveal different concepts, women's situation at the beginning of pregnancy was not explored in any more depth. In the current chapter therefore, the subcategories and their properties are introduced in order to outline women's scenarios at the beginning of pregnancy.

6.2 Expecting

While *Expecting*, women looked forward to their future with a new family (Rubin 1984, Pollard & Liebeck 2000). These expectations were most commonly related to positive emotions such as hope or pleasure, and influenced women's experience of pregnancy and childbirth (Heaman et al. 1992, Green et al. 1998). Although both experience and expectations had previously been negatively associated with anxiety, little was known about the direction of this association, or its interaction with other factors (Ayers & Pickering 2005). The subcategory of *Expecting* had five properties; *Being pregnant*, *Becoming aware*, *Creating a picture*, *Perceiving uncertainties* and *Needing experience* (Figure 6.1)

Figure 6.1 Expecting and properties



Being pregnant initiated the process of *Expecting*. The women themselves were the first to suspect a pregnancy because of missing a period or perceiving bodily changes. Most women confirmed pregnancy by performing a pregnancy test at home, like Marianne in the Netherlands.

"I had done that test, well I am pregnant and heep, heep, hurray. Yes, of course you keep your mouth shut the first three months, that, I'd learnt a bit about that, that you shouldn't say too much the first three months."

(Marianne/the Netherlands)

A few women were not sure if they were pregnant, so they consulted a known healthcare provider (Chapter 7.5) in order to get an objective confirmation (Chapter 8.3.2).

"Well, just make sure, that I really will be pregnant at the time. And I'd used an expired pregnancy test, which didn't give me a, it gave me a positive, then it disappeared."

(Nora/Scotland)

Feeling sure about being pregnant was an important condition in which the thinking process of *Becoming aware* was induced before proceding in the process of *Becoming a mother*. Some women, like Laura, described that they "opened up" to things related to pregnancy which was perceived as a new, alien area.

"I really never, never opened myself for that. I never knew anybody like that, until I came to live here. But well, then I noticed, like for example the medical side of it, I like very much. Also the medical programmes I really find interesting. But of course that comes very near to you. And that is why it is very interesting of course, at such a time. And it also could be, that when I am two years further ahead, well, I will let it go."

(Laura/the Netherlands)

This state of mind was characterised by increased "thinking activities". Different types of knowledge available to the women, such as personal knowledge, knowledge about daily and family life, experiences of pregnancy and childbirth, values, opinions, views and beliefs, were reflected on and compared.

"Interviewer (I): Are you comparing your feelings with your knowledge? (..) Or are you reflecting your feelings on your knowledge?
Woman (W): Could be either way, I think, you know, sort of high blood pressure, I'm desperately going through all the possible reasons as to why I have a high blood pressure."

(Jan/Scotland)

Open awareness was required for learning and personal development. Activities like reflecting and comparing during development of the maternal role and identity were also described by Rubin (1984). This state of mind and, consequently, the desire for information was most often voiced by women having a first child (Chapter 6.5.2). Open awareness had been described as a condition for actively taking responsibility, thus enabling the autonomous preparation and management of a developmental process (Glaser & Strauss 1965). In the current study however, such increased perceptiveness also led to anxieties (Chapter 6.5).

As awareness increased, women prepared for the future, consequently *Creating a picture*. This was a dynamic process of self- interaction (Rogers 1959, Mead 1967, Rubin 1984, Blumer 1998, Steffen-Bürgi 1999) and involved three stages of self and their world: the present, being pregnant and having a new family. As a starting point, women reflected on characteristics of their actual situation and themselves as a person. Deborah in Scotland characterised her current situation thus:

"Cause it is me and him in the house, and, yes, both my parents' and my partner's parents would help, if I ask, but then sometimes you feel, like I can't ask too much. (..) And, things that maybe were to get done, when my partner came home, before, are getting left for the weekend, and then he is very tired as well, because a lot of weekends, he drives up and down. (..) So, to some extent, it is probably not, it is not a normal thing for a person, who is maybe part of a partnership. (..) It much more a normal kind of scenario, for somebody, who is maybe a single mother or, you know, and finds herself pregnant again."

(Deborah/Scotland)

Creating a picture also involved the construction of future scenarios (provisional "pictures", "images" or "expectations") at different periods, which were then used as a reference and something to hold on to during pregnancy (Chapter 4.5) as Erin in the Netherlands stated:

"W: Thus, you are creating a scenario. Because you hear from people, like it has to go like that and that. Normally. And that, you like to have it like that yourself of course.

I: And that picture is important?

W: Yes, because, finally you can hold on to that. (..) Because you think, well, end of the pregnancy, you have to give birth, a birth will be something like this. And that is a picture. (..) And then the rest will follow, and that will be approximately like this. And that is another picture. Thus there, you are living towards that (picture). That is your, your point to, to hold on to."

(Erin/the Netherlands)

All the women in the current study created a picture. The new family and being a mother was the most important picture. Other pictures involved stages along the journey to motherhood, such as pregnancy, and birth, but also care and the care providers. Several studies had showed the importance of previous experiences in pregnancy and childbirth for the construction of expectations (Green et al. 1998, Ayers & Pickering 2005). Some women in the study, like Susan, used these pictures as reference points:

"I actually found his birth even more difficult than my first child, whereas I think with the amount of pressure and contractions I have had right through my pregnancy, I was expecting an easier birth, but in fact it was even more difficult. (..) The other thing that I found was a bit strange, was, with my first child there was a lot of classes available, you know, and I was given a lot information and, invited to attend these classes, whereas with this baby, I never ever went to any of these breathing classes or anything, you know. I was never ever invited or any information was never even passed to me, whether that was a mistake or not."
(Susan/Scotland)

If these experiences were missing or were different from previous ones (for example a twin pregnancy or a child in breech presentation), women created a "foreign picture", in which information of other women, brochures or books were used. Heather in Scotland was therefore eager for books to give her an idea of what it was like having twins.

"The literature is, with my first pregnancy, because a single pregnancy, you know, it was very straight forward. (..) But with me expecting the twins, there not a lot of books, to see right, your, the needs of your twins will be such and such. And I had to, join a twins and multiple birth association, I joined that last week. And you can rent and read for books to see how to deal with the twins in the first year, the first 5 years, how twins and siblings get on. So I am looking forward to these books coming through, because that will give me a better idea of my family unit."
(Heather/Scotland)

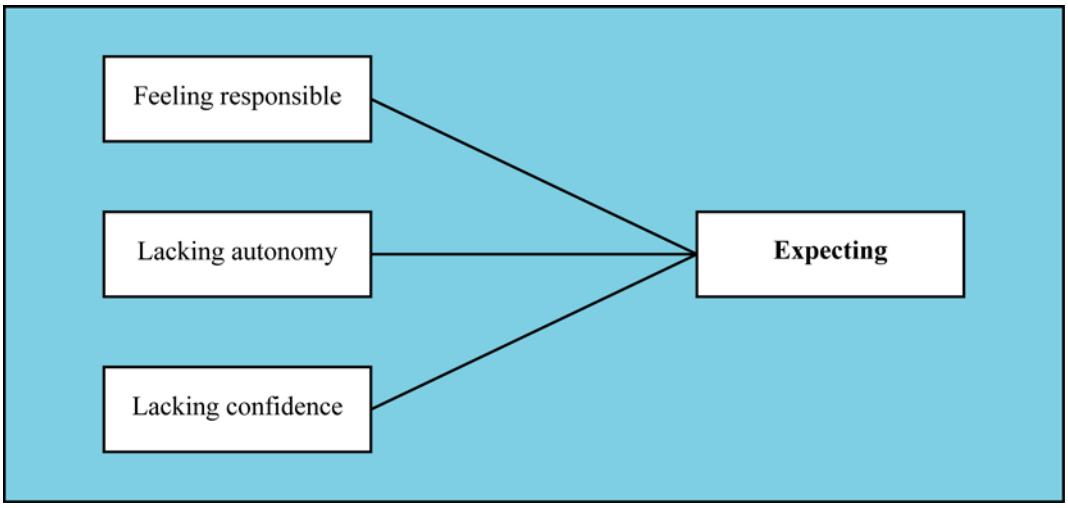
Pictures were continually created and revised until the experience of becoming a mother was completed (Chapter 9.2). Women in Scotland mentioned the largest number of subjects in their pictures and Swiss women the smallest. These cross-national differences were related to the amount of information that women had or received (Chapter 8.3.2).

A complete picture stopped women's thinking processes and gave them "peace of mind". Most women, however, found gaps in the picture, thus *Perceiving uncertainties*. Awareness gaps had been described in the postnatal period (Mercer 1995) (Chapter 9.2), but not in pregnancy, and therefore not related to a process. These uncertainties led to the continuation of the thinking process called "worrying", and resembled a puzzle with a variety of good and bad scenarios, in which the right "fit" was not found. Personal risks for each scenario were determined based on knowledge, experience and information from others. As women felt responsible (Chapter 6.3), they aimed for a reduction of risk and wanted to choose the best scenario. Vanessa considered a home birth, but also considered the risks to her own life.

> *"I didn't want to be in a situation, where I was going to put my own life at risk, cause that would be worse for Robin, than, than a bit of jealousy about this new baby*." (Vanessa/Scotland)

To counteract *Perceiving uncertainties*, women were *Needing experience* from other people with regard to the three subcategories of *Feeling Responsible*, *Being Autonomous* and *Lacking Confidence* (Figure 6.2). These physical, psychological, social and emotional needs were met by *Being experienced* (Chapter 10.2). The subcategories of *Expecting* are described in the following sections.

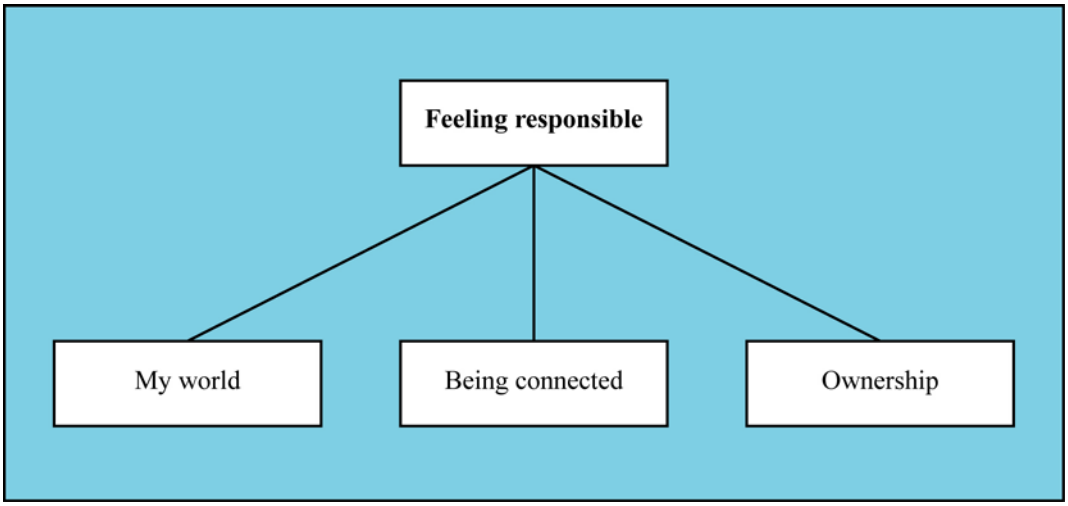
Figure 6.2 Expecting and subcategories



6.3 Feeling responsible

Expecting caused the women to reflect on their responsibilities. Three properties led to the subcategory of *Feeling responsible*: *My World*, *Being connected* and *Ownership* (Figure 6.3).

Figure 6.3 Feeling responsible



While *Feeling responsible*, women focused on their future but also reflected on their current responsibilities. Responsibility had been described as a legal or moral

obligation to take care of something or someone or to carry out a duty, and involved both being capable of action and being accountable for the consequences (van Sterkenburg 1996, Pollard & Liebeck 2000, Dudenredaktion 2002). Although accountability is often used as a synonym for responsibility, in fact its appropriate use had been linked to ethical values and gender. While accountability is based on teleological views (Glossary), responsibility as caring had been related to deontological philosophy (Glossary) and the moral development of women (Schütz 1972, Tschudin 1988, Gilligan 1993, Belenky et al. 1997, Jones 2003). So as to distinghuish between meanings, Tschudin (1988 p. 78) spoke of "human responsibility", which, according to Bergum (1989), resulted from relational engagement with the baby. Women in the current study emphasised this "human" responsibility, which contained the process of caring as well as dealing with consequences themselves, but not to account for them to somebody else. Due to the existence of similar Dutch expressions, meanings were discussed with Elena.

"I: Do you mean being accountable (verantwoording*) to the doctor or responsibility* (verantwoordelijkheid*)?*
W: No.... responsibility. No, not that you have to account (verantwoorden*) for something. That you do not have to account towards the doctor, but my own eh...*
I: For yourself, for your own life...
W: Yes, yes, exactly."
(Elena/the Netherlands)

Feeling responsible was related to women's experiences. Nora in Scotland mentioned a situation of professional responsibility and experience as a metaphor for the responsibility of being a mother.

"I was there, and it was very special to be there. But not have the complete responsibility of it all, because I was so new as well, you know. I didn't have years of experience at that point, but..."
(Nora/Scotland)

Women with two or more children mentioned fewer changes in their feelings of responsibility than women who were having their first child. This was related to their pre-existing world, which is described in the next section.

6.3.1 My world

Reflection on the responsibility they currently had for their social worlds was women's first reaction to their expected future family responsibility. The women in this study each had different biographies and different responsibilities. These responsibilities were hardly addressed in the available literature, although Garcia (1982) mentioned a low regard for women's responsibilities in antenatal care. Maren lived in the same house as her parents and described herself as someone who always felt very responsible for her family:

"W: Well, I do feel responsible for the whole family. (...) I am a very social kind of person. (..) Yes, I do feel very responsible. Like for my parents, yes. (..)
I: Were there any changes concerning this responsibility?
W: Well, I have always had responsibility, but well, if you are having a child yourself, you are having more responsibility."
(Maren/the Netherlands)

Women sought to share family responsibility (Chapter 8.5) with their partner and therefore reflected on their relationship. They assessed their relationships and then and anticipated their development (Chapter 7.3.1). Lilian in Switzerland reflected on this relationship and her family responsibility with regard to antenatal screening.

"Well, concerning the partnership, it is not necessarily the simplest composition. And I think, in regard to culture, my partner has a totally different background concerning a handicapped child. That is a different image, that one is creating then. That I have the feeling, that somehow I might be standing quite alone there. And, I could not imagine it that way."
(Lilian/Switzerland)

Women next considered the responsibility they felt for their baby as described in the next section.

6.3.2 Being connected

While *Expecting,* women related the present to the future and considered their responsibilities during pregnancy and childbirth in light of this. As these were centred on the health of the baby, this property was named *Being connected*. While taking care of their own physical health, women also aimed to have a healthy baby and therefore not to harm it.

> *"If it is concerning my own health, then I can take some medicine, if I am feeling bad. .. It only concerns me. But now it also concerns somebody else. (..) Or, like eating, I think, if I am eating something that is unhealthy, it only concerns me, that is, well... But now it also concerns somebody else. Responsibility."*
> (Rosemary/Switzerland)

Women in the current study also discussed the effects their emotional health had on their own and their baby's well-being. Other than in studies about anxieties (Melender 2002a), this issue had hardly been addressed in the literature. Women particularly emphasised unneccessary worrying.

> *"And I think, that you, being a mother, and you are worrying about something, some of that is transferred to your baby. Then it is inside you and it nurtures your state of mind. Also, yes.. That is why I think, it is very important to be at ease."*
> (Ariane/the Netherlands)

Limits to responsibility were experienced, directly related to the degree to which they could influence the baby's development. Although women took responsibility for their daily life, they felt responsibility for their own and their baby's health during pregnancy was overtaxing. This was why they needed an experienced person (Chapter 7.3, 10.2) to share this responsibility during the process (Chapter 8.5).

6.3.3 Ownership

Women felt that the ultimate responsibility lay with them, as the process happened to them and they owned their body and the baby. Hannah's right to want something was based on this ownership.

*"And then I feel something like, well, I think I really am **allowed** to want something. And it is my body, and my health."*
(Hannah/the Netherlands)

In fact, women talked about an "expected ownership" based on its relationship to a future scenario that they had in their mind. First time mothers focused on their own and the baby's health as well as having a family and expected to be happy. Women in subsequent pregnancies, on the other hand, particularly emphasised having emotional ownership of the experience, like Jan in Scotland:

"I think if you are going through a second time you have got quite a lot of emotional bagage, left over from the first time."
(Jan/Scotland)

Although studies had described women's responsibility while becoming a mother (Rubin 1984, Mercer 1995), the issue of ownership of the experience and its consequences had hardly been addressed. In the current study, emotional ownership was even more emphasised if women had had miscarriages like Lynn in Scotland.

"W: And I think people need to make choices for themselves to have ownership of.. of the problem, the grief whatever. Yeah.. I do, I do believe that now.
I: Okay, we'll go back to the ownership. Is this about being responsible?
W: Yes."
(Lynn/Scotland)

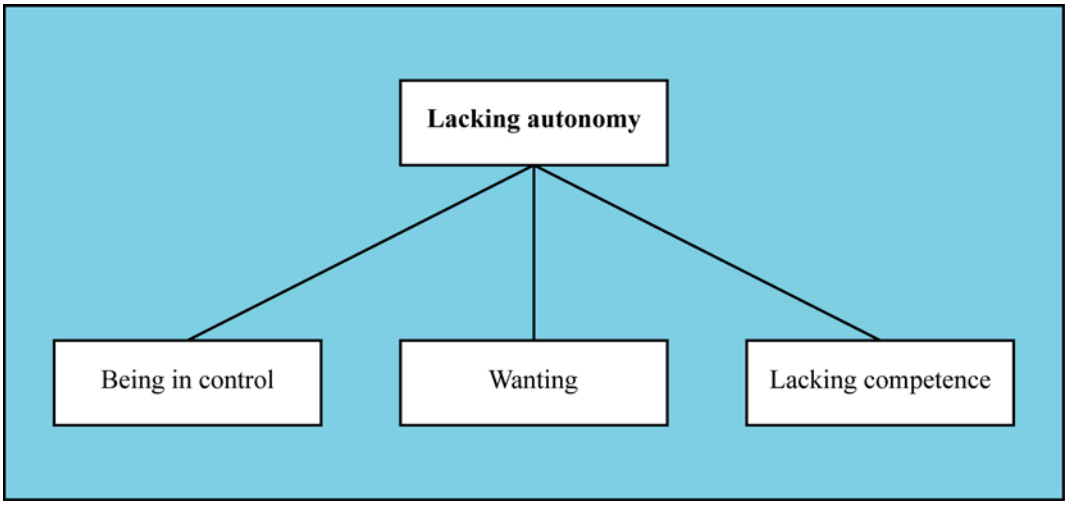
Desired future ownership of an experience ("a picture") was influenced by information (Chapter 8.3.2). Women's individual priorities for ownership were related to their family composition, personal history, experiences of pregnancy and childbirth, and sociocultural background. Taking responsibility required that women

could act as autonomous persons in order to ensure that their scenarios were realised. This is described in the next section.

6.4 Lacking autonomy

While being responsible for the achievement the desired outcome, women felt they were *Lacking autonomy*. This subcategory consisted of three properties; *Being in control*, *Wanting* and *Lacking competence* (Figure 6.4).

Figure 6.4. Lacking autonomy



While autonomy has been defined with multiple attributes (van Sterkenburg 1996, Davies et al. 1997, Keenan 1999, Pollard & Liebeck 2000), women in the current study emphasised independence and freedom to act as well as the ability to act on their own. Feelings of autonomy during pregnancy and after birth were compared with their previous state of autonomy, which often was almost like autarky (Glossary) prior to a first pregnancy. Due to the unknown process however, there was a need for interdependent relationships with experienced persons (Chapter 7, 10.2). Scottish women emphasised “control” (Chapter 6.4.1), whereas women in other countries preferred the term “autonomy”.

"They can give me advice, but I myself still remain an autonomous and responsible person."

(Hannah/the Netherlands)

Some described autonomy as a multidimensional and context-bound concept embedded in particular relationships and circumstances (Davies et al. 1997, Keenan 1999). According to Davies et al. (1997), autonomy was maintained as long as the capacity for autonomous decision-making was intact and dependence was freely chosen. Autonomy within partnerships was therefore based on individual partners, which involved personal biography and educational and cultural knowledge (Belsky & Kelly 1994). Likewise, cross-cultural differences in this subcategory related to differences in women's confidence (Chapter 6.5) and the attitude of the care provider(s) (Chapter 7.5.2, 10.3).

Self- determination had been viewed as a central element of autonomy (Davies et al. 1997, Keenan et al. 1999, Jones 2003). Collopy et al. (1991) differentiated between decisional and executional autonomy. Although most women in the current study felt capable of deciding (Chapter 8.4.2), lack of autonomy was often voiced in the need for help experienced by Deborah in Scotland's pregnant friend:

"I remember her describing to me one night, where she was, you know, she put the wee one in the, she put her daughter in the bath, you know. And she was just so sore and so tired. And lifting her out of the bath was kind of beyond her. And I think it has been her partner's dad, that must have been in that night. And she just, she said, I just completely lost it, because I just thought, well at least you can come and lift her out of the bath for me."

(Deborah/Scotland)

Women however aimed to regain an independent autonomous state of responsibility (Chapter 9.5). Interdependent autonomy was thus viewed as a transitory state in which women expected to be supported by their guiding persons during pregnancy and childbirth (Chapter 10.5). During this state of interdependency, women aimed to feel in control, as described in the next section.

6.4.1 Being in control

Autonomy involved women feeling a need to be in control. This was particularly emphasised by the Scottish

“I think emotionally, you know, you have to be in control of it as well. You have to be in control of your environment. And that is what it is to be a pregnant mum, you just want to be in control.”

(Heather/Scotland)

Feeling in control during labour had previously been associated with positive effects on women's satisfaction with birth and their physical and emotional well-being (Green et al. 1990, Waldenström et al. 1996, Green et al. 1998), but this issue had not been addressed during pregnancy. In most studies however “control” had been a predefined concept (Green 1999, VandeVusse 1999, Cheung 2002, Green & Baston 2003). The most commonly used definition was that of Green et al. (2003 p. 235) which differentiated between external control (“control over what is done to you”) and internal control (“control of your body and behaviour”). Applying this to pregnancy in the current study, in which women referred to a governing influence on the realisation of the desired process however, was difficult. In addition, Swiss and Dutch women did not use the word “control”, but emphasised the “governing” aspect (see autarky) in saying “im Griff haben” and “in de hand hebben” (having it in one's hand). Nicole in the Netherlands liked to have the organisation of all preparations for the baby in her own hands and finish in time, even if the baby were born early.

“W: And I’d like to do all myself, you know. Otherwise you have to give that out of your hands. Then you have become a mother and you are going to the hospital three times a day. Or two times (..)

I: Do you want to have it a bit in your hands ?

W: Yees, I think so. (..) I'd like to have it into my own hands. But I'd like to be finished in time then.”

(Nicole/the Netherlands)

Despite cross-national differences, “control” was chosen as a label, as this property underwent remarkable changes during the process of becoming a mother (Chapter 8.4.1, 9.4.1, Appendix 23), at which time it was contrasted with “letting go”. Women in a first pregnancy in particular had the feeling that they actually were in control. This was related to feelings of control in their previous life, professional background and the cultural and informational perception of the risks involved. In the process of becoming a mother women usually learnt that such control was not possible (Chapter 9.4.1) and they had to let go. Negative experiences with *Maintaining autonomy* however increased the need for control (Chapter 8.4.1). *Being in control* related to women’s wishes, as described in the next section.

6.4.2 Wanting

Expectations, wants and wishes from *Creating a picture* were topics of *Wanting*, which included the idea of an ideal self and future family situation . The most important desires were for a healthy pregnancy resulting in a healthy baby.

“Of course you don't want, that there is something unhealthy with your baby.”
(Nicole/the Netherlands)

“To know that the baby was healthy. For me, it was only about that. It was just about, is the baby healthy or does it all develop normally.”
(Paola/Switzerland)

Most desires in routine antenatal care concerned antenatal screening, while at a later stage desires relating to birth and post partum became more important. The subject and the number of women's wishes were influenced by the surrounding environment and the media (Chapter 8.3.2). Wishes were related to culture. Complications during pregnancy and the mothering experience changed or reduced them and made women focus on relevant issues (Chapter 9.4.2). To realise these wishes, they needed to make their own decisions (Chapter 8.4.2) and have the competence to make them come true.

6.4.3 Lacking competence

Women felt they were *Lacking competence* while inexperienced in both pregnancy and childbirth and in their future situation of being a mother and having a family. They aspired, therefore, to compensate for this lack by learning (Chapter 8.4.3). Competence involved the legal capacity as well as the actual ability to do what was required (Pollard & Liebeck 2000). Conceptions of competence differed however (Norris 1991, Gonzi 1994, Eraut 1998, Eraut 2002, Robin 2006) and ranged from task based behaviour to "a complex structuring of attributes needed for intelligent performance in specific situations" (Gonzi 1994 p. 29). Women's competencies in the current study were connected with each other, integrated into a process, transferable, related to a complex context, and required specific skills, behaviour and understanding (Chapter 8.4.3). Because of these different concepts of competence women were asked in their final interviews for the most appropriate word. Both Lea in Switzerland and Jan in Scotland felt that competence was the right word, which may have been related to their mothering experiences.

"Competence, you already have that actually, because you own it (..) Less likely ability (..) Maybe professional competence (..) Also professional competence is a word, that is used a lot here, for specific problems or yes."

(Lea/Switzerland)

"I don't think it is really a skill, no. I think, competence is probably quite, quite a good word.(..) I guess, you just seek the opportunities to, again, share knowledge, to learn those things, that you need to, and sort of (..).With bigger women, you know, help you try to feel the shape of your baby. And things like that, which was quite, quite interesting. And so on."

(Jan/Scotland)

During pregnancy, required competence involved physical and psychological adaptation, risk prevention, problem solving, preparation for childbirth and having a family, and attachment to the baby. Although women in a first pregnancy wanted to know everything about their own health and what they had to do, they experienced gaps in preparative thinking, like Mireille in the Netherlands:

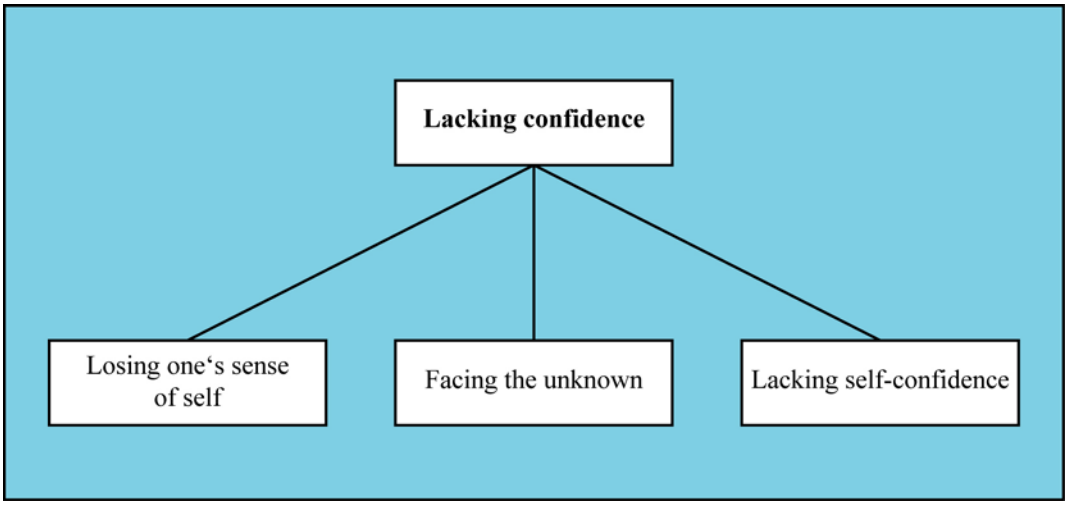
"I just wanted to know more, about all the things I had to do. And not just, that he talked about going to the midwife, but also right away, like, take care that you call a children's day care centre. And I suddenly thought like, gosh, I just know that I am pregnant, do I already have to call a day care centre now?"
(Mireille/the Netherlands)

In particularly, competence in prevention and preparation was based on anticipative thinking gained through the mothering experience. Acquiring professional competence had been described in similar ways (Benner 1994, Eraut 2002, Robin 2006). Experience also made women realise that situations would occur in which they would be unable to act and would have to rely on others who were competent (Chapter 8.4.3). Lack of competence was directly related to lack of confidence, as described in the next section.

6.5 Lacking confidence

In order to "make" sure, women said that they had to "be" sure, and thus be confident. Because they were in a new situation, however, women lacked confidence in themselves and the process of pregnancy. Lacking confidence had three properties: *Losing one's sense of self*; *Facing the unknown* and *Lacking self-confidence* (Figure 6.5).

Figure 6.5 Lacking confidence



Confidence was based on a combination of words used by women in all three countries. Scottish women talked about “confidence”, “trust”, “feeling sure”, “security” and “safe”, whereas Dutch and Swiss women combined trust ("vertrouwen"/ "Vertrauen") with security or certainty (“zekerheid”/ “Sicherheit”). In Switzerland women talked about a “Halt” (something to hold on to or rely on), which was related to themselves, knowledge, the process and the picture, as well as other people. While describing their situation, women in the Netherlands and Switzerland explicitly distinguished between confidence (“faith in the process”) and self-confidence (“faith in themselves”).Because women described an inner feeling of self-assurance (Prowe & Schneider 1997), confidence was chosen. Uncertainties (Chapter 6.2) led to a lack of confidence and anxieties. Women in their first pregnancy, like Emily, experienced a lack of confidence as everything was new. Women in a second pregnancy however, like Joëlle, sometimes felt less confident as they worried about uncertain aspects of pregnancy that they were aware of:

“I: Are you visiting an antenatal class? Or are you going to?
W: No, I think, I don’t feel very comfortable. I’m not, I’m not a very confident person, as I, as I don’t think I could sit in a class full of women, huffing an puffing (..) I don’t think, I think, I just go in there. Not knowing...”
(Emily/Scotland)

“I make myself a lot of worries. I also did that in my second pregnancy. Like is the baby alright, or .. And I could not get rid of that during pregnancy. (..) And I am just very insecure in that regard. With myself, for myself. Therefore I always need reassurance from somebody else. (..) I, I am just a very insecure type of person, I always like to be reassured by others. But it is worse in pregnancy.”
(Joëlle/the Netherlands)

Many women experience anxieties in pregnancy (Areskog et al. 1981, Melender & Laury 1999, Melender 2002a). In a Finnish survey by Melender (2002a), 78% percent of 329 pregnant women reported fears. These fears were caused by their own constitution and background as well as information from other women and healthcare professionals. The study however did not distinguish between worries and fears. Fears affected women's physical and emotional self and, through this,

everyday life, in addition to the desired mode of birth. Antenatal preparation and parity reduced fears. This was also found in the current study. Women's self-reliance increased while becoming a mother (Chapter 8.3), although they initially had to rely on others to compensate for the loss of their sense of self. This is described in the next section.

6.5.1 Losing one's sense of self

Confidence meant that women felt sure. This involved recognising themselves both physically and emotionally. The idea of "Feelings" was a central concept in this regard. Having a sense of oneself was important while entering new territory, as this feeling was the only thing women could rely on.

> *"I think that the relationship of me and my body is the central issue. Yes, that is where I take my security and my trust from."*
> (Kerstin/the Netherlands)

As described by Rubin (1984) and Mercer (1995) however, bodily changes during pregnancy increased insecurity. Some women had read about these changes. Most of them however were unprepared for the emotional changes, which influenced their self-perception, as described by Paola in Switzerland:

> *"That is, when I was pregnant, that was different. So now and then I did not recognise myself. (..) You know, when they played the hymn of the country, I cried. I mean, when ever do I during this hymn, when this hymn, no.. really. You are different. You are just different. They are different emotions."*
> (Paola/Switzerland)

Through experience, second-time mothers had knowledge of the "pregnant self" that they referred to (Chapter 8.3.1). Women restored the balance in the thinking process (Chapter 6.2), and felt confident through discovery of knowledge fitting to what they felt, and thus created a reference for what was normal. Because of continuing changes during *Becoming a mother*, this process was continuous, as was also found in the postnatal period by Barclay et al. (1997). Women's lack of confidence was

caused by *Losing one's sense of self* as well as *Facing the unknown* ahead of them, as described in the next section.

6.5.2 Facing the unknown

While becoming a mother, women faced an unknown journey in a new area of which they had little existing knowledge. *Facing the unknown* was particularly emphasised by those expecting their first child like Emily in Scotland, who spoke of her fears about giving birth.

> *"I am scared because I don't know what is going to happen to me. And things I don't know. What it is going to feel like, or.. What is labour going to be like, or things like that. (..)I am not scared of having a baby. I am, that is not the matter at all. It is just the labour that is scaring me. (..) It is just the feeling that I am scared, and the pain.(..) Scared of the pain that is going to, labour. Cause I have never been in labour before. (..) I don't know what is going to feel like, or what it is going to be like, how long it is going to last. Cause you hear all these stories, it could last for 46 hours. It could last for two hours. So, you don't know."*
>
> (Emily/Scotland)

Through their prior experience however, women in subsequent pregnancies realised the remaining unknowns:

> *"And just knowing that, I mean there is, you don't, there is lots of unknowns in pregnancy. And you don't know until your baby arrives, everything is actually as it should be."* (Nora/Scotland)

Women described two ways of dealing with *Facing the unknown.* The first method was seeking information to reduce the unknowns (Chapter 8.3.2), particularly in first pregnancies and in Scotland. If a subsequent pregnancy was similar to their previous one(s), however, women were less interested in information. The second way involved a trusting relationship with a healthcare professional (Chapter 7.5). This was emphasised by women in the Netherlands and Switzerland. Trust provided a feeling of security and reduced the need for information (Rotter 1971, Walker et al.

1998, Luhmann 2000). Saskia in the Netherlands described what she needed from her midwife in order to deal with the unknown journey ahead of her:

"And yes, the rest is just, yes, I do not know how it is goes. Thus (..),that is all about wait and see. But just the main thing is, that she is there. If something occurs. If something happens. That is the most important thing for me. That is also like, yes, it is, it is a bit strange, but I just do not know yet. But the most important thing is, that she is there. Or a replacement, of hers. That, that there someone anyway, if something happens."

(Saskia/the Netherlands)

Women's self-confidence was negatively influenced by the unknown journey and the loss of one's sense of self as a reference. This is described in the next section.

6.5.3 Lacking self-confidence

The new experience, particularly in a first pregnancy, made women lack self-confidence and feel unsure. As they mainly addressed the postnatal period, most studies on becoming a mother mentioned self-esteem rather than self-confidence (Rubin 1984, Mercer 1986, Barclay et al. 1997, Nelson 2003). While self-esteem involved a "good opinion of one self" (Pollard & Liebeck 2000), self-confidence referred to the belief in oneself in being able to accomplish something in the future, and ability to rely on this. Erin in the Netherlands reflected on her self- confidence during the first pregnancy:

"I: How big a role does self- confidence play?
W: For me a large role. (..) Yes, I became, I became very unsure from the first one, because I did not know, what I was up to."

(Erin/the Netherlands)

Once women had gone through the process, self-confidence increased. Some Swiss and Dutch women talked about self-consciousness and "working with themselves", which referred to the awareness process throughout the experience (Chapter 6.2, 8.2, 9.2). According to Luhmann (2000 p. 102), confidence depended on the degree to

which women had an “inner security” at their disposal to enable them to cope with “trust deceptions”. In contrast to the negative effects of stress and risks on self-esteem (Mercer 1986, Mercer & Ferketich 1990), their influence on self-confidence depended on the way such situations had previously been coped with (Erikson 1966, Petermann 1996). This was also found in the current study. Self-confidence thus promoted confidence, as Lea stated:

“I believe by having more self-confidence, one certainly has more confidence. (..) Because, well, I know, that what I am doing is the right way. Or the way, that it is meant for to be for me.”

(Lea/Switzerland)

Once women felt confident, they were able to let things happen. This process usually occurred postnatally (Chapter 9.4). Increased confidence particularly resulted from the understanding and reliability of the guiding persons (Chapter 10.5), and prepared women for a new unknown situation.

6.6 Conclusion

While *Expecting*, being pregnant induced a process of awareness in which women in the current study reflected on their current and future responsibility. Consequently, women created pictures in their mind of both the current and expected future situation of being a mother and having a family. Growing awareness also involved perception of uncertainties. Women's feelings of responsibility for their own world, themselves and their baby involved feeling autonomous as well as confident. Because the process of becoming a mother was unknown and uncertain, and they perceived themselves differently and lacked self-confidence, they lacked confidence in the process ahead of them. Although women felt in control at the start of pregnancy, they experienced a lack of autonomy in achieving ideal scenarios because they lacked competence. Therefore they needed experience, which was sought both in information and, more significantly, from experienced people. The latter is described in the next chapter.

CHAPTER SEVEN- CREATING A BOND

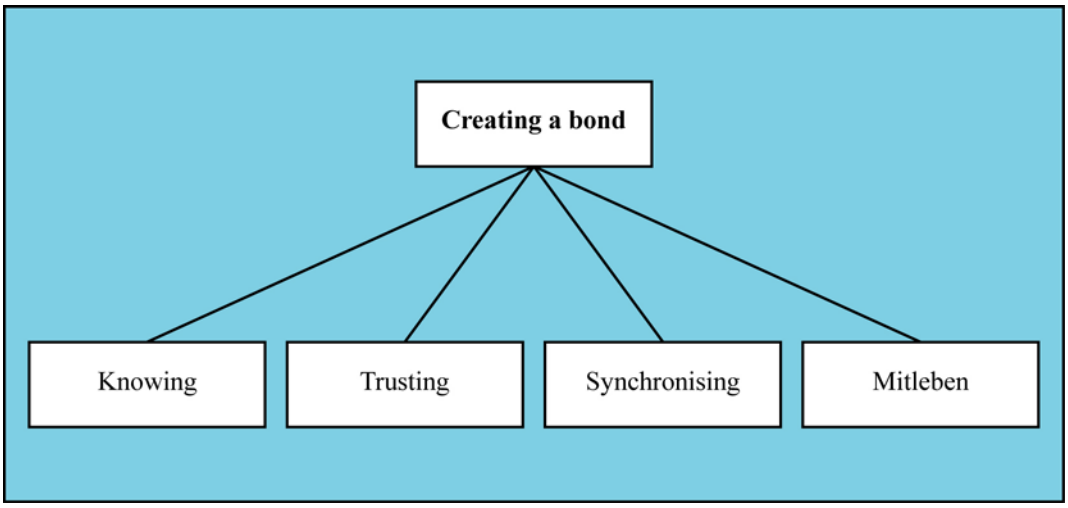
7.1 Introduction

While *Expecting* (Chapter 6.2), women felt responsible for the outcome of becoming a mother, but lacked the confidence and autonomy to do this while facing an unknown journey. They therefore sought experience (Chapter 6.6) through *Creating a bond* with several people in their environment. Rubin (1984) described the establishment of such relationships as one of the maternal tasks in pregnancy. *Creating a bond* represented the intervening conditions (Strauss & Corbin 1998) influencing the process of pregnancy and childbirth (Chapter 8) and linked this to effective content of care during this period (Chapter 10). These conditions were essential for the outcome of women's journeys (Chapter 9).

7.2 Creating a bond

Women in all countries sought *Creating a bond.* This was important for their physical, social, and psychological development during the transition to motherhood. It also supplied them with a support network, preventing them from feeling insecure and alone. The word “bond” was chosen, because women talked about relationships that involved mutual obligations and the idea of unity in being there for each other (Bergum 1989, Pollard & Liebeck 2000). The bond was sought within women's existing social cirle, but also with new people such as care providers. *Creating a bond* consisted of four properties: *Knowing; Trusting; Synchronising* and *Mitleben* (“living along with someone”) (Figure 7.1).

Figure 7.1 Creating a bond and properties



Knowing was the first property of *Creating a bond* and had four dimensions: *Getting to know; Knowing as being around; Knowing as a person;* and *Knowing as a close relative*. In *Getting to know,* people and institutions were previously unknown to women, and thus "new". These people included the baby (Chapter 7.3.3), other pregnant women (Chapter 7.4.3) and healthcare providers (Chapter 7.5.1). *Knowing as being around* was applied to people who were publicly known by name. Rosemary in Switzerland wanted to change to a well-known gynaecologist:

"Actually, very early I have been with somebody else. He is then, he was too old and closed his practice. And then this doctor just started. And then I actually had heard about another one from colleagues, and then I wanted to make an appointment there, but he did not take new patients any more. And then I thought, then I'll go to the new one. And that turned out well."

(Rosemary/Switzerland)

The third dimension of *Knowing as a person* referred to people with whom a superficial relationship already existed, and was often applied to relatives (Chapter 7.4.2) as well as gynaecologists (Chapter 7.5.2). The final dimension of *Knowing as a friend or family* referred to close relationships with family, friends and some care

providers. Susan in Scotland mentioned having this kind of relationship with her GP:

"I think my own doctor was quite sympathetic too, because she, she knows (me), *you know. She hardly sees me any other time, you know, so she knew."*
(Susan/Scotland)

Similarly, Schütz (1972 p.56) distinguished between superficial knowledge of acquaintance ("Bekanntheitswissen") and knowledge of familiarity ("Vertrautheitswissen"). According to Swanson (1991) only the third and fourth dimensions of *Knowing* were prerequisites in caring for another person which involved personal engagement. This *Knowing* was based on the care provider's motivation to view others as significant human beings and treat them with respect (Swanson 1991).

Once somebody was known, *Trusting* was established. *Trusting* was a conscious act and had three dimensions related to perceived competence, openness, concern, and reliability of the other people. The first dimension involved a general, impersonal trust (Kirk 1992, Gilbert 2005, Thiede 2005), which Catharina in Switzerland had in the unknown doctors in the hospital in which she would give birth:

"W: I got the feeling, in that hospital, those doctors, who are there, they are anyway good.
I: You were trusting, that those doctors. ...
W: Yes."
(Catharina/Switzerland)

Personal knowledge of the person as well as her competence enhanced *Trusting*. Swiss women spoke of trusting their gynaecologist, while Dutch and Scottish women more frequently mentioned their GPs. Nora in Scotland talked in this way about trusting her gynaecologist:

"The consultant seems very.. I, I fully trust, her management decisions and the, the, what she has shown to myself and what I know of her from other people."
Nora/Scotland)

Although this was exceptional for Scottish women in the current study, Nora's trust was based on her personal choice of care provider and the continuity of their relationship. The third dimension of *Trusting* related to the existence of intimate relationships, for example with close family or friends (Chapter 7.3, 7.4). In line with Rempel (1985), interpersonal trust was based on three attributes: predictability; reliability and faith. Women's experience of predictable and reliable behaviour in another person, particularly in risky situations and at times of need, increased faith in this person for future situations. This trust offered a feeling of emotional security and had consequences in the degree to which the women opened up (Chapter 10.5).

Consequently in *Synchronising*, mutual knowledge, feelings, experiences and values were exchanged, resulting in increased understanding of each other and the development of a shared common picture. Most women in this study synchronised with their partners.

"You know, because he really, really, and that just changed him of course, you know. I mean, not that he didn't want to have the first one. He did, he was ready then . We were both, we were both ready. But, just earlier on, the fact, that he used to say, oh, it wouldn't bother me, if we didn't have kids. (..) And I, and I used to like, no way, no way, no, way, because it was just so important to me, that I had had them."

(Holly/Scotland)

"But he knows then, that he should not be too close to me, he particularly should not touch me. Nobody should touch me, at such a moment."

(Laura/the Netherlands)

Synchronising created a basis (a "we") for mutual co-operation (Schütz 1972, Willi 1987, Brazelton & Cramer 1990, Friedemann 1996, Verhoeven 2000, Thiede 2005). Lewis (2000) distinguished three dimensions of synchrony in a partnership: matching; attunement and reciprocity. This matched the findings of the current study. Certain dynamics of the process, such as rupture and repair, particularly enhanced synchronisation.

As a result, *Mitleben* (“living along with”) required that the whole experience, including joy and sorrow, was mutually shared. If Scottish women mentioned these aspects, they most often talked about participating and sharing, highlighting the emotional aspects less. Swiss and Dutch women used “with” in several combinations, such as “meegaan” (going along with), “meevoelen”, (feeling along with), “meegroeien” (growing along with). Yvonne and Kerstin described what they wanted from their care providers.

“ Thus that is living along with you, yes, that is, yes, I do not exactly how, a word, involvement, yes, involvement, openness, also imagining yourself in somebody else's situation, indeed, imagining yourself in somebody else's situation, like gosh, where are you going through.”
(Kerstin/the Netherlands)

Although some English terms equating to *Mitleben* were found such as “care-as-a worry” (van Manen 2002) and “compassion” (Halldorsdottir & Hamrin 1997, Käppeli 2001), all of them emphasised the aspects of suffering in the experience. Going through the experience together was essential for the bond as Maren in the Netherlands mentioned in regard to a care provider in the postnatal period:

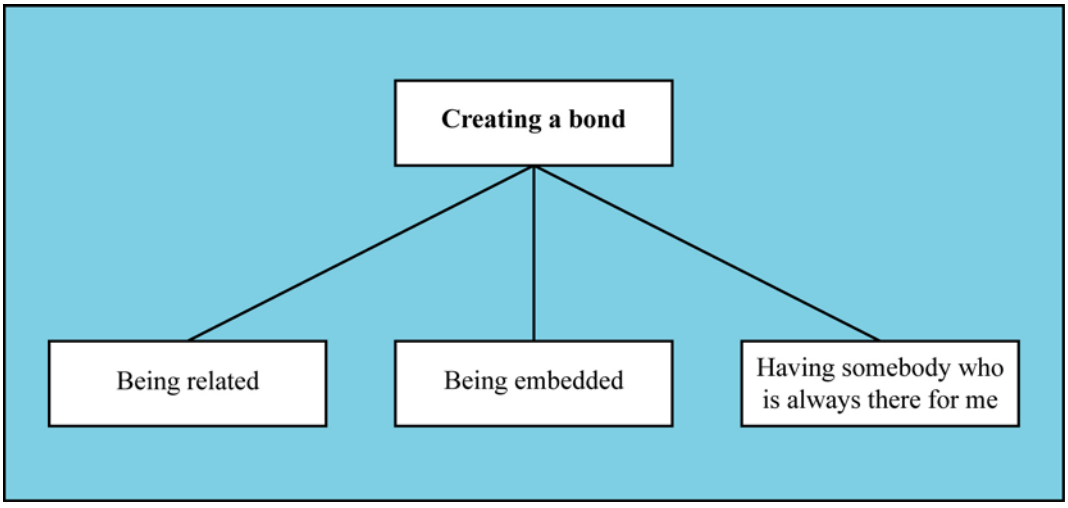
“*That woman was also very nice. But you simply have no bond with her. And if you have somebody, who knows before that time, how your pregnancy has been. Well, then you also have a bond with her, that.. “*
(Maren/the Netherlands)

Although many studies looked at the content of care-providing relationships in nursing and midwifery (Schubert 1989, Fleming 1998a, Newman 1999, Hindley 2005, Fontein 2007), few addressed their creation. Peplau (1988) described two stages of orientation and identification. These focused, however, on the client's awareness of illness and consequently her need for help. In a review, Hulskers (2001) described nurses' competence in creating a relationship based on a model by Fosbinder (1994). Using an ethnographic approach, Fosbinder (1994) researched this competence from patients' points of view. Although the sample involved 40 male and female patients from different medical divisions, obstetrics was not

included. Four categories were identified: “Translating” (informing, explaining); “Getting to know”; “ Building up trust”; and “Going an extra mile” (being a friend, doing something extra). The importance of getting to know and trust people was also found in the current study. Informing and explaining however were results (Chapter 10.5) rather than conditions of the bond, and Mitleben usually involved the “extra mile”, which was less common in nursing. Such familiarity and mutuality had, however, already been described in midwives' bonds with women (Fleming 1998a, Walsh 1999, Hindley 2005). *Mitleben* linked *Creating the bond* to *Providing a familiar environment* (Chapter 10.4) through which a close match between expectation and experience could be achieved (Chapter 9).

Creating a bond consisted of three subcategories: *Being related*; *Being embedded* and *Having somebody who is always there for me* (Figure 7.2), which are described in the following sections.

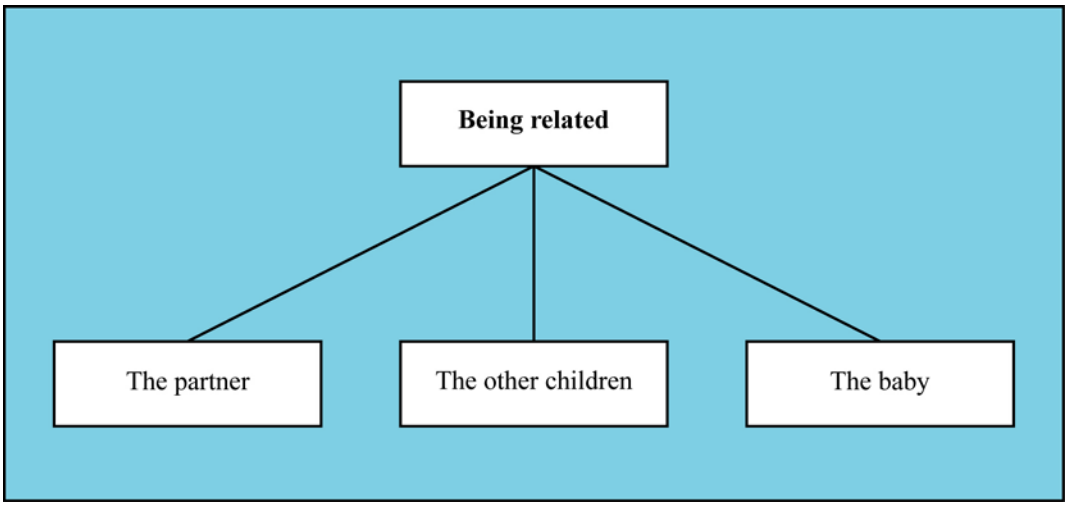
Figure 7.2 Creating a bond and subcategories



7.3 Being related

Being related involved the people from women's own family unit with whom they felt the closest. This subcategory had three properties: *The partner*; *The other children* and *The baby* (Figure 7.3).

Figure 7.3 Being related



Heather in Scotland described how she envisioned her future family:

"Because that will give me a better idea of my family unit. Because I have got Nick, my partner, Leanne, my, my wee daughter, and the twins coming. It is like having them all going nice mould together, you know, my family."
(Heather/Scotland)

This family unit was an open, adaptive system (Stewart 1990, Friedemann 1996), which went through the same transition as the women during their process of becoming a mother. During this transition, women aspired to keep this unit intact and stable.

"For what it is important.. Well, I think, making the experience together. Like there is another baby coming, telling it to the boys, talking about it, really living through that together. (..) Yes, because that is what I liked very much in the third pregnancy. That we could make that experience with the four of us."
(Yvonne/Switzerland)

Changes within the family unit, and in particular the partnership, were addressed by several studies during the 1980s and 1990s (LaRossa & LaRossa 1981, Stewart 1990). During the 1980s in the United States Belsky and Kelly (1994) undertook a

longitudinal study of 250 couples during the period from the third semester of pregnancy up to the third birthday of their first child. Successful transition to parenting was related to a reciprocal relationship, in which a balance between one's own views and wishes ("autonomy") and contribution to the bond ("affiliation") was achieved. A different understanding between women and men regarding autonomy and their mutual contribution and commitment was observed, which led to couples growing apart and even separating during the three years of study. Similar results were found in a comparative international survey on family dynamics in four North European countries, Greece and the USA (Tomasdottir et al. 1991, Hall et al. 1994, White et al. 1996, Hakulinen & Paunonen 1995). That survey, however showed cross-national differences and highlighted the need to include the entire human environment in which the family was embedded in studies on the transition to parenthood. In anticipation of these changes, women in the current study actively involved their direct environment, including their family unit, in their personal transition.

7.3.1 The partner

The most important person for the women in achieving joint responsibility during pregnancy and childbirth was *The partner*. This process involved both physical and emotional support (Chapter 10.5). All women lived in a heterosexual partnership (Appendix 11), in which they worked towards joint organisation and preparation. Heather in Scotland therefore discussed her pregnancy with her husband at home:

"I wanted to discuss it with my partner every week, to say right, that's me with 10 weeks, that's me 11 weeks, and the baby is doing this and the baby is doing that, so that it would help her relationship, because we would bond together more, I mean, bond with the baby, and I would talk to the baby and sing to the baby, and, so would my partner."

(Heather/Scotland)

Sarah in Switzerland, on the other hand, involved her partner through antenatal classes:

"And also involving my husband a bit more, I think, in the pregnancy. And also, the experience that certain things certainly are caused by pregnancy.... Something that one would not notice otherwise, or did not know, and blame it on a bad mood, or that it might cause tensions. That you can laugh about it together, and say, yes, we've gone through that, or so.."

(Sarah/Switzerland)

Joint preparation involved intensified communication and, through this, strengthening of the bond. This was an important, but also a very vulnerable stage of the process (LaRossa & LaRossa 1981, Belsky & Kelly 1994). Studies on becoming a father during pregnancy showed a similar experience to the women in the current study, particularly during first pregnancies (de Montigny & Lacharité 2005). Both feelings of confusion, involving feelings of anxiety, ambivalence, separation and a need for information, as well as development were reported (Barclay et al. 1996, Finnbogadottir et al. 2003). Increased mutual engagement between men and women positively affected the experience of transition (Hallgren et al. 1999, Finnbogadottir et al. 2003). Condon et al. (2004) noticed that the lack of change rather than change led to an abnormal transition to parenthood. Although in the current study individual and cultural differences were found, going through pregnancy and childbirth together was important for the future functioning of the partnership and the family, as well as attachment to the new baby.

7.3.2 The other children

The bond with *The other children* meant that primarily the women felt responsible for them, and thus had to care for and look after them. Holly in Scotland mentioned the bond with both her children.

"My kids, my kids are my life. Like they are with me. (..) Of course they are. I have never spent a night away from them, apart from, apart from when I am having, when I am having them. You know, they don't stay out, I mean, even at grand's. They have never stayed a night out, apart from, when I have, I have been given birth. (..) You know, because I feel they are my responsibility, and I want them with me."

(Holly/Scotland)

This existing responsibility had an important role in women's considerations about the new baby (Chapter 8.5.2) and how to integrate it into their existing world (Chapter 7.3.3). Twenty-two of the women in this study already had children (Appendix 11), aged between one and ten years old. Yvonne in Switzerland described the pregnancy experience with her two children.

> "*Of course, the first one you do together, which is also very exciting. But this time was very special. The boys very much lived along with me, and, not only when we went to the doctor, but also at home. And, at night before going to bed, kissing the belly. Really going through that together. Very special.*"
>
> (Yvonne/Switzerland)

Few studies addressed the influence of the birth of a subsequent child on an existing family unit and other siblings in the postnatal period (Stewart 1990). In a survey of changes in patterns of inter-action between 47 Japanese mothers and their firstborn children after the arrival of a second child, Kojima et al. (2005) found behavioural changes that were similar to changes in partnerships during the transition (Belsky & Kelly 1994, Hakulinen & Paunonen 1995). Stewart (1990) explained this behaviour in terms of a changing bond between mother and child causing attention-seeking behaviour in first-borns. Involvement of the father reduced conflicts in the mother-child relationship (Kojima et al. 2005). No literature was found about these changes in pregnancy. Because of their caring responsibility, the women in the current study aimed for understanding and therefore engaged their children in the experience of having a new addition to the unit.

7.3.3 The baby

Whereas *The partner* as well as *The other children* were both physically and emotionally known to the women, *The baby* was not. *Getting to know* began as the baby started moving around the middle of pregnancy (quickening), and thus physical feelings were the primary means of contact. Mothering experience enabled the use of these physical feelings (Chapter 8.3), as Sonja in Switzerland described in her second pregnancy:

*"And it goes well, and I trust the baby, and I trust myself. (..)
And somehow I often have the feeling by the baby, in which in between, he kicks again, as if he wants to say, listen mum, don't worry that much. Hey, I am here, and everything is going to be alright."*
(Sonja/Switzerland)

This mode of *Creating a bond* was in contrast to models of postpartum attachment which were based on visualisation (Goulet et al. 1998, Beck 1999, Canella 2005). Most studies on maternal-foetal attachment focused on the intensity of maternal affection (Beck 1999, Laxton- Kane & Slade 2002, Canella 2005), while the process of acquaintance was little described (Goulet et al. 1998). Condon (1985, Condon 1993) described a model of foetal acquaintance, which involved cognitive (knowing the baby), affective (women's pleasure in feeling the baby) and altruistic (protective feelings) dimensions. Shieh and Kravitz (2002) used this model in a qualitative study on foetal attachment amongst forty drug-using women from different cultural backgrounds in the United States. Themes within the cognitive dimension were: "Knowing the baby's characteristics and health through foetal movement"; "Acknowledging the foetus as an individual with physical and emotional functions" and "Knowing the baby by relating it to self or family members". Generalisation was limited due to the small sample size and the individual cross-sectional view. These themes, however, matched the findings of the current study. For many women the ultrasound was the first step in getting to know the baby, as described by Verena in Switzerland:

"Well.. that is, you can already build up a certain relationship with the baby. You come closer to the baby, and see it, and, I don't know, it is quite nice. And also for the partner, if he comes with you. That is the only thing that he has from the baby. I mean, a woman feels it, and well, has it in her belly, but the partner sees it there for the first time. And, well, it is just nice."
(Verena/Switzerland)

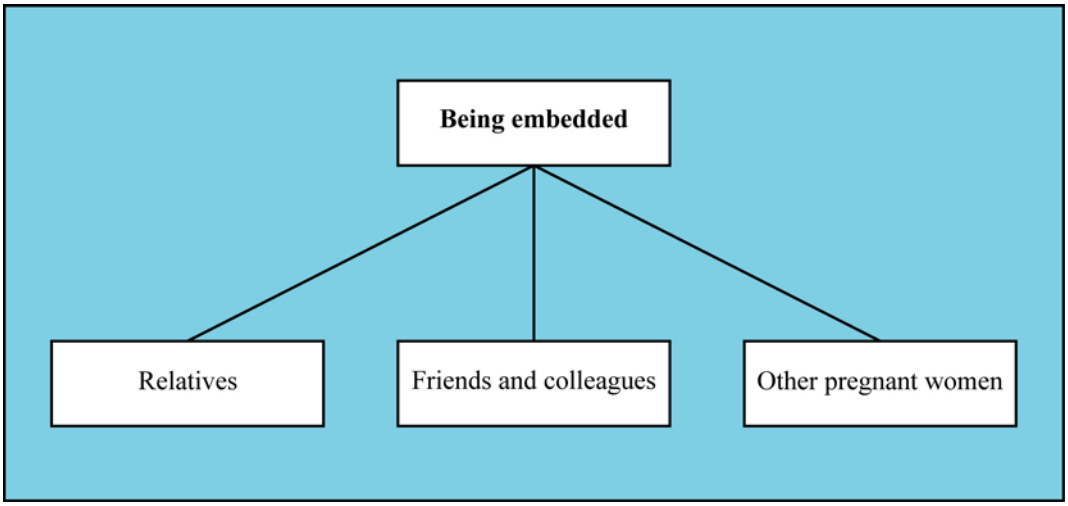
In contrast to experiential learning, the process of acquaintance through ultrasound emphasised the affective dimension of attachment (Righetti et al. 2005), which was related to the women's mental pictures (Chapter 6.2). Antenatal attachment through

ultrasound in pregnancy however, did not particularly increase personal cognitive acquaintance with the baby. An increased number of ultrasounds, however, related to reduced physical interaction of the women with their baby. This differed cross-nationally.

7.4 Being embedded

During the study, *Being embedded* emerged as an important category influencing women's needs in pregnancy. This involved the human environment surrounding women and their families, which was a source of support for women's health and well-being (Boddy 1992, Coffman & Ray 1999). Negative situations and information however also burdened women. *Being embedded* had three properties: *Relatives*; *Friends and colleagues* and *Other pregnant women* (Figure 7.4).

Figure 7.4 Being embedded



A supportive environment such as Erin in the Netherlands had, reduced women's social and informative needs from antenatal care.

"Friends, who had been given birth. Well, yes, the leader of the gymnastic class, let's say, that you can ask your questions then. Just people around you, who I experienced.. Who also gave birth, who have had children. Really those... that you

can ask them your questions."

(Erin/the Netherlands)

The degree to which women were *Being embedded* differed within as well as between the countries. While nine of 12 women in the Netherlands talked about people in their direct environment, only half of the Scottish and Swiss women spoke about them. Moving away from family and friends for work or marriage played an important role (Schütz 1972, Keyes & Kane 2004). Familiarity with, and attachment to, an environment however provided a feeling of identity (Fullilove 1996). This was needed in order to feel secure, be accepted, belong to and be supported before, during and especially after becoming a mother (Rubin 1984, Bergum 1989, Bergum & Dossetor 2005). While working full-time prior to giving birth, Paola in Switzerland had difficulties creating a support network.

"I have been getting it myself. However, if I not had had this, if I was simply somebody, I would not have had that at all. That, that, how should I have been able to build such a thing up? I wouldn't have had the chance to get that somehow at all."

(Paola/Switzerland)

The role of women's human environment during pregnancy was mentioned more often in non-European than European populations (Long & Curry 1998, Coffman & Ray 1999, Bender et al. 2001, Langer et al. 2002, Coverstone et al. 2003, Bensel 2005). Both the studies of Coverstone et al. (2003) in Argentina and Long and Curry (1998) amongst Native Indians particularly highlighted the role of experienced women, which also influenced how women cared for themselves and attendance at antenatal care during pregnancy. Parallels with these findings were found in the current study. The role of relatives in this regard is described in the next section.

7.4.1 Relatives

The involvement of the *Relatives* took place later than that of the members of the family unit, and their roles were different. Women made a conscious choice about who they wanted to involve, and when and how. As Saskia in the Netherlands had

miscarried her baby in her previous pregnancy, she told her parents about her pregnancy, but wanted to disclose the news to others at a later stage. Unfortunately this did not work out:

"Family, family.. Well, there are some things going on now, and, yes, then you grow closer together and... The person that is in the hospital now, just could not keep her mouth shut, thus we had some strange phone calls from my aunt and my uncle and well... Now I have to explain them, what is going on..."
(Saskia/the Netherlands)

Through this intimate bond, women felt more confident in opening up, asking for support (Chapter 10.5) and sharing their experiences. Holly in Scotland described the difference in opening up to her midwife and to her family.

"You know, but, I'll tell her, I mean, I'll tell her how I am feeling, and tell her al how I have been, you know. But I think, your family, you can open up more to your family."
(Holly/Scotland)

Relatives were of both genders, although female relatives were preferred, as had been found in other studies (Rubin 1984, Nelson 2003). Women looked for similar experiences to their own within their family. Specifically they looked to mothers or sisters to sharing information, pictures, understanding and reassurance. As her sister had had two complicated births, Maren in the Netherlands expected that she would have a similar birth.

"And my sister had two caesarean sections, and she also had very heavy births, And then, you yourself, have an idea like, o, what is awaiting me. You are assuming a very serious scenario."
(Maren/the Netherlands)

The connection with female relatives was highlighted in an ethnographic study researching the non-utililisation of antenatal care amongst young Native American

women (Long & Curry 1998). Thirty- two older women and 20 young women aged between 18 and 39 participated in focus groups. An important strength of women's culture was the inter-generational transfer of traditional wisdom about pregnancy. Young women felt ambivalent about modern antenatal care however, as a mismatch with traditional values was experienced. The integration of older relatives and their wisdom was therefore recommended in order to make antenatal care more effective. Although a traditional women's culture was less obvious in the current study, an exchange of experiences through female networks took place, particularly in the Netherlands and Scotland. This network not only involved relatives, but also friends and colleagues.

7.4.2 Friends and colleagues

The second property of *Being embedded* was friends and colleagues. The transition to motherhood was a time in which bonds with friends or colleagues were intensified or redefined while new relationships with new acquaintances were added (Chapter 7.4.3). Nicole in the Netherlands experienced a growing distance between herself and her friends due to becoming a mother:

"While I went out with my friends, and, who are still going out. At the same time, that I say, no, my life is only just beginning, because I have always waited for children. But on the other hand of course, but well, you have the feeling of well, my youth is nearly over."

(Nicole/the Netherlands)

Mutuality in existing relationships was based on age, previous experience, similar views and an expectancy of future shared experiences, as Jan in Scotland emphasised:

"And probably people that were just, most helpful, were colleagues. Because I had, I was at the same level with three people who, who had young children. And you know, sort of, the oldest, well, they all had a child within the previous two or three years."

(Jan/Scotland)

The new situation of having a child and a family often led to diverging values and philosophies, which either strengthened these relationships or detached women from friends or colleagues during the postnatal period (Hart 1981, Rubin 1984, Smith-Pierce 1994). During pregnancy women considered the value of existing relationships. Some women had a bond with a pregnant friend or colleague, which Yvonne in Switzerland and Megan in Scotland both experienced:

"O yes, what I also want to say. Just about support. That I also had a friend, who was pregnant at the same time. That is also nice. That you also can exchange the small things with each other.(...) A pregnant friend, who says like ohh, I've got that too. You know. That pain there, or, I feel so sick. That you can hearten the other person. Like, oh, I have got that too, that does not matter. And aimless talking about such and such. Things you don't do that easy with somebody who is not pregnant. Because she thinks, gosh, what drivel."

(Yvonne/Switzerland)

"Well, I'm quite lucky, when I started with the pregnancy, there was a colleague, who was pregnant still there, so I could ask her, or she told me at least, all the things connected with work. And in between I talked with friends in Germany. And a friend, this friend sent over even books."

(Megan/Scotland)

The role of friends and colleagues during pregnancy is further described in Chapter 10.5. While searching for similar experiences, women also bonded with other pregnant women in their direct environment.

7.4.3 Other pregnant women

New acquaintances that women made both within and without their existing environment were the subject of *Other pregnant women*. Although Nora in Scotland experienced limitations in creating such a bond as she had lived in different places, she emphasised its importance:

"From my experience with other people, they seem to have quite a bond with the other ladies,that are pregnant, especially in their first pregnancy. At the same time they seem to continue to meet them afterwards and watch their children grow up. So.., that provides social, but also the kind of in..., just passing information on as well."

(Nora/Scotland)

All women aimed at *Creating a bond* with other women who were having the same experiences, as was described in other studies on becoming a mother (Hart 1981, Smith-Pierce 1994). This bond was intended to share the experience and obtain information about what to expect (Chapter 10.5). Lea in Switzerland, therefore, sought out experienced women in her environment:

"Just the exchange with, with equal, equal (..) With people, who I, who here in the neigbourhood... Well. (..) Or sister. While working, I also talked a lot with older women, when I still, well, where I worked during the pregnancy. And of course they did not any more. Also, I realised, that, either, they did not, not go through that very consciously, or they have already forgotten it."

(Lea/Switzerland)

In their pre-pregnancy world (Chapter 6.3.1) women had been surrounded by other women with similar personal aims and experiences. Women who had been pursuing professional career goals were usually surrounded by different women than women who had been focusing on a family life (Smith-Pierce 1994). The antenatal class, therefore, was an important means to get to know other pregnant women, particularly for women who had previously worked like Hannah in the Netherlands:

"The first time.. was especially because, the idea that at that moment, I was alone, pregnant, let's say it like that. And my sister got pregnant shortly afterwards. But there were a couple of months in between. But well, I did not really have friends, or, other contacts. I work much, I really have little possibilities in other ways to, to share with other pregnant women. And I had something like, pregnancy gymnastics, at least I'll meet a number of people from my environment, which whom I can share something. Well with whom you can talk sometimes. I mean, I do not need to keep

them as friends, or whatever, but, well, that you can share something sometimes, or can look, what is going on exactly. That was a nice aspect of it, I thought. And actually more than eh....”

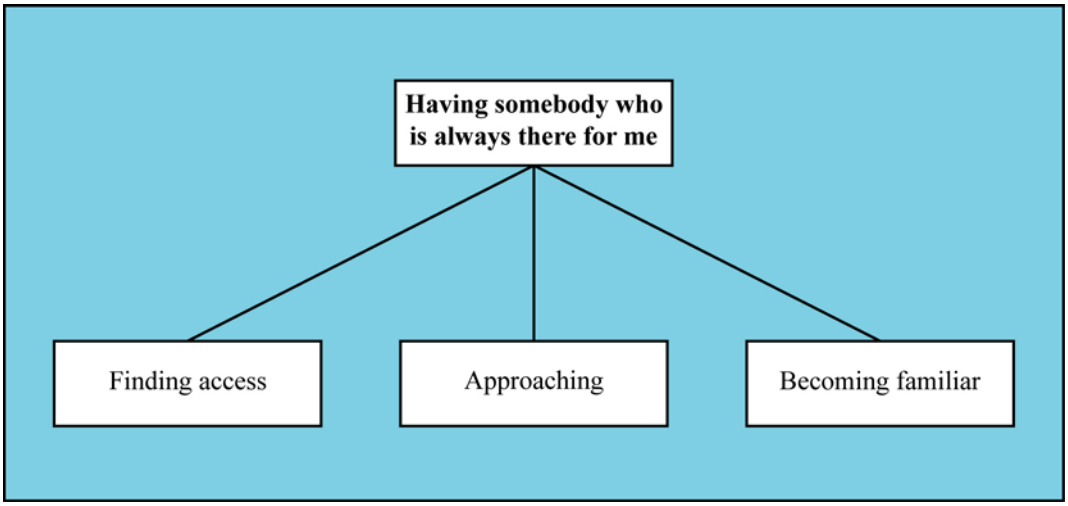
(Hannah/the Netherlands)

Factors influencing the creation of such bonds were age, number of pregnancies, closeness of the place where women lived and philosophies of life and health (for example “alternative”). These bonds usually lasted long after giving birth (Chapter 10.6). In a quest for further bonds with experienced people, women entered the health care system, which was influenced by people from *Being related* and *Being embedded* as well as the national (healthcare) culture.

7.5 Having someone who is always there for me

The subcategory of *Having someone who is always there for me* involved women's needs for a care provider during pregnancy and was directly related to the core category (Chapter 10). The properties of this subcategory were: *Finding access*; *Approaching* and *Becoming familiar* (Figure 7.5)

Figure 7.5 Having somebody who is always there for me



Having someone who is always there for me was made up of the criteria that women defined for their desired care provider. This was particularly mentioned in Switzerland as women had a large choice:

"Yes.. I think that would be good, that one simply has somebody to hold on to.. also a person, whom one can always ask. " (...) I simply wanted to enjoy that, that way, that there was simply somebody there for me. (..) That you have somebody, that you trust."

(Verena/Switzerland)

Women in all three countries aimed to create a bond with an experienced, understanding and professional person in the area of becoming a mother (Chapter 6.2, 10.3), on whom they could always call. "Having" referred not only to the personal exclusiveness of this person, but also to them as a source of security as someone to hold on to (Friedemann 1996). Most women in a first pregnancy wanted to have the same guiding person for all stages of becoming a mother, while women having a subsequent child emphasised pregnancy and postnatal period in this regard. Continuation of the bond was hardly possible if care was fragmented, as experienced by Emily in Scotland:

"It won't be the midwife I am seeing just now. It won't be the midwife that I am going to have, I am going to hospital ABC. It is whoever is going to be on. It is not going to be the same midwife. (..) So, I cannot really get to know my midwife. (..) It is not going to be the same midwife that I am with off during my pregnancy. At my antenatal classes. It will be a totally different midwife, or it could just be student midwives, that have you at the, the hospital. So..."

(Emily/Scotland)

Seventeen women described having a bond with a formal or informal care provider, most commonly a midwife (Chapter 7.5.3). Most women in the Netherlands had this bond with their main care provider, while most of the Swiss and Scottish women bonded with a second care provider either in the healthcare system or privately known to them. These differences within as well as between countries were related to the philosophies of the healthcare systems (Chapter 10.4), which involved

fragmentation. As a first step, this philosophy of maternity care was reflected in getting access, which is described in the next section.

7.5.1 Finding access

While searching for the right person to meet their needs, women were initially *Finding access*. They therefore had to know the healthcare system, including the maternity care system, and its options (Chapter 2.4). According to Thiede (2005), accessing healthcare was culturally defined and was related to (impersonal) trust in regard to expertise. In line with this the women in the current study primarily consulted an experienced care provider whom they knew best. Thus Marianne in the Netherlands called on her GP at the beginning of her first pregnancy:

"At a certain moment, I actually had such problems with my belly, that was at ten weeks. Look, there is so much happening in your body, that you know, you don't know, what all is happening. And then I thought, well, I don't know, if everything is alright, I am going to the doctor." (..) Thus he helped me on my way. Like, then you can make an appointment with Mary. And, he also gave me the telephone number of Mary. Because I did not believe that you could search... choose your midwife yourself. Also he gave me her phone number and then I was going to call her, and I told her, yes, I am pregnant, and she asked me how far and she said, well, at 12 weeks I am coming to you. Well, and this way the ball actually started rolling."
(Marianne/the Netherlands)

While women in a first pregnancy sometimes were referred, women in a second pregnancy usually consulted providers they knew and trusted directly. Difficulties in access had been highlighted in British studies on women's views over the last decades (Reid & Garcia 1989, Proctor 1998). Its improvement had therefore been an important objective on the healthcare agenda (DoH 1993, Scottish Executive Health Department 2001). Access, convenience and options of care in the current study however, were particularly emphasised by Scottish women:

"Right, I think, probably first of all convenience and accessibility. Especially so if you're so still working. So, you know, you're not having to give up especially a

whole day to attend an antenatal appointment. And, I also think, there should be more with the antenatal classes, sort of having like evening classes. So that you can have partners along. Cause that was very restricted, where I, I was..”
(Jan/Scotland)

Finding access was particularly difficult, if women, like Lynn, sought care that met specific needs.

“I was needing emotional support…. Care. And it was not available. And it was basically, I would have needed, I would have needed it throughout. And if it not available, or it not going to be available throughout, I needed something else. And I was, I phoned around, in various places type of care, alternative care. And I eventually found it through a homeopathic midwife in, in Glasgow. She put me on to Helen.. (..). But I ended up talking to all various people. In my, my search for something I could find, I'll do all organisation, but again there is none of this in this area. They put me on, they said try NCT, National Childbirth Trust. Again they’d not gotten anything in this area. I was going to have to travel up to Glasgow. For any sort of support groups or.. whatever. I ended up just, just muddling through, and that was where my friend came in. She, she was my support. Until, until I found the sort of professional support I needed.”
(Lynn/Scotland)

Finding access was not really an issue in Switzerland, as most women stayed with the gynaecologist who they had visited prior to pregnancy for screening and family planning. A study in the French speaking part of Switzerland highlighted women's preferences for the combined care of gynaecologists for the medical part and midwives for information and guidance (Monney Hunkeler 2000). In Switzerland, as well as in the other countries, available information usually only described the main model of care, and said little about care provision and options (Appendix 12). Most dissatisfaction with the care in all countries however based on the care provider's attitude, as described in the second property of *Approaching*.

7.5.2 Approaching

In *Approaching*, women encountered and got closer to their care providing person(s) with the aim of bonding. This required not only professional competence but, more importantly, an individualised, human approach. Most women expressed their need for a human attitude during the encounter. Swiss women described this as a "human" attitude, which they contrasted to "medical" attitude:

"And I found that terrific. Real human guidance. And I had missed that very much in my first pregnancy. That was that medical. And now you have to go to the hospital, and now you have to take your medicine."

(Yvonne/Switzerland)

Dutch women talked about "social" attitude in contrast to "medical or business-like". Erin reflected on her experience during her first visit with the midwife:

"What disappointed me was, that she was quite medical, and less, on the, social area actually. And I also found her at that moment, with the partner less, involved in it. She addressed the woman more, then that she really involved the partner. Like, "well, you kind of belong to it, but the rest...." . Yes, it might also depend on the midwife, how her character is. But, of course it is not a matter of course, that somebody is like, is like that. But you just actually expect a pleasant conversation, it really is something beautiful and well, a combination of actually, also being guided medically, but also, well, how you feel around that. That she shows her interest for that. And feels along with you."

(Erin/the Netherlands)

Care providers with a medical attitude remained distant and sometimes behaved in a brusque and paternalistic way. Through this attitude women often felt misunderstood and not respected which reduced their sense of worthiness (Page 2002, Hunt 2004, Bergum & van Dossetor 2005, Marcellus 2005). Sonja in Switzerland talked about such an experience with a care provider:

"He told me. I have been there in the 12th week of pregnancy, then I said, we have seen a nice pram. And then he said, if we actually were out of our minds, he just had a woman, who had her pregnancy, literally, going down the drain, her child. And that really started to annoy me."

(Sonja/Switzerland)

A social or human attitude involved the care provider being interested, listening, treating women as an individual human being, and willing to understand them in their world. This was described as "caring" (Berg et al. 1996, Halldorsdottir & Karlsdottir 1996, Hallsdorsdottir & Hamrin 1997, Wiman & Wikblad 2004). During their encounters with midwives in a Swedish birth centre, women wanted to be perceived as human individuals so they didn't have "to feel ashamed of their behaviour" (Berg et al. 1996. p. 12). In the current study, Heather in Scotland mentioned the importance of a human relationship during childbirth, which she had not experienced herself the first time she gave birth:

"One thing I would like, like to add is, I would have hopefully have liked to see in the future any other woman who is pregnant building up a relationship with her midwife. So that they don't feel as if it is a stranger, who has just come into the room. Who is participating in a very private, emotional and physical aspect of their lives at that time, so that you would know, oh, my, my name is Cole, Mary or John. You build up a good relationship with her, and that would maybe ease you through the birth a bit better."

(Heather/Scotland)

Dutch and Scottish women in first pregnancy and most women with gynaecologists described such a professional relationship during *Approaching*. Similar views were found in Thai women in a study of their relationships with private gynaecologists (Riewpaiboon et al. 2005) Women were usually satisfied with this kind of relationship as long as the attitude was right, but expressed what they missed (Proctor 1998). Despite the human attitude, women did not yet talk about having a bond. *Becoming familiar* provided the missing aspects to complete the bond.

7.5.3 Becoming familiar

Becoming familiar referred to "family" and feeling at home, in which a care provider was well known and showed an attitude of friendliness and informality (James 1997, Pollard & Liebeck 2000). The need for familiarity with the care provider was reduced if such a bond existed in *Being embedded* (Chapter 7.4) or life-threatening complications occurred. Familiarity was increased by continuity of care (Lee 1997, Shields et al. 1999, Fenwick 2003, Hindley 2005) when women often spoke about "their" care provider or mentioned them by name. Nora in Scotland mentioned the importance of continuity in creating this bond:

"I think a relationship being build up with the people that are looking after you, so ...People that take time to listen to fears, questions, to offer practical advice if needed. And the continuity is, I think, quite helpful, in building up a relationship with those people."
(Nora/Scotland)

Women in the current study sought continuity of personal contact with the carer rather than continuity of care (Lee 1997, Green et al. 2000, Fenwick 2003, Warren 2003). This continuity enhanced the building up trust and thus the bond, and allowed women to maintain a feeling of control (Edwards 1998, Hindley 2005). Several studies had shown positive effects of continuity of carer, however all focused on the quantity of carers (fewer numbers), while the quality of care (for example knowing) received little attention (Green et al. 2000). Hindley (2005) therefore proposed the term "emotional continuity" to refer to the continuity of contact, which was emphasised in the current study.
This informal, emotional contact involved the "levelling" of the care providers, in which they met women in their world ("level"). Joelle in the Netherlands experienced this contact with her midwife:

"I: What would you miss if antenatal care was not there?
W: The conversation. The story. What we had together, those, well, ten minutes only. But I always could for some time. In, in my world. My pregnant world."
(Joelle/the Netherlands)

The effects of social time (instead of medical time) has only been addressed a little (Peltenburg et al. 2004). While involving a different tone of speaking in terms of content and language than professional conversations, social talk (chatting) enhanced interpersonal trust and personal disclosure (Fenwick et al. 2001, Bender et al. 2001). Some women described this kind of contact within a bond as a friendship (Fleming 1998a, Walsh 1999, Hindley 2005). Although in the current study women often had such a bond with a midwife, Sonja in Switzerland described this with her (male) gynaecologist:

"Also, I'd like to say, it is actually, a kind of friend. (..) Of course, he is the doctor. But for me it is, and we somehow, it is, we can laugh together. We can, he can take me seriously, like in the conversation, we just have had. (..) I have the feeling, it is a kind of, taking and giving."

(Sonja/Switzerland)

This relationship and the involved trust, made these care providers "confidential persons" or "reference persons" (German: "Bezugsperson") (Bender et al. 2001, Hindley 2005). Availability was not restricted to antenatal care appointments, but care providers were "always there" to call on or come by (Fleming 1998a). While active behaviour (for example problem solving) occurred during *Approaching* (Chapter 7.5.2), during *Becoming familiar* emotional behaviour prevailed, as Yvonne said.

"And now, she also said, well, in emergency I could, I could also come to you at night. And I also really liked that feeling. Not that I did that, but just the idea, that that was possible, that put me at ease."

(Yvonne/Switzerland)

7.6 Conclusion

Following *Expecting*, women aimed towards *Creating a bond* with the family and their direct environment, which included a professional care provider. Through shared family responsibility, women intensified the bond with their partner in order to go through the experience together. Simultaneously the other children were prepared for the arrival of the new member, and personal acquaintance with the baby

was sought in order to integrate it in the existing family. Likewise, women redefined, intensified or ended existing relationships in the environment in which they were embedded. New relationships were started, most often with other pregnant women and mothers.

Finally, women sought support and guidance through a bond with an experienced care provider during the process of becoming a mother . In their quest, they met structures in the different healthcare systems and attitudes of care providers which either restricted or supported them in establishing such a bond. The presence of a bond with a familiar person was a requirement for *Providing a familiar environment* (Chapter 10.4), which enabled and facilitated women's growth into motherhood.

CHAPTER EIGHT- FAMILIARISING

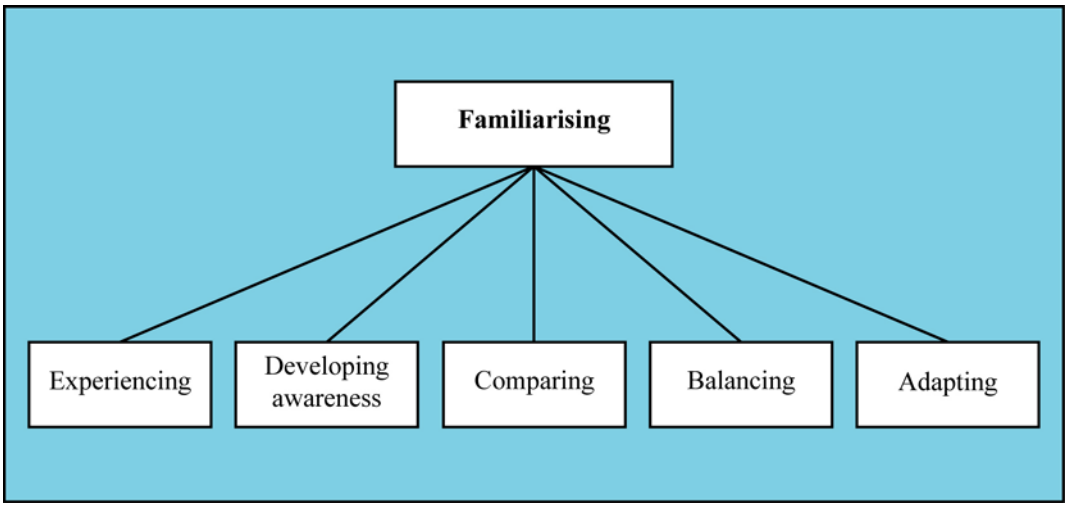
8.1 Introduction

While *Expecting* (Chapter 6), women in the three countries felt responsible for their future family with the new baby, but lacked the confidence and autonomy to take this up on their own. Therefore they were *Creating a bond* (Chapter 7) with people in their environment so as to be embedded and guided (Chapter 10.5) during the process of becoming a mother. Although professional midwifery and obstetric literature fragmented this process in stages of pregnancy, childbirth and postpartum (Lundgren & Wahlberg 1999, Enkin et al. 2000), women in the current study described their experience as one whole, continuous, transitional process. During this process, women became familiar with the experience of becoming and being a mother and the future environment in which they and their family would be embedded. This is described in the following sections.

8.2 Familiarising

Familiarity with the experience of motherhood provided women with a feeling of confidence. This was reflected in the current study in the Swiss and Dutch expressions for "being familiar" (Schütz 1972, Luhmann 2000). *Familiarising* involved "socialising" into a family and was thus being part of a family and feeling at home (Fullilove 1996, Pollard & Liebeck 2000). While *Familiarising*, women relocated themselves so as to become a mother and to organise and care for a future family, in which they developed acquaintances with related persons, places and experiences. The roles of people and places had been highlighted in other studies on transition (Welzer 1993, Elias 2003, Tillmann 2004), although the importance of familiarity on the experience had not been described greatly. Unlike other transitions however, becoming a mother could be a reccurent process. *Familiarising* in the current study involved the properties of *Experiencing, Developing awareness, Comparing, Balancing* and *Adapting* (Figure 8.1)

Figure 8.1 Familiarising and properties



While *Experiencing*, women personally lived in the real situation of being pregnant, giving birth and becoming a mother (Pollard & Liebeck 2000, Dudenreaktion 2002). Some Dutch women talked about "ondervinden" (feeling the reality). While expectations were cognitively built (Menzies & Taylor 2004), *Experiencing* involved all the senses. Although Nicole in the Netherlands was well informed about being pregnant through reading, her real experience was quite different:

"Of course you read sometimes, that somebody has an, an awful pregnancy, yees, though you read that not that often. In booklets is often like, how great a pregnancy is (..) Or not? Also if they, if the midwife is like, o, those nice butterflies in your belly, yes. (..) But well, at three o'clock at night I do not think like, let's have a nice play. Yes, that is just annoying. Because, that wakes me up. Because I had been awake an hour before, as I had to go to the toilet. And an hour afterwards I have to go to the toilet again, thus... (..) And I knew that all, that you had to go to the toilet that often. But now that you are really experiencing that."

(Nicole/the Netherlands)

Through their experiences, women created new knowledge, which pushed their thinking activity (Chapter 6.2) and led to *Developing awareness* of becoming and being a mother. New knowledge also raised questions, mostly involving the baby's

and women's own health as Barbara in Switzerland remembered during her third pregnancy:

"During the first pregnancy I sometimes had a contractions, yes, what I could do about that, or.... (...). Or then later on with lying down, how I could sleep in the best way possible, that has also been such a question. Now it is just, yes...."
(Barbara/Switzerland)

These thinking activities were related to changing responsibilities for the women and their babies (Chapter 8.5). Women's awareness developed through personal experience as well as issues raised by other persons (Chapter 10.5), and this led to the construction of new pictures. In the following period of *Comparing* these new pictures were matched with the woman's existing picture (Chapter 6.2). Joelle in the Netherlands compared the experience of her second child with what she knew from the first one:

"Well I, for example... He moved an awful lot in my belly. I thought well, is that, is that normal? The first one had been quite quiet, and this one, he just half, kicked my ribs apart."
(Joelle/the Netherlands)

Through *Balancing* women tried to make a new experience fit their existing picture, in order to maintain equilibrium and a state of rest (Randell 1993, Levy 1999, Shyu et al. 1998, Frei 2005). Due to the complexity of *Comparing* and *Balancing*, time as well as information and discussion were necessary factors in these processes (Chapter 10.5). New information was either accepted, in which case the existing picture was reconstructed, rejected or led to worrying. Megan in Scotland rejected information from her care provider who thought she was "small" and expected her to have complications during childbirth:

"Well, my nature is, I don't worry about that. I know in other countries, females are much smaller than I am, and they still have had the babies. And 100 years ago people were much shorter than they are now.

So, well I, don't worry."

(Megan/Scotland)

Other studies on becoming a mother described the *Balancing* of pictures as a necessary activity for adaption and growth. In the United States O'Reilly's study (2002), women in a second pregnancy used previous experiences as a "balance pole" to accommodate to pregnancy. In another study of the self-perception of 18 older primiparous women (over 30) in early pregnancy however, Randell (1993) found both change as well as resistance to change. "Balancing" involved the integration of new experiences into women's existing self-images and led to change, while "Buffering" was used to maintain a sense of self. "Buffering" was interpreted as resistance as well as a desire for stability. Although in the current study "Balancing" involved both activities, their contributions differed due to individual personal experiences, but not particularly to age.

Adapting was a result of each new picture developed women which they used to familiarise themselves with the idea of being a mother. In this way they gradually accommodated to pregnancy and childbirth. Piaget (1975) described similar steps comparing new knowledge with existing knowledge ("assimilation") and subsequent adaptation ("accommodation") in the development and education of children. Women having their first child were most affected by this change in the current study, while women having a subsequent child experienced more stability. This was also found in other studies (Rubin 1984, O'Reilly 2002). Marianne in the Netherlands (second pregnancy) and Lea in Switzerland (after having her second child) reflected on their personal changes in becoming a mother:

"And if you go for the first, first time, for your first baby you are just a lay person in that area. The further pregnancy proceeds, the more, the more you come to know, actually. And now you are, well I won't say an expert, but you just knows an awful lot, maybe even a bit too much, for... Yes, you are, of course you know that it can go wrong sometimes, but I actually never gave that much thought, in the first pregnancy."

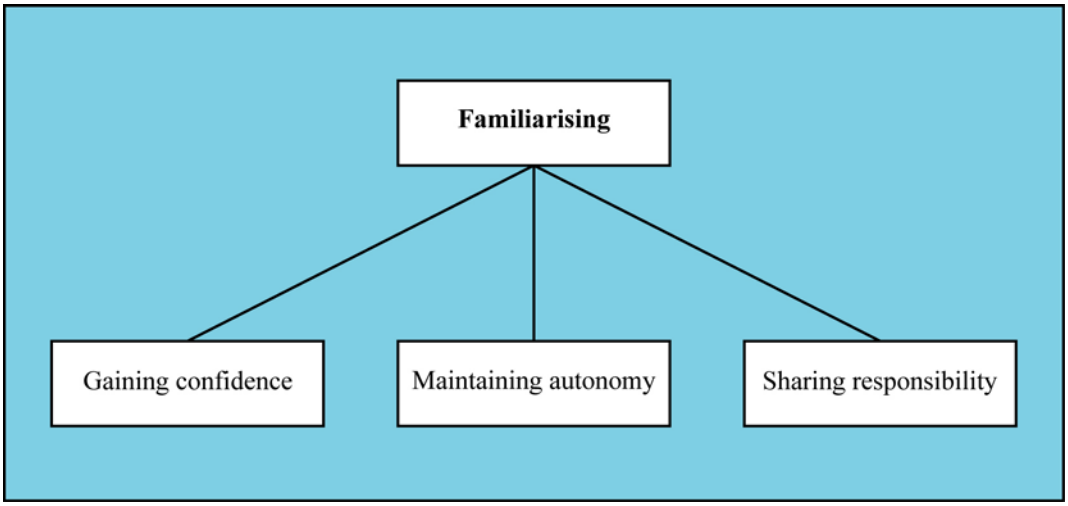
(Marianne/the Netherlands)

"I: According to me, becoming a mother, is almost like landing in a new culture? W: That is true. And particularly, it is well, like, such a, you have to develop in new familiarity in yourself, because, it is a process, you do not know yourself anymore. (..) You have to learn to know yourself again. Define new. Yes, you have to really open your eyes"

(Lea/Switzerland)

Developing familiarity consisted of three subcategories: *Gaining confidence*; *Maintaining autonomy* and *Sharing responsibility* (Figure 8.2), which are described in the following sections.

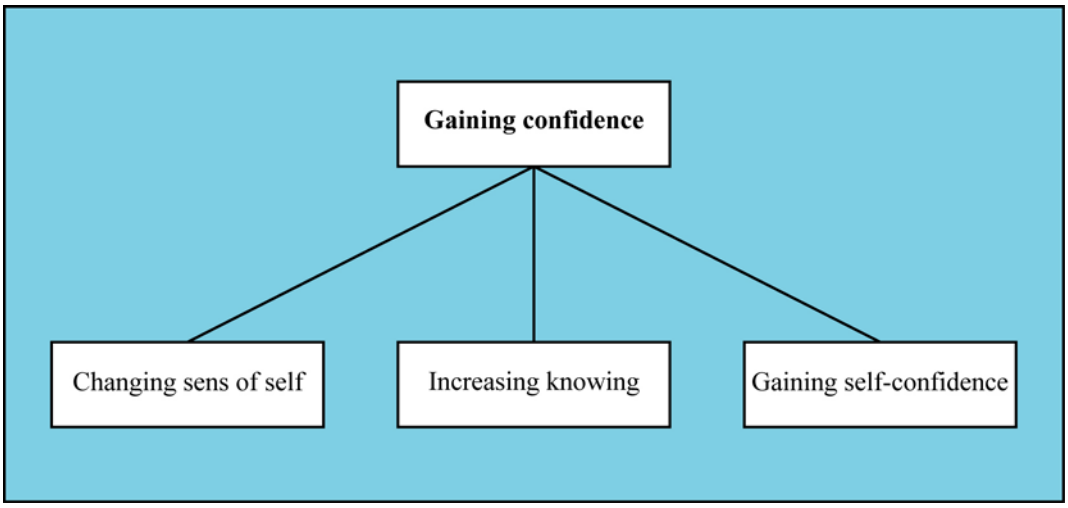
Figure 8.2 Familiarising and subcategories



8.3 Gaining confidence

As a consequence of *Lacking confidence* at the beginning of pregnancy (Chapter 6.5), women aimed to gain confidence in themselves and their future situation during pregnancy. *Gaining confidence* had three properties: *Changing sense of self; Increasing knowing* and *Gaining self-confidence* (Figure 8.3).

Figure 8.3 Gaining confidence



Uncertainties caused anxieties concerning women's selves as well as the baby (Chapter 6.5), as previously described by several other authors (Luhmann 2000, Melender 2002a, Tomaselli-Reime 2005). *Gaining confidence* therefore involved increasing security. This was often found through external sources such as information (Chapter 8.3.2) and care providers. As Vanessa in Scotland experienced pregnancy as an anxious time, she looked for reassurance from a care provider:

"I personally found, the pregnancies were quite an anxious time. You know, I am sure that some people, you know, find it much more enjoyable. But I, even the very first pregnancy, you know, I had an awful lot of anxieties. And I didn't know many other women with babies, or women who were pregnant. I think I was really looking for, a lot of reassurance from the people looking after me, you know. And I think ideally, you would want to see one, or two people, throughout the pregnancy. So that, so that you feel that you don't have to explain it all over again with every visit. Well, I am worried about this and it was this that happened in the past, and, you know, that you felt, you had, someone who knew a little bit about, you know, was what going to matter to you and what was important."

(Vanessa/Scotland)

Women's anxieties in the current study differed individually in regard to number and kind. Reducing anxieties led to relaxation and increased confidence. Saskia in the

Netherlands had previously miscarried and wanted an ultrasound confirmation that everything was all right so as to be at ease:

"Well, then it is waiting until 9 months. Then I don't need... It is okay, that somebody keep an eye on it. But then I have something like, well yes, an ultrasound, and.. If everything works well, or the little heart is beating and so on. Then I have something like, then I am at rest (..) That is why I say, in the first or second week of February or so, an ultrasound. One more time for security. Then I know that everything is right, then I am at peace with it, say it like that. Then I am living further peacefully. Then we can start possibly start working here (organising the house)."
(Saskia/the Netherlands)

Contrastingly, Verena in Switzerland told about how she coped with not finding her care provider to reassure her when she feeling ill during her second pregnancy.

"Well, then I just try to listen to my inner feelings. I knew, that I was not allowed to take any medicine. Then I stay home, and then maybe, if the belly aches stops, then it is only the flu. Then I don't have to be afraid, that I am going to lose the baby, and simply...not to harm it. Well, you know, what, what you should not take, medicine and so on. But you just very much liked to have somebody, to go and ask and so on, or maybe, who could give something, that won't harm."
(Verena/Switzerland)

Following a normal process of becoming a mother and the concurrent provision of security by reassurance, women usually felt more confident in a subsequent pregnancy (Chapter 9.3). Security as a means of reducing anxieties was surveyed amongst 481 primiparous and multiparous women at between 16 and 40 weeks of pregnancy in six Finnish maternity clinics (Melender& Lauri 2002). The response rate was good (69%). Security was provided by social support, knowledge, antenatal care, livelihood, positive stories and positive previous maternity care experiences. Women with uncomplicated pregnancies often mentioned social support and antenatal care, while knowledge was emphasised in subsequent pregnancies. While many studies on confidence highlighted external sources of security (Petermann 1996, Gennerich 2000, Endress 2002, Schweer & Thies 2003) however, Erikson

(1966) mentioned learning to trust and rely on oneself, involving aspects of interpersonal trust. Learning to rely on oneself also played an important role in the current study (Chapter 8.3.3) in which adaptation took place stepwise (Chapter 8.2) and confidence increased with every step. Women in a first pregnancy relied very much on information and other people, whereas women in subsequent pregnancies like Erin in the Netherlands had more confidence in themselves:

"But that, I really did not like that with the first one, that you feel so unsure. You are very unsure, you have, you give her the, the trust, that you think she just can do it, but a part of you remains unsure. (..) And with the second one, I think, that you feel more self-assured, you give her your trust, like, for the birth and so, but well, you have a little more certainty like, gosh, it will be alright, because it went well with the first one. (..) And of course, that does not mean a thing, but it is just a little more confidence "on" yourself."

(Erin/the Netherlands)

Cross-national differences in external sources of confidence were noticed. Swiss women mainly relied on people with whom they bonded (Chapter 7), Scottish women emphasised the importance of having information themselves (Chapter 8.3.2), and Dutch women mentioned both sources of knowledge. A source of reccurring uncertainty that women continuously had to balance however, were changes in their sense of self during pregnancy, which is described in the next section.

8.3.1 Changing sense of self

Confidence primarily was based on women's relationships with their bodies (Chapter 6.5.1). Through *Changing sense of self* however they had lost something to hold onto as "place is incorporated into the sense of self as a core element in identity formation" (Fullilove 1996 p. 7). Women mentioned physical changes, like Emily in Scotland:

"Your body is changing a lot, so you don't know your body anymore. I suppose that you loose confidence in your body. You don't feel as attractive as you used to be.

Cause you obviously get body changing. (..) Your breasts, and you get a bump. More than there used to be there."

(Emily/Scotland)

Emotional changes were also significant (Chapter 6.5.1), as for Ariane in the Netherlands, who reflected on herself as a pregnant and non-pregnant person:

"W: Well, I react and feel and think, very differently. I, I have, well at this moment, at this moment... but I feel very much burdened by my hormone household, and I think that is the cause. And then I sometimes hear myself say things, that I think like, oh boy, oh boy, what is wrong, this is not me actually. My partner, he really suffers from it. And then, then, well, then I really feel a bit sorry, but well, it just bubbles out of me. Actually I am different, different when I am not pregnant. More kind-hearted I think. (..)

I: Do you have the feeling that you're kind of standing beside yourself?

W: Sometimes yes, then I watch myself doing things, that I normally would not do."

(Ariane/the Netherlands)

Women sought information to understand and be reassured that their experience was normal (Chapter 8.3.2, 10.5). This often involved objective confirmation from care providers (Schneider 2002, Ayerle et al. 2005). Thus they created a picture of their pregnant selves. These changes were familiar in subsequent pregnancies as women used previous experiences as a point of reference (Chapter 6.5.1). Schneider (2002) interviewed thirteen Australian women about their experiences in each trimester of their first pregnancy. Physical, emotional and cognitive changes were mentioned as most difficult for women to cope with during the first trimester and were related to a loss of control leading to anxieties. In the current study however, familiarity with women's pregnant selves reduced anxieties and allowed them to let things happen (Chapter 8.4.1). Women in a first pregnancy needed guidance and time to live through the new experience and develop familiarity with their other selves and the baby. Paola in Switzerland reflected on the lack of guidance during her first pregnancy:

"Where I noticed, that just also, that feelings ("the belly") *totally were forgotten. That all goes, with me all went into my head. And I would have wished myself somebody, who much more from the beginning actually, who much more, from the beginning actually, had been saying to me, you have to listen to your body. It sounds weird, that you need somebody for that, but I had needed that now, I had needed that, I had needed somebody, who had said, that is normal, that you yourself also changes, that you become very sensitive. That you just do not function like, like a non-pregnant woman."*

(Paola/Switzerland)

Through a developing awareness of their body, women integrated the experience of their pregnant self and the baby while becoming a mother (Rubin 1984, Bergum 1989, Bergum 1997). Guidance (Chapter 10.5) provided time for the experience and increased women's knowledge, as described in the next section.

8.3.2 Increasing knowing

Women sought *Increasing knowing* to reduce the unknowns (Chapter 6.5.2) about their actual and future situation of childbirth and having a baby. "Knowing" involved both information and personal acquaintances, including the baby and the environment (Chapter 7.3.3, 7.4). Due to their new experience, women, particularly in a first pregnancy, emphasised their increasing knowledge:

"With, because it was, everything was new to me, it was as if someone saying to me you're pregnant, as if someone gave to me this big Christmas present, it was wonderful, and I wanted to know all about it."

(Heather/Scotland)

"I began to read more. (..) How the development of the child is. At this moment. And well, what has been constructed. Particularly the first weeks, I liked very much. And well, what you can do with yourself.
About aches and pains that you can get."

(Nicole/the Netherlands)

Women's need for information was highlighted in British studies (Chapter 3.4.1), but little was known about other countries. In thematic interviews about information and support during a first pregnancy by von Rahden (2003) however, 13 German women expressed the same need for information (Chapter 3.4.4). As in the British studies, women wanted information to be offered to them and not to have to ask. They preferred quality over quantity and personal over general information. The findings of the current study were similar. Women mentioned their need for general information, such as written information (from books, brochures or the internet) or antenatal classes, particularly in a first pregnancy. Deborah in Scotland would have liked these classes to have started earlier in her pregnancy.

"There is probably a lot that they can teach you about your pregnancy. Apart from just about the birth. And what is going to happen to you after the baby. You know, maybe, maybe what they can do is, giving us more classes, you know, a week sort of classes at the beginning." (Deborah/Scotland)

Moreover, all women emphasised a need for personal information through experienced, human guidance (Chapter 10.5) as Vanessa said after her second pregnancy:

"W: I mean, general information, is helpful when you haven't been through the process.
I: Just to know what is, what is going on.
W: Yeah. What an epidural is and well, you know, yeah. But I think probably afterwards, it is, yeah, it is personal information, that you need."
(Vanessa/Scotland)

Personal acquaintance with the baby (Chapter 7.3.3) and knowledge about its health in order to enable decision-making (Chapter 8.4.2) and learn how to care for it (Chapter 8.4.3) were part of this personal information. Health-wise three aspects were mentioned: the baby's sex; if its health was all right and if its body was complete. Mireille in the Netherlands decided to have a second ultrasound to know this:

"If everything is up and on (complete) and that everything grows well, and that its size is alright. I think that is quite important, not that it is too small or something. Because I am quite a smoker."

(Mireille/the Netherlands)

Where general information helped women with creating expectations (Chapter 6.2), personal information helped them to understand and become familiar with the experience, as had been described in human adaptation (Schütz 1972, Piaget 1975). Information received had to fit the picture (Chapter 8.2) and reduce uncertainties. Aiming for a balance, women tried to regulate its timing, content and amount. Levy (1999) found a similar process while studying the provision by midwives of information to support informed choice in maternity settings in England (Chapter3.4.7). Women maintained equilibrium through the regulation of incoming information by balancing and contextualising it with their personal knowledge picture. Melender (2002b) highlighted the key role of the mode of information provision in both increasing knowledge and reducing anxieties. In the current study, sharing the experience (and thus an exchange of awareness) (Chapter 10.5) was the most important balancing activity. Such experience was found with birth care providers and other women (Chapter 10.3). Some women like Lea in Switzerland (Chapter 7.4.3) and Lynn in Scotland had a hard time finding other women's knowledge in relation to both positive and negative pregnancy experiences.

"With my miscarriages, I was desperate to find folklore; tales, old wives' tales, whatever you want to call it. Just that there is a body of knowledge that is missing, people don't talk about it. Where is that information? Where is it gone? It must be there somewhere. And I never did find it."

(Lynn/Scotland)

Cross-national differences were found in the amount and source of information. Scottish women emphasised their need for written information. This need was reduced in the Netherlands and hardly noticed in Switzerland. The largest need for information in all three countries was found in women in a first pregnancy. Scottish women in a subsequent pregnancy however, were likely to want more written information so as to increase control, because they had previously experienced a

lack of support by formal care providers (Luyben & Fleming 2005). Contrastingly, Swiss women didn't look for the necessary information themselves, but asked people they knew. Paola in Switzerland and Holly in Scotland described how they gained knowledge in a country-specific manner:

"I was lucky. Because I had my own relationships, I did not feel that unsure. That means I had unsure, always had unsure moments. And those unsure moments I just directly compensated. That means, I called someone. Someone, that I knew really well, a doctor. And there I got my rest information, or what I lacked. Or I knew a midwife, and well, afterwards Louise."
(Paola/Switzerland)

"You know, this was really, it actually was really, I mean, I was crying, when I found out that my baby was breech. I mean, I was really upset. It got me.. You know, all I could think, and then, then all of a sudden, it was a different pregnancy. All together. I was looking at books, I was reading. And I, I was, I was obsessed with this, having a caesarean section, you know."
(Holly/Scotland)

Through *Increasing knowing* and getting used to their pregnant selves (Chapter 8.3.1), women familiarised themselves with the experience. Consequently self-confidence was affected, which is described in the next section.

8.3.3 Gaining self-confidence

Women lacked confidence in face of the unknown, new situation ahead (Chapter 6.5.3). Through gradual familiarisation with experience, they were *Gaining self-confidence.* After having her second child, Erin in the Netherlands reflected on this process in her first pregnancy:

"Because you do not know, when it is going to happen, one way or another, with the ultrasound, like is everything alright. You have never experienced it. Like is this okay, does this complaint belong to it? And now I am much more sure, thus I just feel better. (..) Therefore, self- confidence, I find, to be able to enjoy is, and just have

some more, peace, I find self-confidence very important. (..) And with the first one is that never possible according to me, because you do not know what is going to happen. (..) You do not have a grip on the unknown. That makes it so, scary actually. (..) Therefore your self-confidence gets less.(..) And now, with the second one, you just know more. Therefore you have more self- confidence. (..) But indeed, the scary, the unknown. (..) Not knowing what, what they are going to do with you, and what is about to happen, and you have to give yourself over to that.(..) I find that with a first one, very, well annoying. I do not know, something like that. Not really annoying, but on the other hand still."

(Erin/the Netherlands)

Dealing with the experience gave women the faith that they could do it and rely on themselves, no matter what happened. Although self-reliance had hardly been mentioned in studies on becoming a mother (Rubin 1984, Nelson 2003, Mercer 2004), its importance for health was investigated by Lowe (2002) in an ethnographic study amongst 26 Cherokee men and women. Self-reliance was a balance between self and the connection with others, involving responsibility, discipline and confidence. Confidence was related to an identity based on cultural values and a feeling of self-worth related to personal attributes. Likewise, in the current study self-confidence in mothering was gained through comparison with other experienced women and acknowledgement of achievements (Chapter 10.5), such as those receivd by Joelle in the Netherlands her midwife:

"So well, then I went to my midwife again, to Ann. Then she says, well you are getting a ten (highest mark in the Dutch educational system*) from me again. So I think, well again a good feeling. Yes. That is just very important."*

(Joelle/the Netherlands)

Some women however, like Deborah in Scotland, felt stupid if they had to ask about every day concerns:

"Whereas, you know, this lot, I don't really know them. And, I think also, being, being a nurse probably didn't help that as well. You know, because, I kind of feel, I can't ask that question, cause it is too stupid. Now, it is, it is fine, you know, I can go

and maybe look it up. (..) You know, I really need to have get it to a level, where I feel it is, at least intelligent enough. To, to ask them, so."
(Deborah/Scotland)

In order to get what she wanted, Holly in Scotland therefore built herself up to ask her care provider about the sex of the baby in her third pregnancy, resulting in a "quasi-self-confident" attitude:

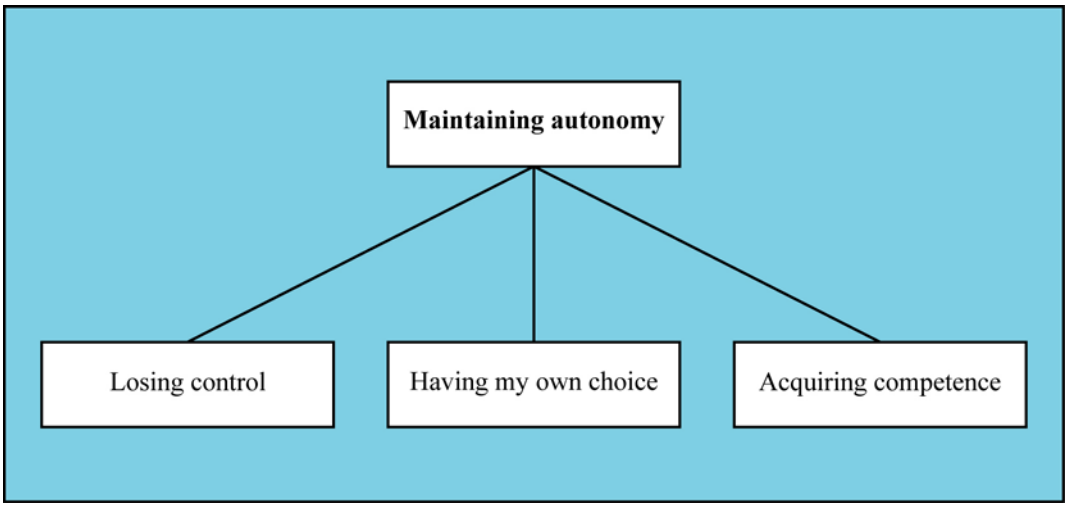
"And I said, right. And I built myself up, for this asking, what the sex was of the baby, and they couldn't tell me! (..) But, I was still disappointed, because I had worked myself up for this, I'd be getting to know, what the sex was, and then, when I walked away, that day, I felt, deflated."
(Holly/Scotland)

Little was found on self-confidence during pregnancy, but postnatal studies emphasised its importance in successful mothering (Rubin 1984, Barclay et al. 1997, Nelson 2003, Mercer 2004). While *Gaining self-confidence,* women developed a stronger attitude. As women's self-confidence during pregnancy was supported by people from *Creating the bond* (Chapter 7), they felt they maintained their autonomy.

8.4 Maintaining autonomy

As a result of *Lacking autonomy* in early pregnancy (Chapter 6.4), women aimed at *Maintaining autonomy* in their existing world through the guidance (Chapter 10.5) of an experienced person during the transition. This subcategory consisted of three properties: *Losing control; Having my own choice* and *Acquiring competence* (Figure 8.4).

Figure 8.4 Maintaining autonomy



Women relied on people they had bonded with for support (Chapter 10.5), but at the same time wanted to have the freedom and independence to determine and organise themselves as much as possible in accordance with their responsibility (Chapter 8.5) during pregnancy and childbirth. Both Hannah and Kerstin in the Netherlands expected to have this autonomy ensured by a care provider during guidance.

"Therefore I think, that it is important, that, that a midwife or whatever, stays aware, that you are also an autonomous person. With you own capacities, or qualities. With your own doubts, with your own things, and that they do not want to take things over or so. Or take away. That is not possible at all, but they can help you well, to come to a good decision, or... But with that it still remains an autonomous person."

(Hannah/the Netherlands)

"Like the freedom to move and express myself, that was one thing. But well, if I can just do my own things, that I know I can do that, than it is, than it is okay for me."

(Kerstin/the Netherlands)

As in other studies (Schneider 2002, O'Reilly 2002), informational and emotional support was emphasised during a first pregnancy, while in a subsequent pregnancy

practical support dominated. Through guidance, women acquired knowledge (Chapter 8.3.2) and competence (Chapter 8.4.3). Through this facilitative learning process women were empowered in their autonomy (Nau 2005). Some women like Jan in Scotland however, experienced situations like giving birth where the supporting people took over.

"I think in some ways, probably the first time, you know, certainly initially, I think, the doctors sort of bounced in and took over, so much. That it made that very difficult. And, okay, once they were out of the room, you know, you can sort of try to establish a relationship. But, you know, it already started it on a bad foot. But the midwife was very good and very understanding though. You know, quite helpful. But, by that time my feelings were already..... They were already, you know, a couple of things and a birthing plan, I wasn't able to do. Because the doctors had bounced in just straight in at the beginning and...sort of taken, taken over."
(Jan/Scotland)

While Rubin (1984) suggested that maternal tasks led to role changes and subsequent identity and attitude changes, the process was initially reversed in the current study. Familiarity with the experience and people and place (James 1997, Lambert et al. 2003) enhanced confidence and thus women's autonomy. Autonomous organisation and preparation however, provided women with the opportunity to create a familiar environment and assume control and responsibility, as shown in home-birth and birth-centre studies (Morison et al. 1998, Walsh 2006). Such activities were most significant for women having a home birth in the current study, like Ariane in the Netherlands:

"I had everything organised and I had talked it over with my partner. Well, it is still, of course it always is, at the moment that something goes wrong, you still have to organise things, but I also really had... Well, my son, it would happen at night, then he would stay in his bed. And if he would wake up, he could.. Well, then he could join. And if it happened at day, then I'll ask my father, if it happened after 37 weeks, if he would pick my son up. So I really had the whole picture organised."
(Ariane/the Netherlands)

Women having hospital-based care exercised autonomy by making their own choices (Chapter 8.4.2), including the choice of care provider (Chapter 7). *Maintaining autonomy* positively influenced the development of family responsibility, which has also been described by others (Barclay et al. 1997, Affonso et al. 1999, de Montigny & Lacharité 2005). The transition itself however caused women to lose control, as described in the next section.

8.4.1 Losing control

Women, particularly in a first pregnancy, wanted to be in control (Scotland) and have things in their own hands (Netherlands, Switzerland) to realise their created picture (Chapter 6.4.1). Experiencing the impossibility of controlling pregnancy and childbirth however, made them feel they were *Losing control*. Erin in the Netherlands reflected on this process in her second pregnancy:

"I: You had said to me then, having things in your hands, you wanted to have things in your hands...

W: Yes, that is right. Like, what I am saying, you do not have it in your hands, whether it is healthy or not. And that is really what you want. (..) You also want to have it in your hands, how the birth goes. And how many people are standing around you. And well, it does not happen like that.... (..) And you ***want*** *that. You just want, you want everything like, that one has to do it like that, and that one like that. But it does not work that way."*

(Erin/the Netherlands)

Women needed to let go of their need to control their body and environment and be relaxed in order to let the process of pregnancy and childbirth happen. Although "letting go" was accepted, a sense of control was maintained through understanding, as Jan in Scotland described:

"I suppose you want to be in control. But obviously everybody's body is different. So, everybody's body reacts differently to being pregnant. But I suppose you still want to be in control. So, you sort of, I suppose that is why you are seeking that information. If something happens, you understand why it might happen. So, I

suppose all the possible side effects of pregnancy, you sort of want to be aware of."
(Jan/Scotland)

Feelings of control were also related to women trusting themselves and their ability to cope (Hall & Cart 1993, Hall & Holloway 1998). In a first pregnancy this enabled them to let go. Accordingly, women talked about "letting go", "handing over" or "letting things happen" after having a first child. Kerstin in the Netherlands needed a familiar environment with experienced, known people (Chapter 10.3, 10.4) in order to let go.

"Then I can I hand myself over to the process. Then I can myself, then can, I say it like this, let go of my control, then it can happen, let's put it like that. I think, that is the most important thing with a birth, to, to, to, well, surrender yourself. Literally. That is, the biggest surrender you need during birth, because it happens from your inside out, and well. I think, that you need all those conditions to let go, like that."
(Kerstin/the Netherlands)

Although Hall and Carthy (1993) found that women's need for control differed individually, it was also related to the availability and acceptance of support. While letting go of control, the people that women bonded with were expected to support them, speak for them ("advocate") and act on their behalf if necessary. In Scotland however, several women experienced situations where care providers took over (Chapter 8.4). Such negative experiences increased the need for control, and women tried to increase their knowledge (Chapter 8.3.2) in their next pregnancy. Women with a positive experience came to terms with "letting go" and the "uncontrollable" some time after their first childbirth (Chapter 9.4). While this loss of control created a lack of balance in women's autonomy, balance was largely restored by women making their own choices, as described in the next section.

8.4.2 Having my own choices

Although women realised that they did not have everything in their hands (Chapter 8.4.1), *Having my own choices* provided them with the feeling that they did, as Jan in Scotland described.

"Perhaps being able to sort of be in control. I mean, I suppose, I mean, it does go back to this thing of sort of, sort of options and structure and ...Being given some of the choices and being given explanations, being given information, making things understandable, to you."

(Jan/Scotland)

Having my own choices related to responsibility (Chapter 8.5) and women wanted to be treated accordingly (Waldenström 1999, Hunt 2004). As autonomy was about independence and freedom (Chapter 6.4), women wanted to be respected in their choice and not be forced. Biley (1992) described three requirements for participation in healthcare decisions: feeling well, sufficient knowledge and ability to participate. With the exception of sufficient knowledge (Chapter 8.3.2), these criteria were met by the women in the current study.

To increase freedom of choice, Informed Choice leaflets were introduced in the UK during the nineties, providing women with adequate information about options (Rosser et al. 1996). O'Cathain et al. (2002b) evaluated the effects of their ante- and postnatal provision in a randomised cluster trial of 13 maternity units in Wales (Chapter 3.4.7). Provision of information however was problematic as the leaflets were often not clearly visible for women, and oral personal information from midwives was limited, and framed to steer women towards making the "right" decisions (Stapleton et al. 2002a, Stapleton et al. 2002b). Ultimately, women's perception of exercising choice was influenced by parity, profession and education rather than by the provision of leaflets (O'Cathain et al. 2002a).

Women in the current study had individual issues that were important to them, and hardly looked for information about other things. Important issues were antenatal screening for foetal abnormalities or infectious diseases, the number of ultrasounds, place of birth, mode of birth, pain relief and breast or bottle-feeding. As with *Familiarising*, options were compared with existing pictures in order to decide. While deciding about home birth, Vanessa in Scotland weighed the risks for her own life against the responsibility for her firstborn.

"I thought, well, if there is no risk of dying, what is everyone worrying about, you know. Because all the same, I didn't want to be in a situation, where I was going to put my own life at risk, cause that would be worse for Robin, than a bit of jealousy about this new baby. So, yeah, I think, you know, all sorts of different things, come in, come into play."

(Vanessa/Scotland)

Several modes of decision-making were mentioned in the current study. VandeVusse (1999) identified four modes while studying the birth stories of 15 primiparous and multiparous women in the United States. Decision-making ranged from unilateral by the caregiver but contested by the women, through refusal or adaptation, to share through explanations or requests from women as well as caregivers. Women felt devalued by unilateral decisions, but rarely wanted to make all decisions themselves. Although individual differences were found in the current study, cross-national differences were noticed. Scottish and Dutch women emphasised making their own choice while being supported by their care provider. Megan in Scotland wanted to make her own choice, but felt she was not supported:

"Like, what is important is, to get the information you need, for making decisions, and that they tell you about alternatives they have. I got the impression they decide for you here, they make the decisions and you will go along, and that they give you even the time to decide, it is not like where do you go and deliver your baby. Either it is this hospital or that one. You have to decide like that, and..."

(Megan/Scotland)

Contrastingly, several Swiss women preferred a passive mode of choosing, which often involved consenting to decisions made by care providers, as Sara described:

"Although, then the midwife would have decided (..) But that was actually all right. Cause, cause I had the confidence, that it would be okay."

(Sarah/Switzerland)

Having my own choices thus involved confidence based on increased knowledge and support (Levy 1999, Harrison et al. 2003). Following the choice, *Acquiring competence*, as described in the next section, enabled women to act.

8.4.3 Acquiring competence

As women initially felt they lacked competence (Chapter 6.4.3), *Acquiring competence* was important in maintaining their autonomy. Some viewed confidence as an integrated part of competence (Rubin 1984, de Montigny & Lacharité 2005). In the current study however, feeling confident (Chapter 8.3) was an initial prerequisite to competence, which included dealing with the pregnancy, problem solving, preventing risks, preparation and anticipation.

While dealing with pregnancy, women wanted to do everything right to prevent risks and secure the desired outcome for which they felt responsible (Chapter 8.5). Thus, women in a first pregnancy followed information from experienced people strictly (Chapter 8.3.2, 10.5), while women in subsequent pregnancies had developed their own ways (Chapter 9.4.3). Cultural differences were noticed however. Scottish women spoke of “do's and don'ts”, Dutch about “may's or must's”, but Swiss women hardly talked about these ideas. Thus Heather highlighted the role of do's and don'ts in her pregnancy, while Sonja preferred not to know too much.

“I think it was more, to make sure I was doing everything right. And the first pregnancy, I mean I don’t drink or smoke, and I made sure I did not eat any soft cheeses, any high-risk food or anything. I made sure that I oven cooked everything, didn’t make a wee, a thing. I ate a very healthy, healthy diet for nine months. Whereas with the twins I am more, I feel as if I am more laid back. If I feel like eating something, like a wee bit of cole slaw, I didn’t in my first pregnancy, I will, you know. Just because I think, well, I am okay, I can, I can do this.”
(Heather/Scotland)

“All is, from A to Z, everything is really in there. But it can also drive you crazy.(..) If one reads, everything.(...) The negative. You should not eat this, and that. And

then this happens, and that, and so on."
(Sonja/Switzerland)

Problem solving had earlier been described as an essential competence in becoming a mother (Bullock & Pridham 1988, Mercer & Ferketich 1995, Nelson 2003). In the current study, few women had complications that needed medical care and hospitalisation, but most experienced minor problems disturbing their well-being, such as nausea or backaches. Despite the common aim, cross-national differences emerged in dealing with these problems. While Scottish and Swiss women were counselled about remedies, Dutch women were often advised to "wait and see". Both Paola in Switzerland and Marianne in the Netherlands had premature contractions in their first pregnancy. Where Paola was advised to go into the hospital for monitoring, Marianne was told to wait and see at home:

"I think that would not have given me that much, simply like that, again to such a contraction-writer there, to be attached to and then so alone there sitting in a room, and then look how there that, how that functions, the heart and so on."
(Paola/Switzerland)

"Simply, yes, then she brings it again like, well, one way or the other she can put it like, well, yes, woman, the one has five and the other has twenty and if you are not burdened by it in another way, or then, you don't loose blood or whatever, then there is nothing wrong. Thus well, I had very many contractions per day, well, I had something like, I just have that many. (..) She is just very, to me she is really more like letting nature take its course, if not extreme things are happening, it is alright.."
(Marianne/the Netherlands)

Anticipating future situations resulted in preparation. This was mentioned particularly by women planning to give birth at home, as found in other studies (Hall & Carty 1993, Morison et al. 1998). Because anticipative competence was based on experience (Rubin 1984, Benner 1994), women in a first pregnancy needed information and support to be able to prepare. Antenatal classes were important means in providing women with the opportunity to get information and learn skills to cope with childbirth and caring for the baby (Spinelli et al. 2003, Gagnon &

Sandall 2007). Jan in Scotland emphasised the importance of including postnatal care for the baby in the content:

"I think also the classes might be quite useful, particularly for new mums, you know, in teaching you sort of the basic skills, you know. Things like washing babies, changing nappies etcetera, which all tends to be very much left until you have had the baby and you're in the ward etcetera. But I think, you know, some of these things could actually be taught beforehand, would actually be quite."
(Jan/Scotland)

Caring for the baby involved the competence of getting to know the baby and integrating it into the family (Chapter 7.3.3). Ariane in the Netherlands acquired this competence through her own experience:

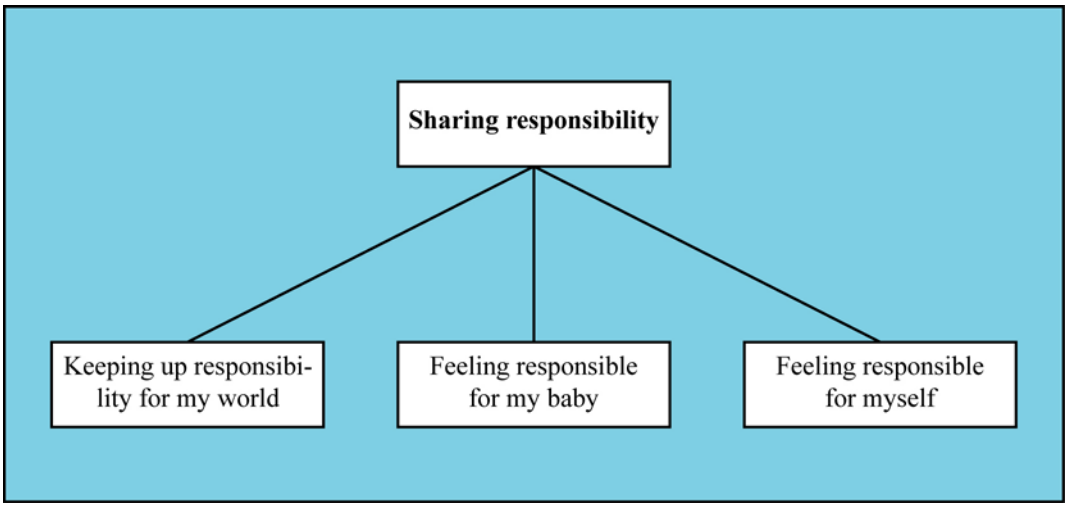
"Hey, look, now, now I know myself, then during my first pregnancy, I did not trust myself to feel. And I have been there yesterday again, and then I also said like, well, according to me it is laying in a breech position. And its lies, you feel it quite differently, you just trust yourself to feel much better. So yes...."
(Ariane/ the Netherlands)

The process of *Acquiring competence* included acknowledging personal limits and asking for support from people women had bonded with, particularly for childbirth and unexpected situations (Chapter 10.5). Thus autonomy was maintained, but women also felt not alone in their responsibility. This is described in the next section.

8.5 Sharing responsibility

Through the commitment to the baby, becoming a mother involved a transformation of responsibility (Bergum 1989, Nelson 2003). In order to gain confidence and autonomy, women were *Sharing responsibility* with experienced people they bonded with during pregnancy and childbirth (Chapter 7, 10.3). This subcategory had three properties: *Feeling responsible for my world*; *Feeling responsible for my baby* and *Feeling responsible for myself* (Figure 8.5).

Figure 8.5 Sharing responsibility



In *Sharing responsibility*, women maintained responsibility for their world, but were supported on their terms in new areas. Through synchronisation (Chapter 7.2), the orientation of this shared responsibility was based on women's own pictures, as women ultimately owned the consequences (Chapter 9.5.3). Ownership was emphasised by Lynn in Scotland:

"Ultimately, if I have made the decisions and thing go wrong, the buck stops here. Yeah.. If they have made the wrong decision and things go wrong, how, how do you deal with that?"
(Lynn/ Scotland)

Some responsibilities in their existing world were shared with partners and family members (Chapter 5.3.1, 5.4.1). Women in the current study however focused on sharing responsibility with maternity care professionals who were expected to guide them and keep an eye on the pregnancy, as Lea in Switzerland described:

"Also I, to me it is important, also, I find it basically important, now not just for pregnancy, but generally, the own responsibility for one's body. And inform oneself, and look, a bit read, what is, well, what is going on there. And these are things, that, that, it concerns me, and there, I do inform myself, and then I can also decide about

that. (..) And, I think that is good. If one has somebody, who guides one, where you can bring that in, and he also, understands that. (..) And that is why, that, I think, to me, well, I find that important. Not especially in pregnancy, but be it an illness, or so... (..) Just a bit. Take own responsibility, that also. I believe, a change of thought has to take place, between client, patient, and doctor. (..) And the other way around."

(Lea/Switzerland)

Both Dancy and Fullerton (1995) and Bailes and Jackson (2000) emphasised the relationship between place of care, control and responsibility. The familiarity of being at home made women feel confident and enhanced their feeling of being in control and taking responsibility. Bergum (1989) argued that in a hospital a shift of responsibility towards hospital staff was more likely as women felt less "at home". The theme of "Shared responsibility" in hospital however resulted from a meta-synthesis of three phenomenological studies in Sweden involving ten midwives and 24 childbearing women with a high-risk pregnancy (Berg 2005). Shared responsibility was related to the character of the relationship with the midwife, which involved dignity, trust and mutuality and made women feel in control while being guided. In the current study, women didn't always feel respected in their responsibility, as Megan in Scotland described:

"What I want is like, being treated as a responsible person, like as a non, non- ill person. Like I said, I, we can make own decisions, and that is not up to them to decide everything. The problem here is often, they go...or they think we're the post codes, the post codes are so small, that our street has an own post code."

(Megan/Scotland)

Dimensions within *Sharing responsibility* were noticed, relating to women's confidence and autonomy in dealing with pregnancy. Women, however, felt responsible as long as they had the freedom to determine if, how and to whom they handed over control. The area in which women maintained most of their responsibility was their own world.

8.5.1 Keeping up responsibility for my world

Women aimed to maintain the responsibilities that they had prior to their pregnancy, such as family and work (Chapter 6.3.1), and tried to balance these with their pregnancy. A primary responsibility involved the existing family unit with their partner and other children (Chapter 7.3). Women tried to provide each person with their share of time and attention, and took their interests into account, as Hannah in the Netherlands did while deciding on antenatal screening:

"And also, well, I think a number of things, well, I have also problems at my work, or I have regularly seen problems from older children, who were getting a younger handicapped brother or sister, that quite influenced the family unit. And I have something like, I want to consider that really well. And also towards myself, like, if I am getting a handicapped child, then at least the chance is big, that I or my partner have to stop working. I want that as much as possible, you can never exclude it, and today or tomorrow can one of the children get ill, and then you also have to choose. But I still like as much as possible, well, for myself, think about it, let's put it that way. I have something like, well, if that is possible, then I simply have to do that that way."

(Hannah/the Netherlands)

Women also felt responsible for the people of *Being embedded*, particularly close family members like parents (Chapter 7.4.1). Holly in Scotland had shared the responsibility for looking after her three children with her mother and in-laws, but felt she should stop working, as they could not do that any more.

"*But this time I feel, it is just no good, I just feel I need to. I need to stop my work now. You know, because my mum, my mum, is 72, my partner's mum is 68...(..) It is too much. And I just couldn't put, put on to them now. It is okay for a couple of hours, watching them a couple of hours, but not all day, it is just too much.(..) So I couldn't put all that, I couldn't put that responsibility on, on them now. And their health, we help them, they are not the same anymore, if you know what I mean."*

(Holly/Scotland)

Responsibilities realating to the women's work involved a balance between doing the work right, looking after their pregnant selves and not affecting the workload of their colleagues, which the study of Smith-Pierce (1994) described as “juggling”. Deborah in Scotland was legally allowed to take time off for antenatal classes, but she didn’t want to take that time however so as not to let her work and colleagues suffer.

“And, I thought the classes would be, I would be able to have like classes at night, and, it turned out, that they only have classes during the day, and, that was closing. Because there was all, we are legally been entitled, to the time off our work. For these sorts of things. I didn’t want to take it off my work. (..) You know. Because that is leaving, because it is always going to be leaving our work short. It is not, like if you walk out of the office, and it is just your work that is suffering. It is (..) Everybody else that is suffering as well. You know. So, you are kind of trying to juggle it, and, find ways of getting to them, and that sort of thing.”
(Deborah/Scotland)

By making arrangements with colleagues or seeking support from healthcare providers, women tried to juggle their responsibilities. Thus *Keeeping up responsibility for my world* was balanced with responsibility for themselves as well as their baby. This is described in the next section.

8.5.2 Feeling responsible for my baby

While *Expecting*, women made a conscious decision to enter into pregnancy and take up the responsibility of caring for the baby (Chapter 6.3.2). Emily in Scotland described why she felt responsible for the baby. This was related to her need for “making sure” (Chapter 8.4) and “being sure” (Chapter 8.3):

“Responsible. You feel responsible for the baby. (..) Yeah, cause you are carrying the child. Nobody else can take it away from you. For a wee while it is into you, and you for nine months, and then you are going to be responsible for it, when it comes out as well. So you need to make sure, that everything is going to be okay.”
(Emily/Scotland)

As a result of *Feeling responsible for my baby*, women thus wanted to make sure that everything was all right so that nothing could harm the baby's health (Rubin 1984, Wilkins 2006). In order to do everything right, information was needed (Chapter 8.3.2). This responsibility also involved decisions concerning the method of giving birth and antenatal screening (Harrison et al. 2003). Most of women, however, recognised limits to their influence on the process, as Nicole in Netherlands mentioned.

"I: Do you feel responsible? For that?
W: I do not think, for everything. No. But if I can prevent something, I am not going to drink one sip of alcohol, if I know, it can be wrong. (..) And if something would be wrong with the baby, then, well, I cannot do anything about it. Yes, that is then an abnormality, yes.... Anyway I have done everything, what I could have done."
(Nicole/the Netherlands)

Women felt that their own means of looking after the baby during pregnancy and childbirth was limited. Therefore they wanted to share this responsibility with experienced people in antenatal care so as to seek "safe passage" (Rubin 1984, Patterson et al. 1990, Myer & Harrison 2003, Coverstone et al. 2004). Joelle in the Netherlands described what she expected from the people in antenatal care:

"*The care that you get, yes, for the benefit of the child. That they keep an eye on it very well. Thus, the blood pressure, how the baby grows. That sort of things. Of course that is for me also very important. There I have, I absolutely had no complaints about that. Therefore."*
(Joelle/the Netherlands)

Antenatal care provided reassurance as well as information and physical and emotional support (Chapter 10.5). This support involved preparation for caring for the baby after birth at antenatal classes (Chapter 8.4.3) even though several studies highlighted the limits of classes concerning preparation for real life situations (Nolan 1997, Callaghan 2001, Ho & Holroyd 2002). Antenatal care also supported women in their responsibility to look after themselves, which is described in the next section.

8.5.3 Feeling responsible for myself

Women also attended antenatal care as a result of *Feeling responsible for myself,* as they expected that an experienced person would keep an objective eye on the pregnancy and act if things were abnormal. Laura in the Netherlands mentioned the importance of this for her own and her baby's health:

"I: Is that why you are going to antenatal care, to see if everything goes right. Because you feel responsible for the baby? Or for yourself?
W: Both. Of course it is your own body, you want, that you just are healthy and stays that way. That you are fine, feeling fine in your skin. But certainly also for the baby."
(Laura/the Netherlands).

Through this connection (Chapter 6.3.2), responsibility for the baby increased women's responsibility for their own health (Bergum 1989, Hawkins et al. 1998, Higgins & Woods 1999, Sword 2003). Thus self-care increased and "risky" behaviour (eating, drinking and sport) was reduced. Although all women in the current study shared this responsibility with a care provider, the degree of sharing varied within and between countries. While Kerstin in the Netherlands wanted to take responsibility herself, Nora in Scotland emphasised being looked after:

"I: Is it about, feeling responsible? For yourself?
W: That is the essence of the, well, that what I actually wanted to say. Like, look, asking pills from the doctors is actually giving away the responsibility to somebody else, and, well, what I already said, I first try to search within myself like what do I do, what do I do, that that is like that, or what can I change about it. Therefore I, yes, I just want, I take responsibility myself and, and the care provider is there to help me with that, let's say. To well, to be at my side."
(Kerstin/the Netherlands)

"So, I think just, the problem with knowing and being a little bit qualified, is that you think of the, the worst case scenario sometimes. So that, I think, just to have somebody else, that be, be there overseeing, instead of myself..."
(Nora/Scotland)

The degree of sharing was related to women's confidence and autonomy and thus the attitude of care provision, as highlighted in other qualitative studies (Patterson et al. 1990, Long & Curry 1998; Higgins & Wood 1999, White 2002, Coverstone et al. 2004). Sword (2003) studied why 26 women of low income used antenatal care in Canada using a grounded theory approach. Individual as well as focus group interviews were carried out. Women's decisions for antenatal care depended on its meaning for self-care. They decided whether they felt confident and competent to do things themselves or needed support. The attitude of care providers played a crucial role in making these decisions. Although the women in the current study initially adhered to culturally "right" things and used antenatal care, during subsequent pregnancies confidence and competence concerning their own health increased. In this way they developed their own views on their need for antenatal care, as Susan in Scotland described:

"My first pregnancy, I could probably have done without, you know. And apart from scans and things to make sure that the babies' development. For my own personal health it wouldn't have been necessary."

(Susan/Scotland)

Thus women increasingly took up *Feeling responsible for myself*, reducing the contribution of the maternity care professionals. The responsibility for each new baby however remained the same. *Sharing responsibility* with an experienced person prepared women for family responsibility after birth (Chapter 9.5).

8.6 Conclusion

During *Expecting* women entered a transition, which took place during pregnancy and childbirth, and was guided by people from *Creating a bond*. While *Familiarising*, women developed awareness regarding being a mother, in which the expected picture was gradually replaced by real experiences during the transition. These new experiences were compared with the expected picture and balanced: some pieces were replaced and others were refuted. This process led them to adapt to the new situation. Throughout the process, women gained confidence as they underwent changes in themselves, increased their knowledge and gained self-confidence, while being guided (Chapter 10.5). Women maintained their autonomy,

as even though they lost control of the process, they had their own choices and acquired competence to meet the actual and future family situation. Finally sharing responsibility supported women in caring for their existing world, themselves and the new baby. The guided process of *Familiarising* ended in *Embarking on motherhood* after having the baby, which is described in the next chapter.

CHAPTER NINE- EMBARKING ON MOTHERHOOD

9.1 Introduction

Women created an expectation ("picture") of their future situation at the beginning of pregnancy (Chapter 6.2). With the guidance of experienced people they had bonded with (Chapter 7.2), this picture was complemented and adapted through experience while *Familiarising* during pregnancy and childbirth (Chapter 8.2). In the current study this process most often came to an end in a period up to one year after giving birth. At this time, women took up responsibility for a new family (Chapter 9.5).

Despite the focus on care during pregnancy in the current study, women related this care to their personal process of becoming a mother. This meant that the beginning of the journey had to be linked to the end in order to understand what was going on, as had been highlighted by Glaser (1992). In accordance with theoretical sampling (Chapter 4.6), the timing of interviews had been extended to one year after birth in order to capture this part of the process. In the current study, while *Familiarising* (Chapter 8.2) continued until this time, becoming a mother involved a complete process from early pregnancy to about a year after giving birth (Chapter 5.2). Most previous studies, however, particularly addressed becoming a mother in the postnatal period (Rubin 1984, Bergum 1989, Mercer 1995, Martell 2001, Nelson 2003, Mercer 2004), which was only a fragmented stage of this process.

9.2 Embarking on motherhood

The aim of women's journeys was *Embarking on motherhood,* in which they began the expected enterprise of "being a mother" (Chapter 6.2). Women therefore had to leave the journey of "becoming a mother" behind them physically, psychologically and emotionally. This took "some time" during the postnatal period, as indicated by Barclay et al. (1997 p. 25). For Lynn in Scotland this process involved three pregnancies and was related to meeting her expectations.

"I've come, I've come full circle. (..) I've got to the point, where I thought I would be, embarking on motherhood. It's, it has. I suppose my expectations have now been

met. (..) And it's, it's been, it's happened the way I envisaged. But it's taken me quite a long time, a few years, to get to that point.(..) It has been a big journey, but I'm there. I won't, I don't think I will have any more."

(Lynn/Scotland)

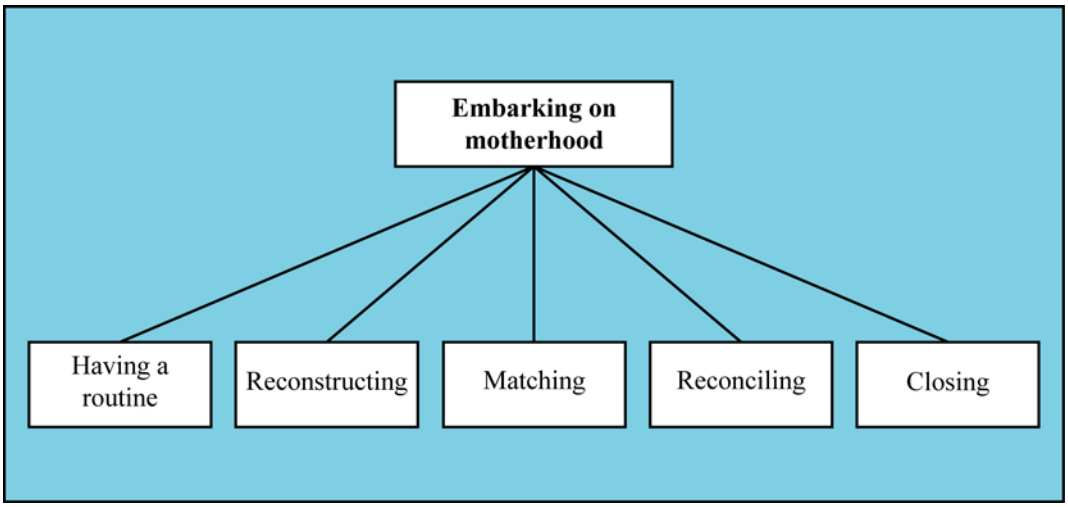
While Scottish and Dutch women chose the word "embarking", Lea in Switzerland preferred a country road as a metaphor.

"Well, I think that is also, that is, those (becoming and being a mother) *are two different pair of shoes. (..) And I believe, the bigger journey is afterwards. (..) If the child is there, and then you are a mother. (..) Your whole life long. (..) Now for me, that with that ship, yes.. I would take a country road.(..)*
Whatever, train, bicycle, car."

(Lea/Switzerland)

Embarking on motherhood had five properties: *Having a routine*; *Reconstructing*; *Matching;*, *Reconciling* and *Closing* (Figure 9.1).

Figure 9.1 Embarking on motherhood and properties



In *Having a routine,* women experienced a new normality in their everyday situation. They felt secure in being with and caring for the baby, and experienced an

increased stability in their life. After having her third baby, Holly in Scotland had more difficulties finding this routine than with her first one:

"But I start to get into my routine and everything now, I think, because I had, you know, I had, my oldest son to get to nursery. And I had a, all of a sudden I had a new baby, a toddler, and a four year old, having to get him up, ready. Leave the house, you know, at one o'clock, get him around, take them all out, you know like, get him into nursery, get them back out of the cab, back around, and then do it all over again. To go back for him. (..) You know, and it is, it is hard. There is no getting away for you, it is hard. And I would say, I, I felt it more this time, that way. (..) Than, than I did. I mean, the first, your first pregnancy, I went to the shops every day. With my oldest son, every day, in the pram, you know."

(Holly/Scotland)

The time before *Having a routine* differed individually and related to women's own well-being (Chapter 9.3.1) and the behaviour of the baby (Chapter 9.3.2). Several studies highlighted the establishment of a new normality in the postnatal period (Sawyer 1999, Martell 2001, Mercer 2004). Bergum (1989) linked this normality to a new sense of quality in postnatal life, which according to Symon et al. (2002) involved physical well-being, happiness over the baby, finances, personal time, work and the relationship with their family, which was individually emphasised. Through the resulting "sense of harmony" (Mercer 2004 p. 227), women relaxed and had time to reflect, which had been missing during childbirth and the early postnatal period. In this way they were *Reconstructing* their picture and filling in gaps in their awareness, as Erin in the Netherlands explained:

"Yes, when did I start to do that? I think, that after, yes, really after a month of, of, that all went well a bit again, I think, a month of three, four, that I thought like, gosh, yes, how did it all go actually? And... Does it all fit with, like what you had in your head a bit, and, also everything after that, really, like, that you are going to work, and, how you experience that, and... If it is a bit like, how you have thought it would be."

(Erin/the Netherlands)

Women relied on their shared awareness with guiding people (Chapter 10.5) to help them fill in the missing pieces, and complete their own awareness. This meant the experience could be understood and integrated (Arizmendi & Affonso 1987, Mercer 1995). After *Reconstructing*, women were *Matching* this experience with the expectation (Chapter 6.2) and judging it, as Erin in the Netherlands did:

"And, then comes the postnatal period. That will be something like that. And if the picture indeed, does not match, then you feel, I think, very disappointed. (..) And if that picture matches, then you are very happy. (..) And my picture matched coincidentally. (..) Yes. Yes, but I had everything really perfect. I have had a good birth and a good postnatal period. Yes, I really cannot complain. (..) But I have heard about somebody, who had a caesarean section. She found it all so disappointing, and yes, she just had to, also had to get used to the baby, and all concerned. The whole picture in her mind did not fit anymore."

(Erin/Netherlands)

While *Reconciling*, women came to terms with the aspects of their experience which had not matched their expectations. This was a balancing activity as described by Heather in Scotland:

"I think as well you have to balance your wishes, your perception of how it is going to go, about the reality of how it did go and kind of come to an understanding between the two. Because I know that it causes women after the birth a lot of kind of psychological problems, that they never had a natural birth and there is all this intervention, you know. And they have signed themselves up for no intervention and, not a lot of people in the room. And all of a sudden there is like 12 people in the room, you know, assisting with the birth."

(Heather/Scotland)

Several women experienced dissonances between expectation and experience. Although Mercer (1995) emphasised unexpected interventions and complications as causes of these dissonances, in the current study the major cause was antenatal information. For some women like Lynn in Scotland, reconciliation ofe experience and expectation took more than one journey to motherhood:

"Because I am more than balanced now, than I have been since before, since my first child. When I was, I was very out of balance, during and after my second pregnancy until, I would say until now, until she was, she was born. Because of negative experiences. Yeah.(..) Which were to resolve with the rosy picture that was painted."

(Lynn/Scotland)

A few women resolved their negative feelings regarding the experience through complaining, either orally or in writing. Two Dutch women wrote a letter of complaint and one Scottish woman had considered this. All complaints related to the attitude of care providers (Chapter 10.4). Usually, however, women altered their expectations to match reality. Thus the experience was "good", but some aspects were "missed", which had also been noticed in other studies (Porter & McIntyre 1984, Proctor 1998).

Consequently *Closing* the picture allowed women to leave the experience behind. The picture was re-used as a reference for *Creating a picture* in subsequent pregnancies (Chapter 6.2). Rubin (1984) similarly described the importance of reviewing and coming to terms, so that women were free for new experiences. Kerstin in the Netherlands closed her picture after talking with her midwife:

"But I could still ask that kind of questions then. And that was very important to me, to get the picture complete. To, to, yes, let's say, to get the questions answered. So that I, could leave it behind. That it did not move about in my mind, like I should have done that, or if I had done this."

(Kerstin/ the Netherlands)

Several women in the current study however had not completely closed a previous experience, as Deborah in Scotland reflected in her second pregnancy.

"W: Maybe for a closure, what I should have done, was, make an attempt to write a letter of complaint about, what I felt was wrong with my care. (..) But I am not very good at getting around, sort of these kind of things.

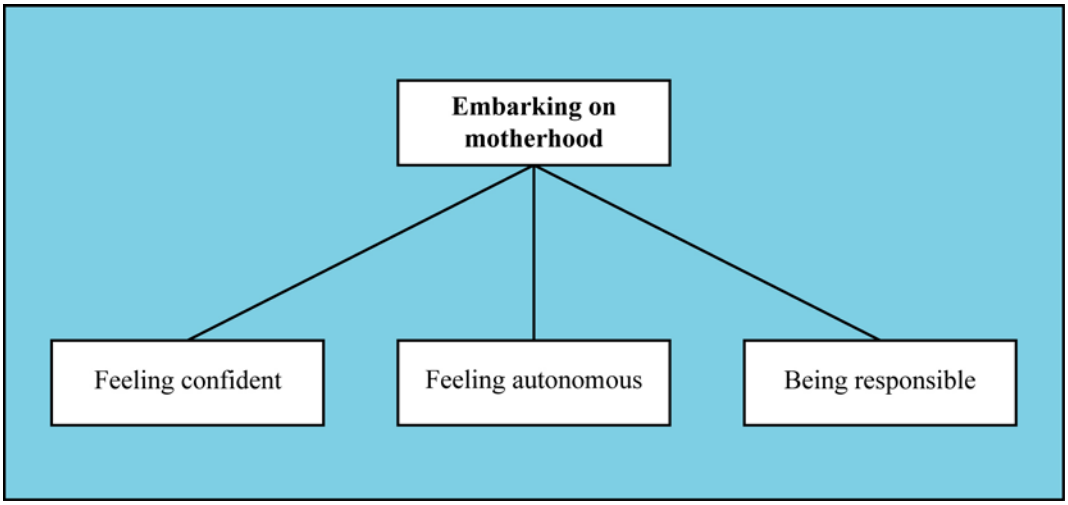
I: So you took it with you?

W: So I, just, so I probably have,taken it with me. Some part of it is closed, and over with. But some part is still there, you know."

(Deborah/Scotland)

This issue was not explored further in the current study. According to Affonso (1977) however, lack of closure could lead to recurring dreams about a past experience, and an inability to concentrate on a new situation. Through *Closing,* women physically and mentally moved on to being a mother. *Embarking on motherhood* had three subcategories: *Feeling confident*; *Feeling autonomous* and *Being responsible* (Figure 9.2).

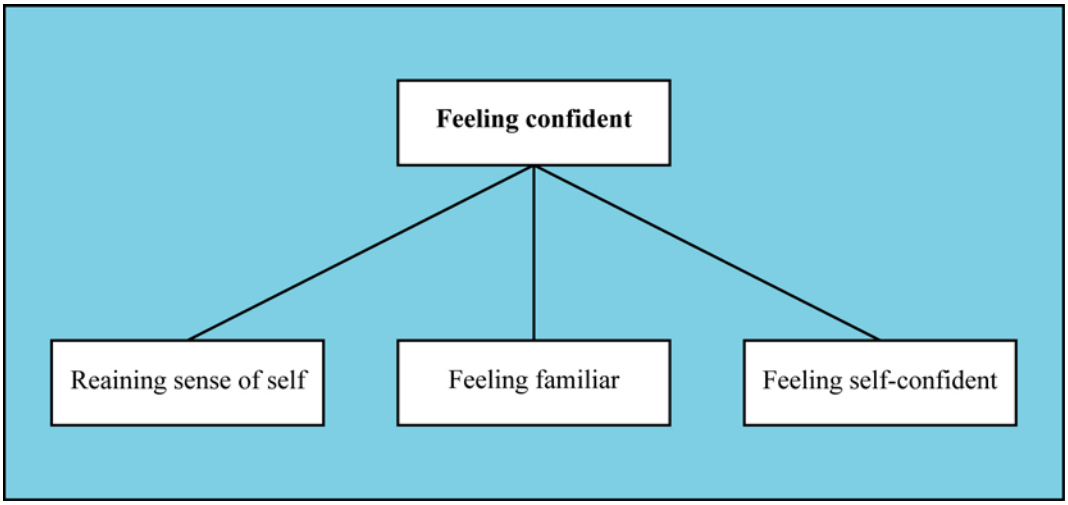
Figure 9.2 Embarking on motherhood and subcategories



9.3 Feeling confident

During *Expecting* (Chapter 6.2), women lacked confidence in themselves and the situation (Chapter 6.3), which which was regained during pregnancy and childbirth and the postnatal period (Chapter 8.3). In this way security regarding the experience increased, resulting in *Feeling confident* at the end of the journey. This subcategory had three properties: *Regaining sense of self*; *Feeling familiar* and *Feeling self-confident* (Figure 9.3).

Figure 9.3 Feeling confident



All women mentioned a growth in confidence. As confidence was related to familiarity with the mothering experience (Chapter 8.2), the process lasted longest in first-time mothers. O'Reilly (2002) noticed that second time round mothers had internalised the mothering role and felt confident about caring for their children. Lea in Switzerland reflected on her changes six months after having her second child:

"Well, I have, I am now finding myself in a totally different place. I have learnt an awful lot, noticed, meeting limits that I did not know before, those limits. I have, of course, having collected experiences. (..) Knowing more about it. (..) I must say, got two totally different children (.) Of course I cannot judge, how different I am as a mother. Certainly also for a part. (..) And well, simply the experience, that goes with it. Security. Yes. And somehow, not so new land. That somehow brings, yes, somehow brings, brings security. (..) Yes, I think, in the first pregnancy one is really searching, and, and one wants to make it good and right."

(Lea/Switzerland).

Physical problems such as lack of sleep (Chapter 9.3.1), but also confusion and disorientation (Chapter 9.3.2) influenced women's confidence negatively. Increased awareness of one's own abilities increased self-esteem and self-confidence, which had a positive influence on confidence (Chapter 9.3.3) and taking up family responsibility (Chapter 9.5). A similar personal development was described by other

studies addressing the postnatal period (Rubin 1984, Mercer 1995, Barclay et al. 1997, Sawyer 1999, Mercer 2004, Frei 2006).

Feeling confident throughout pregnancies involved decreasing uncertainties and fears, as had also been found by Geissbühler & Eberhard (2002). Women in the current study like Sonja in Switzerland and Heather in Scotland felt therefore more relaxed in a second or subsequent pregnancy.

"This time I have been a wee bit more relaxed, even though there is twins."
(Heather/Scotland)

"It actually had been very important to me, that I would not worry that much anymore about the child, the unborn. (..) And with the first one, with the first pregnancy, I really have been, been quite insecure, and had been scared to, loose it, and whatever. And I really did not have that this time, simply until, until the amniocentesis."
(Sonja/Switzerland)

With increasing experience, women's confidence grew regarding becoming a mother as well as in themselves. This growth was particularly related to regaining their reference of self, which is described in the next section.

9.3.1 Regaining sense of self

Women's sense of self was based on knowledge of their bodies (Chapter 6.5.1), which was continually changing during pregnancy (Chapter 8.3.1). The early postnatal period however was the beginning of *Regaining sense of self.* Catharina in Switzerland described how she felt better as she could walk well again:

"And, afterwards, after three weeks I have noticed, that I could go out, that I could walk, that I... I had not been able to walk very well, because it really had torn me apart. And then I could not go out, could not go for a walk, nothing. And then after three weeks I then noticed, now I can go. And then it became much better, really,

every day an hour, one and a half, it really brought me an awful lot."
(Catharina/Switzerland)

Regaining sense of self was thus primarily based on physical well-being and regaining the pre-pregnancy functioning, which Lea in Switzerland experienced after six months.

"I: How long did that take?
W: Half a year.. (..) Until I kind of again, found myself somehow. And knew me, also again.(..) Also, until I had regenerated myself, and noticed where I stood. And also physically regenerated. And psychologically anyway, right? (..) Because of the lack of sleep. I really had then, I could not lead conversations anymore, because I could not concentrate myself, and such stuff. I was also not anymore available at all times. (..) And I had been more like that before that time. And that certainly took half a year. (..) And then it is, became more convenient. Good, she too of course. (..) She also became more quiet."
(Lea/Switzerland)

Some studies described an increase of physical well-being in the first months of motherhood, but others pointed out that complete regeneration took longer (Mercer 1995). For North-American women in the grounded theory study of Martell (2001), postnatal reconstruction of their former selves was an important condition in moving on. The role of physical recovery in the postnatal period however, was less significant in studies of motherhood in Western cultures (Nelson 2003, Mercer 2004) than in non-Western cultures (Hundt et al. 2000, White 2004), particularly through rituals involved. In the current study, women' regeneration was related to life with the baby, which involved breastfeeding and a lack of sleep as experienced by Sonja in Switzerland in the first weeks.:

"Yes, from eight weeks onwards she slept through, and that, that of course plays a big role. On, on the presence of a mother, if one does not have to get up twice a night, or even three times. She just slept through."
(Sonja/Switzerland)

Thus women gradually were *Regaining sense of self* by finding themselves again as well as getting used to the baby. Regaining a normal sense of self and the baby settling in baby provided women with a feeling of familiarity, which is described in the next section.

9.3.2 Feeling familiar

While *Feeling familiar* women perceived their life situation as normal again as which unknowns reduced and the need to increase knowledge (Chapter 8.3.2) decreased. For Holly in Scotland, familiarity was symbolised by returning home in normality after giving birth in hospital.

"I mean, I was, I had my son, twenty six minutes past eleven at night. And I was out the next afternoon then, at three o'clock. (..) Cause I had to go home to, my other boys. I mean, they were (..). So, it was, it was good getting home by the evening, I mean. And, I'd rather, I think you feel, better and you're, you feel better when you're, home, you are in your own environment, you know. (..) Although, at the hospital, it was smashing, I had a room on myself. It was smashing. (..) I was just wanting to get home to my boys. (..) Home in normality."

(Holly/Scotland)

Other postnatal studies also described women's need to re-establish normality (Martell 2001, Frei 2005), which implied familiarity of place (Fullilove 1996). Parents of a preterm baby in the study of Jackson et al. (2003) established normality as a progression from feeling alienated to becoming familiar with the baby and their actual situation, which increased confidence in themselves and the situation. Several studies however highlighted that women were often little prepared for being at home after birth (Barclay et al. 1997, Frei 2005, George 2005). Women in the current study became familiar with the baby through caring for and living with it, which was what Maren in the Netherlands described:

"And then suddenly you have that worry, like oh god, now you also have such a child. What do I do with it? Yes, you have to look after it the whole time. Just, is she laying down well, yes, you are quite nervous. And like now, it all just goes well, yes.

After a few months, then it all is familiar and.. But those who say, it comes out and it is familiar... Yes, of course I directly had the feeling that is was mine. But still, yes, I found it quite scary"

(Maren/the Netherlands)

Feeling familiar meant that women felt embedded in their physical and social environments, which supported them and provided a feeling of belonging (Schütz 1972, Fullilove 1996, Martell 2001, Keyes & Kane 2004, George 2005). Some studies however highlighted that women often felt alone and socially isolated in the first weeks postnatally (Barclay et al. 1997, Cronin 2003). In the current study familiarity differed individually: while Hannah in the Netherlands succeeded in making long-lasting contacts through antenatal class, Deborah in Scotland was (still) seeking new contacts postnatally:

"But I found it very nice to be with that group, and that was quite a solid group, that came every time, and we have been going out together a few times afterwards. Or we call each other sometimes, like, gosh, how are you doing, so.... Or, at least going to eat out one time, a couple of times of course also been visiting each other with the kids. I liked that quite much. I found that really, that was then also quite a solid group."

(Hannah/Netherlands)

"So, so none of them were, were close by either. You know. So, so you don't, you don't make that sort of contact either. So, again, you're, you're missing out on making other contacts. Probably the best contact to meet actually, was the girl who came to talk to us about breastfeeding. Who just lives up the road."

(Deborah/Scotland)

Thus *Feeling familiar* meant that women felt confident in the new situation of being mother. This familiarity also strengthened their self-confidence, which is described in the next section.

9.3.3 Feeling self-confident

Although women lacked self-confidence at the beginning of pregnancy (Chapter 6.5.3), this increased through the experience (Chapter 8.3.3), resulting in *Feeling self-confident* afterwards. Maren in the Netherlands reflected on her own process one year after the birth of her first child:

"I have, as such, a kind of confidence in myself, let's say so. Something like, like, I am not at loss for something, well, at loss, what shall I say, I am quite self- assured. But with the pregnancy I kind of had, also that self-confidence, well, that kind of gets less. That I think like, can I do all of that? And you kind of become, yes, actually something of your self-confidence is crumbling off, I find. (..) Just through, I think like, can I do that all? Is that all going well? Just through the additional tension. As that child is being born, then I actually had, no self-confidence at all, according to my perception anymore. And let's say a few months, then, my self-confidence has maybe like grown a bit. That you are thinking like, I actually managed to do that all, such a child. (..) Then you've got something like, I actually succeeded doing that."

(Maren/the Netherlands)

Women perceived a growth of self-confidence through knowledge of the experience, recovery from it and having mastered it themselves, as was also described in literature (Rubin 1984, Armstrong 2006). Some women in the current study, like Lea in Switzerland, perceived this growth of confidence as gaining an inner strength ("Halt": something to hold on to):

"I: I have thought, there is an increase of awareness, that would suggest, that it finally provides you with more self-confidence. (..) Do you finally at the end look back and say, it makes me stronger.. ?
W: That's right. (..) Yes. (..)Well, when you, have gone over the whole mountain all over. Where I, also, I can now say that from the first time, when you have slept out more of less, and are having clear thoughts again and in that way, that you can sort them out again. Then you are very strong."

(Lea/Switzerland)

Increased self- confidence changed some women's attitudes in regard to healthcare, although this varied individually. Susan in Scotland reflected on this change in attitude during her second pregnancy:

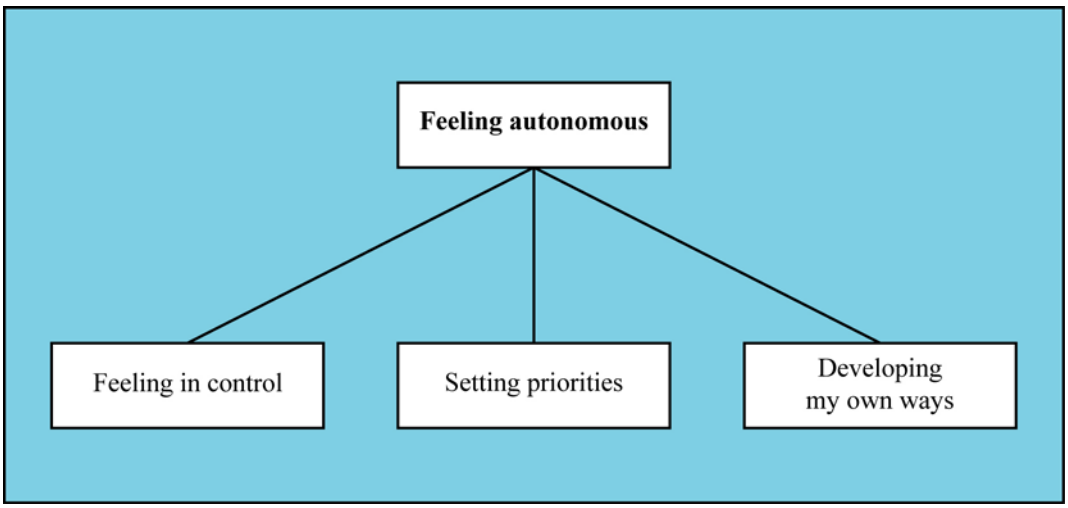
> *"I think with my second baby I would have had the confidence, had I felt well, not even to bother seeing my doctor, you know. Maybe see him once or twice, and maybe just attend my visits, you know."*
>
> (Susan/Scotland)

Thus the increase in self-confidence, the new normality and regained sense of self led to *Feeling confident*, which positively influenced women's autonomy. This feeling of autonomy is described in the next section.

9.4 Feeling autonomous

Where women felt lacking in autonomy at the beginning of pregnancy (Chapter 6.4), they tried to maintain it (Chapter 8.4) through a bond with an experienced person (Chapter 10.3), resulting in *Feeling autonomous* at the end of the journey. This subcategory had three properties: *Feeling in control*; *Letting go* and *Developing my own ways* (Figure 9.4).

Figure 9.4 Feeling autonomous



Although women cared autonomously for their babies after leaving hospital, first-time mothers in particular, like Heather in Scotland, emphasised the need for reassurance during the first months after giving birth.

"When my daughter was born, I needed reassurance all the way through the pregnancy, I was at the health visitors' every week, getting her weight, no matter, that I knew she was putting on weight, because I was breastfeeding."
(Heather/Scotland)

Most women in the Netherlands, like Maren, however felt that they did not need this support from their care providers anymore after the usual postnatal check at six weeks after birth:

"W: And that one at six weeks, that was quite short then. Then I showed the baby there. And that was just nice. To the midwives' assistant, you just show her. (..) That you can just show what you, what you have produced. (..) Thus that was actually just nice. And everything was fine with me, thus yes... Thus yes, in that concern, all went, fine.
I: Yes. But would you have liked to see her again after that?
W: No.
I: That was... For you it had ended with that?
W: Yes. I thought so."
(Maren/the Netherlands)

In the other countries such a formal end to professional care was missing (Chapter 10.6). The regained feeling of autonomy differed from women's previous autonomy (Chapter 6.4) due to the interconnectoin with the baby and the support from their social environment. First-time mothers were most affected by this change, while women with other children had to divide their attention between more children, and experienced an increasing reliance on their social network. These findings were confirmed by other studies (Stewart 1990, Smith- Pierce 1994, Martell 2001, O'Reilly 2002, George 2005). Holly in Scotland relied on her mother and in-laws to look after the children as she had to go to work:

"I don't know, if I could cope in leaving my kids with child minders, but people need to do it, you know. I am not, I am not, I mean, if I needed to do it, I would need to do it, you know. (..) But I think having your family, the support of your family is really, important."

(Holly/Scotland)

Feeling autonomous thus meant that women managed their new family life with the baby on their own, while still being able to rely on social support. Carolan (2005) described a similar postnatal process towards autonomous mothering in Australian first-time mothers. Where women felt overwhelmed and out of control in the first four weeks, in the following three months they tried to master their mothering tasks as they had been told. Feeling like a mother happened around eight months after giving birth, by which time women had accepted the realities of motherhood and developed their own ways of mothering. In the current study, the length of these periods varied, and was related to women's confidence (Chapter 5.2, 9.3). In the same way, however, autonomous mothering was related to regained feelings of control.

9.4.1 Feeling in control

At the beginning of their pregnancy women felt in control (Chapter 6.4.1) and similarly wanted to be in control of their family life. This was mentioned by Emily in Scotland during her first pregnancy:

"I: What do you want to be in control of?

W: Just want to, not in pregnancy, but once after the baby is born. Want to make sure, that the baby, I care for the baby, and nobody burst in, I suppose. That people do the things the way that I would want them to be done. Not, the way that they think it should be done. Like care for the baby, or, what have you."

(Emily/Scotland)

The reality of having a baby however made women wonder whether they could manage, although responsibility for the baby (Chapter 9.5) motivated them to regain control. Developing a routine in the new situation (Chapter 9.2) facilitated this

process, during which they learnt to recognise their own limits, but also increasingly to value and regard themselves as a source of reference and expertise (Gilligan 1993, Barlow & Cairns 1997, Hartrick 1997). Hartrick (1997 p. 9) noticed this change in control after becoming a mother: as women "moved toward reclaiming and discovery, they described feeling more in control of their well-being and beginning to make conscious choices to nurture and care for themselves." Some women in the current study, like Deborah in Scotland, talked about being in charge of their family and determining how they wanted to raise their children.

"And lots of other people I know, had far worse times, you know. And I am wondering if that, if that kind of picture is blown out of the water by this child, because I think, some of it is, how I have treated him, and how I have allowed him to be, you know... I haven't allowed him to be, that person, that I wouldn't allow him, to, keep me up all night and, you know, that sort of thing."
(Deborah/Scotland)

In this way women regained an overview of their family situation and felt in control again, although interconnected with others. As the current study focused on pregnancy, the issue of control while raising children was not explored in further depth. Due to the change of responsibilities observed in the current study (Chapter 9.5), the feeling of control was linked to women's ability to set priorities. This is described in the next section.

9.4.2 Setting priorities

At the end of the journey, women realised that not everything they had wanted (Chapter 6.4.2) was possible, and *Setting priorities* was needed. Several women reflected on how experiences changed their expectations after having a first child. Heather in Scotland had designed a six-page birth plan for her first child, but she decided to set priorities for the second birth:

"W: So everything, you know, sometimes you just have to go with the flow, situations change hour by hour and you just have to go with them, you know.
I: That is something that you take with you in your second pregnancy?

W: Absolutely, absolutely. I think this pregnancy will be a very short, sharp birth plan. Just saying to the midwife, just going with the flow, we'll see how things go, see how things progress, because I think when you set yourself up for this, fantastic, magnificent birth, something...is going to go... wrong, you know, or bear you about offline."

(Heather/Scotland)

While setting priorities, women had to let go of some wishes and expected certainties. During her second pregnancy, Erin in the Netherlands reflected on how she learnt to let go:

"And you just don't have that in your hands. And that actually makes, that you, yes, are very unsure about that. But yes, even if you would have ten thousand ultrasounds that does not say everything. (..) That is just wait- and- see. (…) And that makes it, those are very unsure moments, while waiting. You should not think too much about it. (..) Then you just should think, like, well yes, we cannot do anything about it. If it is like that, it just is like that."

(Erin/the Netherlands)

Women also accepted limits to what they could do themselves, and involved support in caring for the family unit. This was particularly described in studies of second pregnancies (Stewart 1990, O'Reilly 2002). Laura in the Netherlands involved her partner a bit more in her third pregnancy:

"Of course he is always a big support and someone to rely on. Anyway, the fact, that you still are a bit less mobile at the end of pregnancy. Therefore he has to do a bit more with the children. Sometimes I have something like I can do it, but I do not want to do it. That I say, you are here anyway, therefore you're the one to do it."

(Laura /the Netherlands)

While studying seven Canadian mothers with children between three and 16 years of age, Hartrick (1997 p. 5) found that setting priorities and letting go during motherhood was "an ongoing process that will never end". Despite realising limits to their wishes, women felt increasingly in control through realisation of the choices

they had with regard to work, life possibilities and expectations. As they found out that there was no rulebook for security, they had to develop their own ways of doing things. This was also found in the current study and is described in the next section.

9.4.3 Developing my own ways

Women lacked competence at the beginning of pregnancy (Chapter 6.4.3) and they acquired it during pregnancy, childbirth and the postnatal period (Chapter 8.4.3). Initially first-time mothers tried to master their mothering tasks exactly as they had been told to by other people and antenatal care. Real experience, however, made them move to *Developing my own ways*. Deborah in Scotland thus decided to give her son a bottle at night, although she was told to breastfeed only:

"And I mean for a long, long while, he, from, from six, six, eight weeks old, he, he slept through the night, just about, because I used to express a big bottle, and give him a big bottle, just before he went to sleep. Although I breastfed him up to sort of nearly six months. (..) He always had a bottle at bedtime. Generally, I had expressed enough, until I had moved on to more mixed food, and, but he always had a bottle at bedtime. And he slept, because of it, because he obviously was full enough to keep him through, you know, sort of, from eleven to five. But, that is more than most mothers have got. (..) You know, and, and things like that. You know, I wouldn't allow him to, say, no way he wasn't having a bottle. I mean, I know, that it is possible, that you end up with a child, that wouldn't take a bottle or whatever, But, part of the reason, he has a dummy, is probably because I wanted him to have a bottle."

(Deborah/Scotland)

Similarly, Australian first-time mothers in the study of Carolan (2005) developed their own ways as they realised that there was no single right way of doing things. Leung et al. (2005) described conflicts that 20 new Hong Kong Chinese mothers had with a traditional Chinese ritual aimed at supporting their postnatal recovery and finding their new role. Women felt restricted by both the rules of the ritual, as they had to stay at home, and the conflicting opinions of mothers and care providers regarding caring for their children. Many new first-time mothers were careful in

expressing their own opinions, as was also found in the current study. *Developing my own ways,* however, affected how women dealt with a second pregnancy. This was described by Erin in the Netherlands.

"Yes, she (the midwife) still knows more than me. But I, I now do it more my way. (..) Like, okay, you are still telling me this, but I feel better that way, so I do it in that way. And that is also possible, because, I had that experience. Let's put it that way. (..) And yes, she still knows more, but you accept it differently."

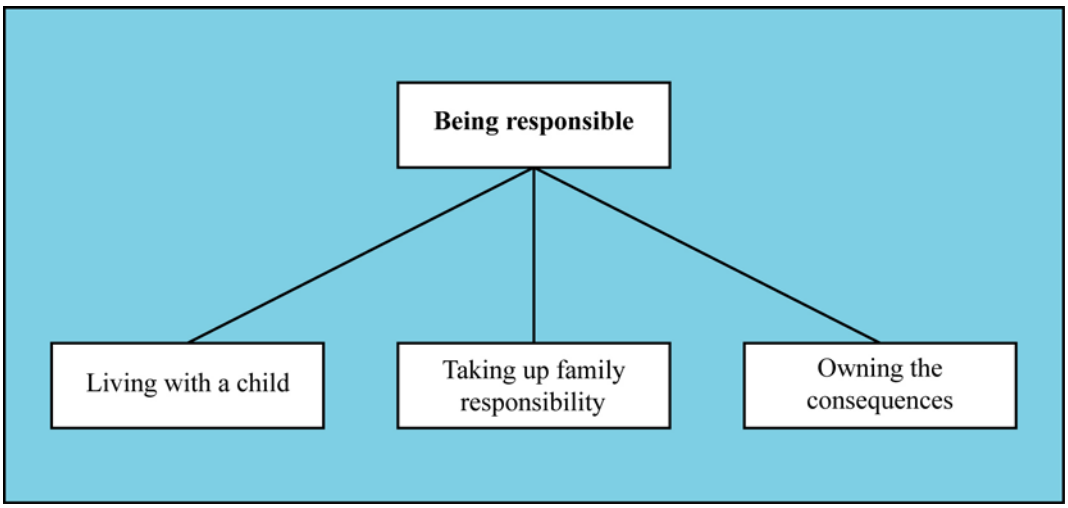
(Erin/the Netherlands)

Mothering experiences strengthened women in doing things their own ways and developing their own opinions. Other studies described similar processes in women (Gilligan 1993, Hartrick 1997) related to experiencing the consequences of family responsibility. This is described in the next section.

9.5 Being responsible

Although women felt responsible for their future family at the beginning of pregnancy (Chapter 6.3), they were overwhelmed by the reality of this responsibility at the end of the journey. *Being responsible* consisted of three properties: *Living with a child*; *Taking up family responsibility* and *Owning the consequences* (Figure 9.5).

Figure 9.5 Being responsible



Despite their joy and happiness at having a healthy baby, women also realised the burden of the responsibility, like Maren in the Netherlands:

"I: Did you already have the feeling of responsibility during pregnancy? W: Yes. That is true, but then, in a different way. Whether you suppress that, I really do not know. But, if such a child is out of you, then you really have something like, huh, now it is really there, now it is yours. I really felt that a lot. And now we are responsible for it. And, yes, yes, I do not know how to describe that. But just, I really had something like when she was there, when she came out of course not, but after a day, if you come home, and, she has to go to bed, just, like, ah, yes, do you do all well and, oh, is she laying doing in a right way, and very exciting."

(Maren/the Netherlands)

Women in this study described an explicit change in their life through the responsibility of mothering a child. This had also been described in other studies (Bergum 1989, Nelson 2003). One of the women in the study of George (2005 p. 254) stated; "It's hard, and sometimes I don't want the responsibility. I have to think about every conclusion." Women with two or more children in particular, like Yvonne in Switzerland, mentioned this change in responsibility.

"In the beginning you think, oh, I am never going to be normal again. I thought, I could never again let go of this. That, that, such a little human being, where you, indeed, you are responsible for it. If you do not look after it, there is nobody else. You...That, that I found in the beginning very, yes, very, yes, heavy, that again sounds very negative. But very, still, it put a bit of a pressure on me.(..) It is not just a pink cloud."

(Yvonne/Switzerland)

The reality of family responsibility therefore exceeded expectations and women encountered this task related to having a new child in their world respectfully, as is described in the next section.

9.5.1 Living with a child

Living with a child involved integrating responsibility for the new child into the other responsibilities of women's worlds (Chapter 6.3.1). Although this process started in pregnancy, the real experience happened in the postnatal period as part of establishing a new normality (Chapter 9.2). Maren in the Netherlands described how her responsibility changed on having her first child:

> *"Well, I have always had, responsibility, but still, if you have a child of your own, you have even more responsibility. Of course you are seeing more dangers, and yes, or dangers. Well yes, it is not that bad yet, because she does not really walk, but still, yes.(..) Now you are really a family, you know. You have something to care for."*
>
> (Maren/the Netherlands)

Besides creating an individual space for their family, this responsibility involved creating new routines, adapting the environment and realigning relationships (Martell 2001). Caring for the baby also involved worrying about it (Ruddick 1983, Bergum 1989), so that women felt that even when they were not physically present, they had to be emotionally present. Hannah in the Netherlands therefore took better care of herself:

> *"Yes, well, I think so, yes. In that story, let's say, from that breast for instance indeed. I noticed, that I.. I have been thinking for years like well, pooh, it all will come, as it must. I now notice, that since I have children, I am more inclined, to think, like, no, I really have to take care or myself. I have children, therefore I am responsible for them."*
>
> (Hannah/the Netherlands)

Some women in the current study, like Yvonne in Switzerland, described this responsibility as a burden and kind of a "pressure":

> *"That feeling, that you had before the children, that, indeed, careless, that goes away, And now you are always thinking, yes, you always have something in your*

head like, what are they doing now, where are they now, what is happening now. How late is it? Do I have to... Well that stays, I think, always."
Yvonne/Switzerland)

While *Living with a child* women had integrated the baby into their previous world and reorganised everything in and around it. Simultaneously the guidance of care providers ended (Chapter 10.6), so that women were now on their own. This is described in the next section.

9.5.2 Taking up family responsibility

Taking up family responsibility meant that women took up family responsibility on their own, instead of sharing this with their care provider (Chapter 8.5, 10.5) as they had done during pregnancy. Maren in the Netherlands realised that she was on her own after coming home from the hospital with the baby:

"W: And it was great, that my husband was quite rational, and he said like, well she is alright and now we are going to try to sleep and so on. You know, when one of you is that rational, I am like, oh, gosh.. And then all the stories that you've heard come up. And then it all going through your mind, of course.
I: Well, that is of course, I can imagine, during pregnancy, like you say, you've got always the midwife as a support..
W: Yes
I: And then you are suddenly, you are on your own.
W: Yes.
I: I can imagine, that that is very scary.
W: Yes. And then of course you've got the maternity care assistant, but well, I guess, that is quite different from a midwife.
I: I guess it is the change that you have to care for it on your own?
W: Yes. That is the point. Yes."
(Maren/theNetherlands)

At this point in the postnatal period, care providers gradually stepped back (Chapter 10.6). In bearing this family responsibility on their own, women relied mainly on

their partners (Chapter 7.3.1) and social environments (Chapter 7.4). Rosemary in Switzerland considered the importance of support in her future family responsibility during pregnancy:

"That you then maybe have a mother, who just can come, or simply the partner, who can, that you can simply once, maybe go away. Just once.. To be for you alone, and not have the responsibility for, at that moment, for that... I just do not know yet. I simply hear those things a lot."
(Rosemary/Switzerland)

Other women, however, emphasised the binding aspect of this responsibility for themselves, like Lynn in Scotland:

"They're yours. You brought them into the world, well you created them. Maybe you didn't bring them into the world. But, you could have done, and .. They are your responsibility and you have to, you know, look after them to the best of your ability."
(Lynn/Scotland)

Taking up family responsibility thus involved the separation of women and their care providers. As a result women were on their own in bearing the responsibility of motherhood and owning the consequences, which are described in the next section.

9.5.3 Owning the consequences

While women considered what they wanted to be responsible for at the start of pregnancy (Chapter 6.3.3), at the end of the journey they faced *Owning the consequences* of having a new baby and a family. Despite sharing the responsibility for their and their babies' health during pregnancy, most women like Elena in the Netherlands had been aware of bearing these consequences:

"*The consequences, you'll get them, absolutely. (..) Well, I am responsible for... If that child would be handicapped, then you are there until, until you die, you are responsible for that. (..) But I am not responsible for the fact, that he is born being*

handicapped."
(Elena/the Netherlands)

No woman in this study mentioned any serious health problems for themselves or the baby. *Owning the consequences* however applied to a wider context in which women lived, which was also highlighted in other social studies on motherhood (McMahon 1995, Hunt 2004). In making a decision about giving birth at home, Vanessa in Scotland had not only considered the baby, but also other factors:

"Well, I mean, I did, I did feel, that there were other, there were other things, there were other factors to consider. (..) I knew, that my son was going to find, having a new baby, very hard. And there were lots of, ways, that I would want to help, make that easier for him. And having him really quite involved, with the birth, was one of those things. But I knew there was a risk of a postpartum haemorrhage, and, and then I thought, well, you know, that is a big risk. For me to take."
(Vanessa/Scotland)

Little literature on motherhood addressed how women dealt with *Owning the consequences* of the experience. Where some studies highlighted problems if consequences were very different from women's expectations (Beck 2002, Hauck & Irurita 2002), others mentioned a positive effect on women's changes in responsibility, including active reconciliation (Gilligan 1993, Hartrick 1997, Miller 2005). To be able to deal with the consequences and having a choice (Chapter 8.4.2) to do things their own way was, therefore very important, as illustrated by Lynn in Scotland:

"I watched.. There was a programme on, recently about, you know, spectacular pregnancy, things that were going really badly wrong, And there was one girl who had been told, that was something seriously wrong with the baby. And they, they were basically recommending a termination. But she did not want that. She had the baby and yes, the baby didn't survive that long. But she did it her way. And to do it her way, she could cope, with the outcome. If somebody else had done it for her, make the decisions, she would have an awful lot longer process to go through, to work through, to, to reconcile that. And I think people need to make choices for

themselves to have ownership of, of the problem, yo, the grief whatever. Yeah.. I do, I do believe that now."

(Lynn/Scotland)

Thus *Owning the consequences* involved all the physical, social and mental consequences of the experience. In subsequent pregnancies (Chapter 5.3) these consequences were part of women's histories. Then the circle of *Embarking on motherhood* started all over again with *Expecting* (Chapter 6.2).

9.6 Conclusion

While *Expecting* women started a journey towards motherhood, in which they were guided by people from *Creating a bond*. This way they were *Familiarising* with becoming a mother during pregnancy, childbirth and the postnatal period. While *Embarking on motherhood*, women ended this journey able to start the new experience of being a mother. Having a routine in the new situation provided them with time to reflect and reconstruct their experience, which was matched with their picture of expectation. Finally, judgement and reconciliation took place in order to close the picture, and thus leave the experience behind.

While *Embarking on motherhood*, women felt confident as a mother, as they had regained their sense of self, experienced their new life as a familiar situation, and felt self-confident. *Feeling autonomous* was achieved by feeling in control again, while setting priorities and increasingly developing their own ways of managing the new family. Thus women took up family responsibility, which included living with a new baby, on their own, but also living with the consequences of the experience.

With *Embarking on motherhood*, the care that began in pregnancy ended. The content of this care was a mirror of women's journeys towards becoming mothers. In answer to the research question, *Mothering the mother* emerged. This core category and its properties are described in the next chapter.

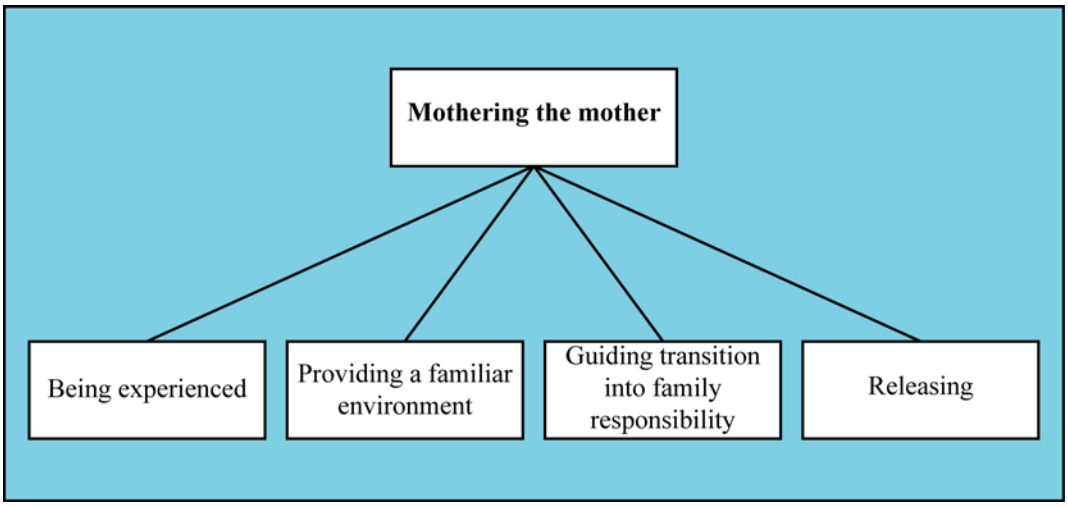
CHAPTER TEN- MOTHERING THE MOTHER

10.1 Introduction

Mothering the mother was the core category to emerge from the data, and provided an answer to the research question of "What is effective content of routine care during pregnancy in the Netherlands, Scotland and Switzerland from women's points of view?" (Chapter 4.1.2). In the current study women in all three European countries described their needs based on their individual development during the experience of becoming a mother (Chapter 5.2). At the beginning of pregnancy women created a picture of their future situation during *Expecting* (Chapter 6.2). While guided by people from *Creating the bond* (Chapter 7.2), they adapted and complemented this picture by living through the experience during *Familiarising* (Chapter 8.2). Finally, in *Embarking on motherhood* (Chapter 9.2), the experience of becoming a mother ended, but a new one of being a mother began.

The core category was central to all categories and summed up "what was going on" (Glaser 1978, Goulding 2002) in this study. Like all subcategories, the core category was a basic social process (BSP) and thus ended on "ing" (gerund) (Glaser 1978). Emergence was spontaneous and not assisted by a particular procedure as suggested by Strauss and Corbin (1998*)*. As the core category emerged from women's needs, its properties mirrored categories in Chapters Six to Nine. In a similar way, Winnicott (2004*)* used the analogy of a mirror to describe a mother's responsiveness to her child. Being the mirror of women's own development, the core category and its properties will be described in this chapter as characteristics of care. The relationship between the core category of *Mothering the mother* and its subcategories (Chapter 6- 9) was presented in Figure 5.3. Figure 10.1 shows this core category with its four properties: *Being experienced; Providing a familiar environment; Guiding transition into family responsibility* and *Releasing*.

Figure 10.1 Mothering the mother and properties



10.2 Mothering the mother

Women experienced difficulties in finding a word for what care they needed during their personal transition to motherhood. This had also been noticed in other studies on maternity care (Fleming 1998a, Walsh 1999, Berg & Terstad 2006). The label for the core category of *Mothering the mother* emerged from the second interview with Jan in Scotland, in which a comprehensive term to fit all the descriptions was searched for and discussed.

"W: It is acting in your interest. Which is what an advocate is, isn't it? Helping for a better word actually on that to cover... (..) But it is different, it doesn't quite, quite cover it. Because it is kind of mixture between an advocate, someone who is pushing what you want, but it is also one of carer as well, sort of, you know, sort of, I suppose, taking care of you. Medical and emotional, needs.

I: Kind of caring for the mother.

W: Yeah. Yeah. It is like that, yeah. Yeah. I can't think of a word that actually encompasses that very well."

(Jan/Scotland)

The expression *Mothering the mother* had been mentioned in literature with regard to the work of a doula (Klaus et al. 1993, Caines et al. 2001). Women in the phenomenological study of Berg and Terstad (2006) described this work as filling in

their needs, where the doula was a guiding person during childbirth. A main-stay that a "woman could lean on", while "protecting her from falling" (p.7). Although the literature was hazy about a concrete content of mothering (Royal College of Midwives Trust 1999), it was defined as looking after in a motherly way (Pollard & Liebeck 2000 p. 526), which involved both responsibility and an attitude of kindliness or tenderness. Likewise, *Mothering the mother* in the current study consisted of of two key aspects: "caring responsibility" and "responsive caring". Caring responsibility was described as "having an overview", "being monitored" or "being looked after" and was enabled by *Being experienced* (Chapter 10.3). In this regard, women emphasised their own and the baby's physical health:

"There was an expectation, for being taken care, being seen regularly, and like monitored."
(Megan/Scotland)

"Well, that they look after, that, that the process goes well. (..) And that they point out to me...(..) And that they point out to me the dangers, like, well, if I, yes, I don't smoke or drink, but if people would do that, like well, do you think about, that this can damage. Or that it could, that they point out to people, like you should do this, or you should not do this."
(Elena/Netherlands)

"Although she has also got a responsibility and she has got to make sure, that, you know, both mother and baby have a healthy delivery and nothing abnormal happens and, you know, if something keeps going wrong, the, you know, she does her utmost to make sure of it, that both come out of it well."
(Jan/Scotland)

"Caring" was the attitude with which this mothering responsibility was carried out, which shaped a familiar environment (Chapter 10.4) and linked this to the content of "responsive caring" (Chapter 10.5). Walsh (2006) used "matrescence" to describe such attitude of balancing skills of "listening, talking, showing, observing and leaving alone" (p. 10). Mothering, therefore, involved the provision of a caring

environment, the importance of which had been mentioned in studies on childbirth (Morison et al. 1998, Anderson 2000), but not in studies on antenatal care. In the current study however, women emphasised the meaning of such an environment for their well-being:

"How they talked with me, how they dealt with me, the caressing, the, the caring.(..) Like, feeling understood... (..) I have felt very, very secure."
(Paola/Switzerland)

"Thus... there comes that care again. And they also give me there, the feeling that I, I can determine that myself. I like that very much. For me that is a feeling of being at rest."
(Ariane/Netherlands)

Women in the current study described effective care during the process of becoming a mother as mothering care from an experienced person which allowed them to (also morally) grow into their responsibility. Thus *Mothering the mother* involved an intense process of exchange of experience between an inexperienced "mother to be" and an experienced "mothering" person, resembling a mentoring or coaching process (Keyton & Kalbfleisch 1993, Williams-Nickelson 2003, Strauss 2005). Anderson and Shannon (1988 p. X) described the concept of mentoring as "A nurturing process in which a more skilled or more experienced person serving as a role model, teaches, sponsors, encourages, counsels and befriends, a less skilled or less experienced person for the purpose of promoting the latter's professional and/or personal development. Mentoring functions are carried out within the context of an ongoing, caring relationship between the mentor and the mentee."

Although the mentee has to live through the experience herself, the more experienced mentor is overseeing the process (Zey 1984) and thus sharing the responsibility, as in the current study.

While mentoring programmes were often described for professional career development and education (Keyton & Kalbfleisch 1993, Chesler & Chesler 2002, Williams-Nickelson 2003), their use was hardly mentioned in healthcare literature.

Some programmes using mothers as supportive mentors for socially disadvantaged groups (for example teenagers), however, were developed in the USA (Navaie-Waliser et al. 1996, McFarlane & Wiist 1997). Navaie-Waliser et al. (1996) reported increased levels of self-esteem and knowledge and a decrease in social isolation as a result of such a programme. Most of these programmes trained laywomen for mentoring. They were, like doulas, therefore not in charge of medical care (Berg & Terstad 2006). Separating *Being experienced* (Chapter 10.4) from *Providing a familiar environment* (Chapter 10.5) in the current study, however, negatively influenced the effectiveness of care. Women's views on the appropriate experience of the mothering person were related to their own experiences as well as cultural values and norms. This is described in the next section.

10.3 Being experienced

Being experienced mirrored women's need for experience while *Expecting* (Chapter 6.2). Thus they sought persons with experiences that complemented their own, like Megan in Scotland:

"Well, I'm quite lucky, when I started with the pregnancy, there was a colleague, who was pregnant till there, so I could ask her, or she told me at least, all the things connected with work. And in between I talked with friends in Austria, and a friend. This friend sent over even books. And we, I went to the library and got a book out there. And it is quite helpful, that my partner had like two, has two daughters already. Like the security, well, we will manage and he has gone through all these things before."

(Megan/Scotland)

In choosing a label for this property, both "expert" and "experienced" were considered. In contrast to most maternity care literature however (De Vries 1989, Miller 2005), many women in the current study described the expertise they needed from antenatal care as "lived" or "seen and done" experience.

"... but it seems that the this hospital has one midwife, who has twins herself"

(Heather/Scotland)

"But with someone, other people's shared experience. You know, people who have seen it, done it."
(Lynn/Scotland)

"Well, with a friend you can also share, but she is not, not specialised. Or my friend had to be a midwife. You are kind of heading for the speciality a bit. Like they should know, because they have done a lot of births."
(Ariane/the Netherlands)

Women particularly distinguished between theoretical knowledge ("learnt") and practical knowledge ("experience"). Verena in Switzerland, who joined a gynaecologist who just started a new own practice, described this difference:

"And then there was this doctor, who then took me, because he just starting his practice. So he still had to collect his experiences. As I had been for the ultrasound the first time, it took him an hour, before he could see something, And then I thought, well, he simply has to... learn a bit, and.. Well, learn, simply collect experiences. Learnt, I think, he had enough."
(Verena/Switzerland)

Healthcare professionals were therefore viewed as the authoritative bodies of expert knowledge in maternity care (De Vries 1989). Miller (2005) however, mentioned mothers as "the experts, in practice, in recognising and meeting their children's needs" (p. 112). Despite power conflicts between these expert systems (Lupton & Fenwick 2001), some research highlighted the major (informal) role of older women in healthcare (Long & Curry 1998, Boncham & Sixsmith 2006). Many women in the current study consulted their mothers (Chapter 7.4.1), as mentioned by Saskia in the Netherlands:

"If there is really something going on, then I have really. Yes, then, my GP, if he is there. And my neurologist. And then, yes, the only one, that I also go to, who is not doctor, is my mother. I get along with her very well. She can also explain things to

me, about what is going on."
(Saskia/the Netherlands)

Women consulted the "best" expert, as culturally defined according to a hierarchy of expertise in the national maternity care system in each country. This cultural definition of expertise was particularly emphasised by Megan in Scotland and Yvonne in Switzerland, who had emigrated from another country:

"I had an idea like, in Austria, you see, like your gynaecologist regularly anyway and then during pregnancy you see them more often. (In Scotland:) *I knew you had to look for a midwife and you, you look for the hospital, where you want to go to."*
(Megan/Scotland)

"And then I thought, I just go to the GP. Because, well, I actually was used to that. Like from the Netherlands, that you just do that at the GP's and not go to a gynaecologist (as usual in Switzerland)*."*
(Yvonne/Switzerland)

The first criterion for such an expert was experience in the field of maternity care, usually obstetrics and midwifery. Because of differing national definitions of expertise (Chapter 2.4.2), women consulted different healthcare professionals. Women like Lea in Switzerland and Susan in Scotland however usually chose a midwife or gynaecologist and less commonly a GP.

"You have a task. A feeling of responsibility against myself and my child.(..) And I try the best thing possible, to fulfil that in a right way. (..) And I think, or have thought, that the gynaecologist was part of that."
(Lea/Switzerland)

"I think, I would prefer a midwife, Ann. (..) Because they, they're most specialising, you know, they know exactly, for example.... Yes, I feel as though they are specialised, they know, you know, you're, you're experiencing, maybe a bit more sympathetic than, than your own doctor, you know. Cause dealing with a lot of

things, you know, rather than pregnancy."
(Susan/Scotland)

Another criterion for Scottish and Dutch women when choosing an expert (Chapter 7.5), were complications in pregnancy. If these women experienced complications in pregnancy, they preferred medical care with a gynaecologist. If they considered their pregnancy to be normal, they chose midwifery care as favoured by Hannah in the Netherlands:

"W: Well, yes, I find it very important, that like it is organised in the Netherlands, I don't want to think about having to go to the hospital every time or, having to see a gynaecologist. Then it is being made so medical, I think. Look, if the GP does it, I still find it another story, in a village, because it could also be organised like that of course. But I find it very nice, that it has been organised like that with midwives, who are specialised in that area and do not look at that from such a doctor's perspective, like... I find that a bit like making it an illness. Well, maybe I should not say that myself, but that is still my opinion. I think, if you all pregnancies, or all pregnancies would have to be guided by doctors, gynaecologists, yes, that would make it a bit more medical.
I: What do you mean by medical? In a concrete way?
W: More controlled, hospitals, more tests, than actually needed. Those kind of things."
(Hannah/the Netherlands)

Swiss women initially chose their gynaecologists, who they had usually already consulted prior to pregnancy (Chapter 7.5.1). Women expecting a second or subsequent child, however, often mentioned needing "human" as well as "medical" experience. Therefore they either found both experiences with one person or combined the care of different people as Sarah did in her second pregnancy:

"I: What do you need from your doctor?
W: From my doctor. The professional competence. (..) That is, also for me that is certain tests, to see, whether the baby is doing fine, and I am doing fine so far. Also,

that there is nothing life- threatening around. And if there are complications, that she reacts. (..) Yes, and also a bit human empathy.
I Yes, seems understandable to me. Well, and from the midwife?
W: From the midwife ? Should be for me, also professional. Being a counsellor or, being guidance like a friend. Who, I can ask things, that are related to pregnancy, that can relieve pregnancy, or support with problems.(..) Also complementary therapies, or with, massages, by.. That simply makes a mother feel good or also the child, also make both feel good, or.. Finally make the whole family feel good. (..) Or I think, a midwife, I hope, or well, I also hope, that she is a person to speak to, who, who, who I could speak to more often, also due to the available time. Wel, yes. She had always been around for me."
(Sarah/Switzerland)

In this way women sought the best available cultural expertise to guiding them through the process of becoming a mother. This expertise influenced the transfer of experiences during guidance (Chapter 10.5), as well as the environment in which this took place. This environment is described in the next section.

10.4 Providing a familiar environment

Providing a familiar environment involved physical and sociocultural surroundings (Morison et al. 1998, Kennedy et al. 2003, Kennedy et al. 2004), which provided women with feelings of closeness, intimacy and being understood, as well as safety and security. Barbara in Switzerland sought such a familiar environment in a birth centre:

"It also happened there, that I thought, I'd like to give birth in a birth centre, and get to know the midwife there. And yes, a familiar atmosphere. That has been important to me. And yes, that is why I went to the midwife."
(Barbara/Switzerland)

A familiar environment was shaped by caring, friendly and informal attitudes in the people the women had bonded with, and the synchrony of cultural, healthcare and individual philosophies and beliefs between them and the women. This environment

was thus a result of *Creating the bond* (Chapter 7.2) and was related to the philosophy of the maternity care expert (Chapter 7.5). Overall women expressed that they felt well in this environment, as Sara in Switzerland and Mireille in the Netherlands described.

"I need, I need, certain time, until I, if I come into a room, until I feel well. Until I also, can express myself. And if I have the feeling that my opposite person is about to jump.. Then.. it is over with me. Then I don't trust myself anymore, then I have the feeling, so and now you also have to hurry."
(Sarah/Switzerland)

"And now you have to go to the maternity hotel (kraamhotel), and that principally just suits me better. I have something like, well, you just go there, there everybody is ready for you, therefore nothing can go wrong. And, you are being received and everybody is there, that you, that you need. Thus I find, that I just find nice."
(Mireille/the Netherlands)

According to Fullilove (1996), a familiar environment consisting of both physical and human structures facilitated the development of relationships as well as a personal identity. Winnicott 2004 (p. 239) mentioned how a mother shaped an "umbrella"-like human environment which enabled and flexibly guided a child's growth and maturation. Several studies on maternity care described women's needs to seek a safe shelter during pregnancy, although these were interpreted as medical safety only (Patterson et al. 1990, Armellini 2003, Coverstone et al. 2003). Walsh (2006) noticed that not only social and psychological safety, but moreover "cultural safety" was sought, based on familiar cultural philosophies and attitudes (Ramsden 2003, Wepa 2005). This kind of safety was also found in the current study and related to feeling at home, as Ariane in the Netherlands described:

"*And the hospital. If you go to a gynaecologist in the hospital then you still having the feeling like, if you do not have a medical indication, what, what should you do there then? Therefore I find a bit more homelier, what you have got with a midwife,*

I find, is for me very important."
(Ariane/the Netherlands)

Home involved both a physical and a social place of identification and belonging, where people felt at rest. This feeling was particularly important during transitions (Holdsworth 2005). Several studies addressing midwifery care mentioned women's needs for a "home-like", human environment (James 1997, Walsh 2006). Although Marck (1994) addressed women with an unexpected pregnancy, she similarly described their needs for a relational place, in which they were heard, nurtured and understood (Bergum & Dossetor 2005, Marcellus 2005). Some women in the current study like Megan in Scotland sought such an environment for realising their scenario (Chapter 6.2):

"And like knowing from Vienna, you have lots of possibilities to go to different hospitals, different kind of clinics, like birth centre and the, and the... Well, you go there more yourself and look around, and talk with people and find out what kind of birth you want. You don't really get all this here, they tell.. Well you can ask I want a birth at home, but of course like being older and then the first one, they won't be too happy for that."
(Megan/Scotland)

Women in the current study described the contrast between the "human" or "social" and "medical" more often with regard to social rather than physical environment. A familiar environment enabled understanding, influenced women's confidence and gave them a feeling of autonomy (Marck 1994, Morison et al. 1998). Vanessa in Scotland described the difference in philosophies between home and hospital environments as different "cultures" leading to different experiences. She opted for giving birth at home:

"But, as I say, it is much easier, to be in control in your own, environment. And I think it, you know, it was so different, when the midwives came to my home. You know, they were on my territory, and not on theirs. And I just think, it is a huge difference. (..) And, when you are at home, you very much are in control. Yeah, I mean, I just, I just think, when you go. It is quite hard for a hospital, to give you that

sense. Because, I just don't see, how they would be able to do it, and then, you know, they change their whole opinion of patients completely. (..) But you know, I just think, pregnancy, birth; they're such different things. You know, you are in the hospital, for a totally unusual reason. Compared with any other patient, you know. It is like you are perfectly well, and you are going through a life changing experience. It is not like you're acutely ill and you need their help."
(Vanessa/Scotland)

Although the human environment was emphasised, it was related to a much larger environment which influenced the establishment of the bond (Chapter 7.5). Different conditions and philosophies has led to differences in care (Fleming 1998b, Hunter 2001, Hunter 2004, Kirkham & Stapleton 2004, Hunter 2005). In the current study, philosophies within national politics, the healthcare system and institutions were found to have affected access, attitudes and options. Hannah in the Netherlands described discovering that laws based on political philosophies restricted her options for antenatal screening:

"Because that philosopher also told us that, because it had not been proven that the Triple Test, or it, it also did not come through, because at that time the politics were, they said, like well, but, the Triple Test, you do that with the thought, that if you get a wrong result, and that wrong result might contain, that you will have an abortion. (..). And that was then a very religious politic group, according to me, in the Netherlands. And that group then said like, then you don't do something preventative, but something, that can cause an abortion, can result of it, and that is why we do not want to do that. And that is why it never came through, I understand. On the other hand like with breast cancer, you say, you can treat that at an early stage, and it makes people better, thus that is why that is allowed. I understood, that it was like that. And I really found that heavy to discover. But I actually find, that in one way or the other the people you have to, have to inform, that there are such things. But that you should not offer it as a standard, but I still find that you have to, that you have to provide information about it. (..) That they are informed about the possibilities. And the impossibilities and the limits, that tests also have. And, thus I still find, that you have to let them know one way or another, that there is, that the

people also themselves, let's say, still, you can..."
(Hannah/the Netherlands)

Political philosophies thus affected the healthcare system and consequently women's care. Several women in Scotland related the attitude with which they were met, and the limitations in realising what they wanted (Chapter 6.4.2), to the possibilities of the NHS (Chapter 7.5.1). Women expected the environment of care to encourage them to get familiar with the physical and social dimensions of mothering. Fullilove (1996) described alienation and disorientation as consequences, if such familiarity was not present. Heather in Scotland who felt lost in the hospital, even though she felt in the right place because of her "risk pregnancy", experienced this alienation and disorientation:

"In a way I like knowing, I would maybe give the room beforehand. Maybe less, to say, right, this is where you're going, first thing you come into the unit, you are going to get an ultrasound scan, then you're come in to see your consultant, and then your midwife. So that you know, so that you're not kind of stumbling about the building, so you know what to expect. Because what happens is your blood pressure rises, and they take your blood pressure, and it could be up, because, you know, you're a wee bit excited about, you know, traumatised about I have been wandering about this hospital, I don't know where I am going, you know, and, and it is just a help to alleviate your stress levels, you know."
(Heather/Scotland)

Thus *Providing a familiar environment* involved an environment that was shaped to provided care, allowed personal freedom and nurtured women's individual growth and development during pregnancy (Chapter 8). Both *Being experienced* (Chapter 10.3) and *Providing a familiar environment* were requirements for the guiding process that followed, which is described in next section.

10.5 Guiding transition into family responsibility

Guiding transition into family responsibility meant that an experienced person "lived with" women through the experience (Chapter 7.2), showing them the way, drawing

their attention to specific aspects, and also advising, directing and influencing their behaviour (Pollard & Liebeck 2000, Dudenredaktion 2001, Strauss 2005.). This way women's personal growth towards a new family responsibility was realised. Swiss and Dutch women used the expression “guiding” most often.

“*It sometimes was too medical and too little social. I quite missed that during the guidance.”*
(Erin/Netherlands).

“I believe, it does not necessarily have to be the same doctor. Or otherwise, the same, but with (additional) *guidance. You need somebody. You should in the first consultation, you should get to know that person, or you can go there and can have a look at everything. What is going on now, what comes towards you in the next nine months.”*
(Paola/Switzerland)

Although one woman in the study of Anderson (2000 p. 103) talked about being “guided” by her midwife “being there” and giving reassurance, none of the Scottish women used this expression. They more commonly mentioned aspects of content like “being there”, “information”, “reassurance” and “support”.

“I think, the balance of information, support and reassurance.”
(Vanessa/Scotland)

“*Having someone you know and trust to be there if you need them.”*
(Lynn/Scotland)

Providing a familiar environment determined “how” guiding was done, and *Being experienced* determined “what” was transmitted and thus the content of the guidance (Geister 2004, Ten Cate et al. 2005, Berg & Terstad 2006). As the experienced person knew the steps in a human process, these could be indicated, predicted and explained, and uncertainties acknowledged. Some studies called this “anticipatory guidance” as elements of risk and trust were involved (Brazelton 1995, Brown &

Olshansky 1998, Strauss 2005). The human experience however was not really highlighted as many women had chosen medical experts for guidance (Chapter 10.3), which was criticised by Lynn in Scotland after having her third child:

*"I think, and I think it is kind of the way they treat you, you know, you **are** ill. And it is something to be managed. And, and if you don't do it our way, you won't get a positive outcome. (..) It is the kind of mentality, I think, there is, in the hospitals. That's what, I, that, I think, that is what, what they're saying. They are trying to offer guarantees, on something on which there is no guarantee. In my view."*
(Lynn/Scotland)

Guidance had a flexible, variable content, depending on the individual and the situation, and mirrored women's own process. In the current study, guidance involved the two tasks of development of women's awareness, and support in taking up family responsibility.

The development of women's awareness related to the development of the "picture" (Chapter 6.2, 8.2, 9.2) and involved raising awareness, sharing awareness and closing awareness. Raising awareness usually happened through women's own experiences (Chapter 6.2, 8.2), creating a state of open awareness (Glaser & Strauss 1965). Guidance however also raised awareness, in which women's attention was directed to important aspects in the actual or future situation. Jan in Scotland described giving these thoughts a voice as "pushing your thinking for you":

"I mean, I would actually like to sort of see them as somebody that has got to know you, sort of during the actual antenatal care, and then on the actual labour things, you know, take time and say, you said about trying, you know, in this position, to give birth. Would you like to get into it? See what you think, you know. Sort of almost pushing what you were thinking, for you. Because I think you do become so insecure and unsure of yourself in that situation."
(Jan/Scotland)

Raising awareness involved asking questions regarding general information, for example about the place of birth or antenatal screening (Chapter 8.3.2). As the

subsequent thinking process caused an imbalance (Chapter 8.2), women wanted to share their thoughts. Paola in Switzerland mentioned this need in regard to antenatal screening:

"Then I had to think about, together with my partner, yes, we two had to think about, what we should do now. And then of course I called on several people, from whom I knew, and then... I know that, the decision will always remain ours, but you still wanted to know as much, as possible, you just want to talk. And there is hardly anyone you can talk to."

(Paola/Switzerland)

Sharing awareness was a two-way exchange of information between women and their guides, which was enabled by a familiar environment. Women emphasised several modes of mutual information exchange, such as discussions, questions and answers and giving explanations:

"That for every question you simply get an answer. And that there is always somebody there, who you can call any time, also any time in pregnancy you can call and ask your questions."

(Verena/Switzerland)

"You know, even things like the difference in my midwife feeling my stomach. And explaining where the baby was, and what this meant, you know, in, in the last sort of few weeks. You know, it was very informative. And very reassuring. Whereas, you know, there is all this feeling of stomach goes on and no one says anything. Very strange. And, I think, they just need to show that sort of personal, or share their, their information, with you. That only seems fair."

(Vanessa/Scotland)

Through the reciprocal exchange, information was individually tailored to their picture, allowing women to maintain a balance (Chapter 8.2). Sharing awareness therefore involved cognitive as well as emotional information about things such as

anxieties, worries and joys, which were mentioned by Ariane in the Netherlands and Yvonne in Switzerland:

"And, then I made up my mind in this pregnancy, that if I worried about something, I was not going to behave in a sturdy way. Then I am going to let my feelings play. And then I am just going to, then I simply want to have attention for that. Thus..."
(Ariane/Netherlands)

"But also, that, indeed with the third one (pregnancy), *that the blood test were all good. We, yes, almost were dancing, like oh, what... That she was really happy, and not just pretending. Also, that she was really happy. That, well, that makes you feel good."*
(Yvonne/Switzerland)

Feelings were most often shared with family, friends and midwives. Although midwives' lack of emotional sharing had been noticed (Hunter 2001, Berg & Terstad 2006), Hunter (2001) claimed that this lack was related the philosophies of the surrounding environment (Chapter 10.3). In the current study, such an environment facilitated sharing cognitive and emotional information, but also physical information gained through bodily contact, as Sarah in Switzerland experienced with her baby.

"And that for instance, is, I think, was such a nice experience, to be able to get in touch with the baby. Through massaging and through, yes, really body contact. What brought me more now than, once again see the child in the ultrasound? Or also hear heart sounds."
(Sarah/Switzerland)

By sharing all aspects of the experience, women felt reassured, which allowed closure of awareness (Chapter 9.2), so that they could move on. Both sharing and closure usually happened during an antenatal visit, as Verena in Switzerland and Susan in Scotland described:

"That, if I come home then, I am a step further, I know exactly, what is until now, and, yes, one goes with the expectation, that everything is alright, that is what one is hoping, and yes, if one comes home one, also, I was always happy and thought, well, everything is well, and yes."
(Verena/Switzerland)

"Just to make sure, it's more to do with the development of the baby and if the baby is fine, you know. It is nice to be told, that everything is fine with the baby, you know, and at least the scan is showing, that everything is normal."
(Susan/Scotland)

In contrast a few women, like Lynn, mentioned their ambivalence with regard to antenatal screening for foetal abnormalities. While some sharing took place, closure was not possible due to the "fuzzy answer", and thus worrying continued (Chapter 6.2):

"I chose this time around not to have the, the blood tests. And the, for the baby's… There is one, there is one about, some sort of.. .. There is one blood test I had done, but I didn't want to have the one about Down syndrome or whatever. (..) I don't want to know a fuzzy answer. It is not helpful. If you can't give me hard facts, I do not want to know. I will trust my instincts."
(Lynn/Scotland)

Thus guiding was a process balanced between pushing a person to move and allowing enough free time and space to let them move on their own (Strauss 2005), as had been described in midwifery and doula work (Fleming 1998a, Anderson 2000, Kennedy et al. 2003, Berg & Terstad 2006). Women in the current study emphasised the importance of their guiding person "being there" in order to provide effective guidance. This sense of presence involved someone being around to hold on to and lean on, giving the women confidence, as Lynn in Scotland and Sarah in Switzerland described:

"Being there to do what was necessary. If I asked. (..) To be, to, to intervene if they felt I was loosing my lean, but to back off if I was doing fine."
(Lynn/Scotland)

"It just gives security. I believe, you don't even need it, say in an increased way. Also not, that I now, yes, had to call more, or really had special things. But just the security. A midwife is somewhere around and if there is something, I can call her, I can ask her, had already made me so much more relaxed. That, I think, finally result in much less problems, than if you have nobody."
(Sarah/Switzerland)

"Being there" was passive behaviour resulting from the provision of a familiar environment in which the guiding person was an anchor providing familiarity and security during the transition (Harman & O' Neill 1981, Anderson 2000, Winnicott 2004). In the current study both "being there" and support, as its more active counterpart, were based on mutual awareness resulting from sharing. Women defined support as a complement to their autonomy during pregnancy and childbirth (Chapter 8.4), although it had been described in various ways in the literature (McCourt 2003, Wheatley 2003). Support included help and advocacy and was most often received from maternity care providers, but also from family and relatives.

"They are there to.. you know, help the baby come out and check that you're well and that it is well. So, I suppose, I suppose, from my point of view, or my point of view is getting the sort of delivery, that you want. And getting the support that you need to achieve, you know, those aims. From the midwife."
(Jan/Scotland)

"I: And then you have, and then you have sought that yourself? Or did the midwife do it for you?
W: No, she had sought that, and she finally made a request. And then I have been to Amsterdam, for the blood test, let's put it like that. But the results were returned through her. Thus.. And I discussed that finally with her."
(Hannah/Netherlands)

"I: Well, it is quite difficult to combine, I think, because it is so logical, that a woman simply is involved in the work at a farm.
W: Yes. Exactly. But because my in- laws are also helping, I can reduce it a bit there."
(Barbara/Switzerland)

Mutual awareness as a requirement for support was highlighted in women's descriptions of the need for somebody to speak up for them (Chapter 8.4.1). Lynn in Scotland expected her independent midwife to speak up for her if she had to go into the hospital, while Nora relied on her partner:

"Getting, getting to the hospital in labour, you're not in a great, in a great state to, you know, to say what you want. Which is one of my midwife's roles as an advocate. To speak for you. So that your wishes are known beforehand. And, she would discuss them with you. And you'd get it transferred over to the hospital, whatever that, and you'd still get as far as possible what you'd like. Because I don't believe anyone could, can really speak for herself, when she is in labour. It is difficult to do that. A partner maybe could. But again they have got a more emotional tie to what is going on, with their partner. Somebody detached, who knows what you want and can discuss it with you."
(Lynn/Scotland)

"I take my partner in and he'll be someone, that, if I can't speak for myself. I'm sure he would, he would speak, so, there will be someone who knows my needs, or knows what my preferences are."
(Nora/Scotland)

So women were guided towards family responsibility. During guidance, women were cared for, while their responsibility was shared with the guiding person (Chapter 8.5) in an enabling environment (Chapter 10.4), as emphasised by Lynn in Scotland:

"I: So, it, it is about shared responsibility? Or support you being…

W: Support. Support. And individual responsibility. Or family responsibility. Cause I had my partner's full support. At having the birth at home and whatever. The hospital experience for my partner was, just alien, he was totally excluded. He wasn't part of the picture. And he didn't enjoy those at all. There was nothing he felt, that he could do either. It was, disempowering. For him. Where else he was able to, he doesn't really want to get involved in the nitty gritty, but he wants to be there and he wants to be of use. So, he was able to play his part in the way he wanted to play it when we were at home."

(Lynn/Scotland)

"Caring responsibility" therefore allowed "responsive caring", and offered women both the appropriate environment and content to enable them to grow. Through this attitude, a level of independent learning was achieved so that women could develop their own styles (Chapter 9.4.3) (Hartrick 1997, Strauss 2005). The end of this guidance was a separate property, which is described in the next section.

10.6 Releasing

Releasing was the flexible, dynamic process of ending the relationship between women and their care providers, in which women's autonomy was facilitated. Women closed their picture, felt confident and autonomous and took up family responsibility simultaneously (Chapter 9). Through their bond (Chapter 7), women received support from their own social environment (Chapter 9.4, 10.5). Although some postnatal studies described support from female relatives (George 2005), others highlighted women's isolation at home (Barclay et al. 1997, Frei 2005). Well-functioning social networks were mentioned most often in studies addressing non-Western cultures or disadvantaged populations (Long & Curry 1998, Leung et al. 2005). In the current study, however, many women in the Netherlands and Scotland, like Maren and Holly, also mentioned support from relatives:

" She (her sister) *just is a specialist. Let's put it like that. And like your family, it is just trust, where you all, really all, I think, say to. Like to my sister, well. Yes, if you are with such breasts, and all, yes... (..) And then your sister, who says then, oh,*

tomorrow it will be better. Yes."
(Maren/the Netherlands)

"Well, my first, well, they have always, my mum and dad, and my mother in law. They have looked after our kids, for me, to go back to work. I did not need to rely on, a child minder or anything. So that was really important to me."
(Holly/Scotland)

During *Releasing,* care providers gradually stepped back and this process had to be consciously shaped (Friedli-Nyffenegger 2005) in order to be effective for autonomous mothering. Women in all countries, however, mentioned dissatisfaction with either postnatal care stopping too early or too abruptly, strangers in postnatal care, or outstanding care needs. Only in the Netherlands was a releasing process formally provided as midwifery guidance continued until six weeks after birth when women had a final visit with their midwife (Chapter 9.4). An early or abrupt end of postnatal care was mentioned by several women having hospital care in Switzerland, and was noticed by Frei (2005). Although Swiss women had a legal right to have postnatal care at home (EDI 1996), they were hardly ever informed of this. The need for sharing however remained after they left the hospital, as Paola in Switzerland experienced.

"If care during pregnancy also that, means that, that one is also still a bit cared for if one has given birth, than that is for me a big desire. Very big. And I have to say, I was very good cared for by the counsellor for mothers and families. I just went there. But I had needed someone, who from the hospital onwards, maybe already in the hospital, came to one, several times, and, and also afterwards at home. Had given me tips, simply came to my home and had a coffee with me, had spoken about specific things with me, that I had needed. Also, I think, care, after you have been born, 14 days and also still afterwards, that is..."
(Paola/Switzerland)

Several women in the Netherlands and Scotland mentioned being cared for by an unknown care provider during the postnatal period. In this situation, as guidance lacked a base of mutual awareness (Chapter 10.5), closure and support were

inhibited. Both Maren in the Netherlands and Vanessa in Scotland had such an experience:

"With us, I just had given birth in the holiday period, and then we got a nurse. Of course the practice could not do anything about that, because they just had a shortage. That is just a pity, you just have, then I just really had the need to, to just, well, get rid of my egg for a moment, like after birth. (..) That, I missed that a bit, with our... Yes, then it went all awfully fast, the came to check, everything was okay. Well. (..) Goodbye, gone. And that I had liked to a bit, yes, for my feeling I had liked to have something more."

(Maren/Netherlands)

"Four different midwives during labour, and then different midwives doing the postnatal care. And then a health visitor I never met before. And I looked back on how I was feeling at that time and I probably was quite depressed, but, because I didn't know any of these people, yeah. I didn't really want, want to say. And I was actually trying, very hard, to, you know, to, to make a good show, that things were going fine, you know."

(Vanessa/Scotland)

Successful *Releasing* was therefore related to an effective, completed guiding process, which involved the appropriate timing of stepping back and the effective transfer of experience during the guiding process (Mayeroff 1971, Peplau 1988, Friedli-Nyffenegger 2005, Strauss 2005). Because of ineffective transfer of experience, some women did not feel confident enough to trust their own perception, as Heather in Scotland described:

"I was at the health visitors' every week, getting her weight, no matter, that I knew she was putting on weight, because I was breastfeeding her."

(Heather/Scotland)

As gynaecological care in Switzerland continued as a part of regular healthcare, and midwives were often informal care providers, some relationships continued as described by Yvonne in Switzerland:

"Those three things, together, yes really actually, the sharing together with, with my partner, my children, with the midwife and with the gynaecologist. That, that is for me the circle. That, that still stands now after, it is one and a half years ago almost. That, that stands for me very.., yes."

(Yvonne/Switzerland)

Problems of continuing dependency in maternity care were not addressed in literature, although they had been highlighted in the areas of geriatrics and rehabilitation (Schafer 2001, Cooke 2003, Turner-Stokes et al. 2006). In the current study, problems in *Releasing* were found in Scotland and Switzerland particularly, although care in all countries aimed for interdependent autonomy of the women in their own environment. During the process of guidance, *Being experienced* and *Providing a familiar environment* were the main factors affecting the mode and the degree to which experiences were shared, and subsequent effective *Embarking on motherhood* (Chapter 9.2).

10.7 Conclusion

Mothering the mother emerged as a core category from the data and provided an answer to the research question of "What is effective content of routine care during pregnancy in the Netherlands, Scotland and Switzerland from women's points of view?" (Chapter 4.1.2). This core category mirrored women's needs during their own personal development of becoming a mother as described in Chapters Six to Nine. *Mothering the mother* was characterised as both caring responsibility and responsive caring.

Caring responsibility required persons *Being experienced* in the area of becoming a mother, who had gone through the experience themselves (for example mothers) or had seen others' experiences (healthcare providers as culturally defined experts). Consequently, *Providing a familiar environment* gave women a feeling of security

and the freedom to make the transition in their own way. In establishing this environment, attitudes and philosophies about pregnancy and childbirth, both in institutions and experts, played a central role. Expertise and a familiar environment both enabled *Guiding into family responsibility*, which involved mutual sharing of experiences with the experts and their continuous presence, support and care. Guidance was a dynamic interactive process with an individually varying content which ended with *Releasing* as the experts stepped back. Inappropriate expertise and the lack of a familiar environment led to ineffective *Guiding into family responsibility*, complicating the releasing process. These complications differed between both countries and individuals.

CHAPTER ELEVEN- REFLEXIVE VIEW AND CONCLUDING DISCUSSION

11.1 Introduction

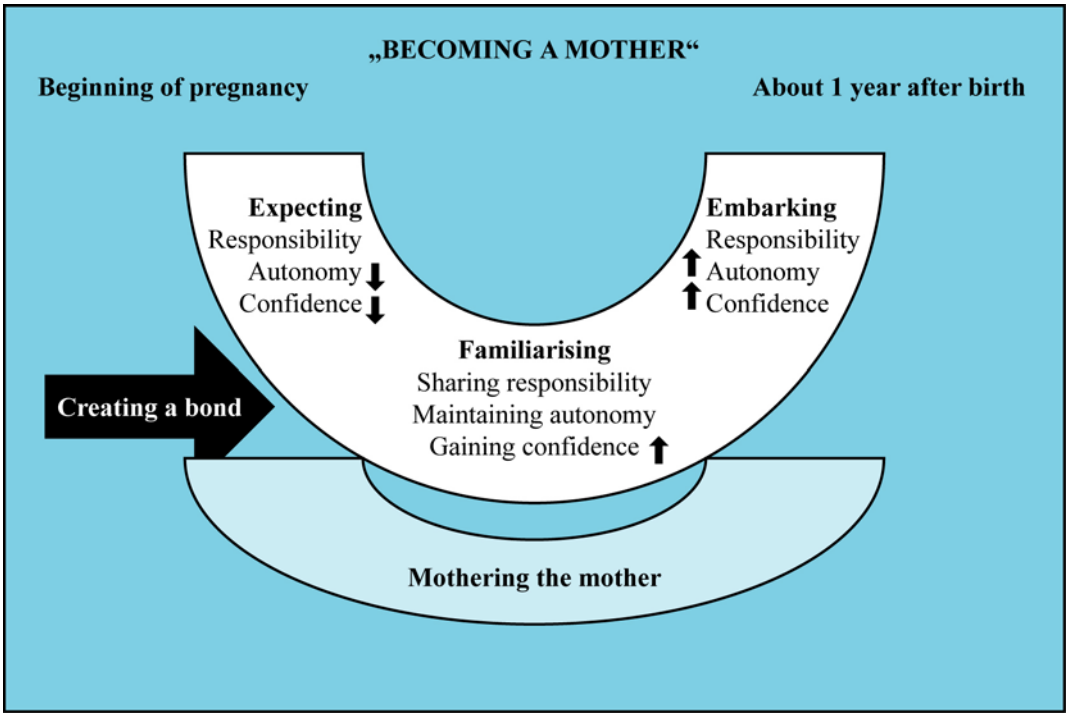
The aim of this grounded theory study was to investigate effective content of routine care during pregnancy from women's points of view in three European countries. Based on these views, a single theoretical model was constructed representing their experiences of becoming a mother as well as needs for content of care as a result. This model contributes to the body of midwifery knowledge, in which it highlights the complexity of provision of content of care during pregnancy, including the influences of the relationship between woman and care provider and environmental factors. Whereas grounded theory allowed a dialectical construction of this model through induction as well as deduction, the interpretation of data from the perspective of the researcher with her own background is inevitably subjective. In this concluding chapter the main findings of the study are discussed, while critically reflecting on their meaning for maternity care practice and further development, and a reflexive view on the research process is taken.

The data for the present study were obtained through interviews with healthy women either in different stages of uncomplicated pregnancies or within a year after giving birth. Informal data, such as documentation material and conversations with care providers, contributed to theoretical sensitivity (Chapter 4.12.2), which supported interpretation of the data. The settings were three West- and Central- European countries with different maternity care systems; the Netherlands, Scotland and Switzerland. All countries had a common aim to improve health by reducing morbidity and mortality, but these countries differed in regard to philosophies of maternity care provision, care providers and the template and content of antenatal care visits (Chapter 2.4). Despite these differences, one single model of care in pregnancy emerged during the current study, which will be presented and discussed in the next sections.

11.2 The model of effective content of care during pregnancy that women constructed

The aim of the current study was achieved through the emergence of one single cross-national model of *Mothering the mother*, which represented effective content of care during pregnancy from women's points of view for all three countries involved (Figure 11.1). Its components were also found in mentoring models, and are discussed in more detail in Chapter 11.2.3.

Figure 11.1 The model that emerged from the study



The new knowledge from this research shows that firstly, the model does not relate to a particular group of care providers, but rather to a philosophy of care in pregnancy; secondly, emphasises the importance of continuity of care as it relates to the complete experience of *Becoming a mother* up to a year after birth (Figure 11.1), and is repeated in subsequent pregnancies; thirdly, highlights the development of women's awareness of family responsibility as aim of provision of content of care; and fourthly, indicates the essential requirement of a bond between care provider and woman in order to achieve provision of effective content of care by linking

Mothering the mother to *Becoming a mother.* Previous studies have emphasised diversity of content, not related to the characteristics of the maternity care systems.

Although elements in common with existing antenatal care were found, women's perspectives on content of care differed from what was currently offered and shed a new light on its effectiveness. Provision of effective content of care involved working with women in order to achieve optimal outcomes for mother and child. Therefore evaluation of effective care during pregnancy should involve both the effects of its medical components and the characteristics of the maternity care system, in particular, the style of guiding (and educating) women. In this section, a synthesis of this model and its main components will be presented and discussed.

11.2.1 Becoming a mother

Becoming a mother was a continuous process of personal development towards family responsibility lasting from the beginning of pregnancy to about one year after birth. This process consisted of three stages of changes in women's scenarios ("pictures") with regard to their confidence, autonomy and responsibility (Figure 11.1). Women themselves changed physically and emotionally, as did their views on their existing world. While their social environment was involved, this process showed parallels with a socialisation or acculturation process (Gudjons 2003). Most previous studies have addressed only part of this process. Linking some of the phenomena described in these studies to the complete process in the current study, led to a different perspective on their meanings. For instance "loss" in the early postnatal period was interpreted in a negative way by Barclay (1997), but appeared to be a normal phenomenon within the context of women's transformative process in the current study.

Responsibility for themselves and their babies was core to women's process of becoming a mother and the main reason they considered seeking antenatal care. During the thinking process of creating their picture, they assessed their own experience and resources (including knowledge and competence), as well as the experience they needed from experienced others. Based on this, they then decided whether or not to seek antenatal care based on expected (health) gain, which was influenced by their previous experiences with care and other responsibilities. In

contrast to suggestions in some previous European studies, women in the current study who took up antenatal care late in pregnancy or sought alternative forms of care were not irresponsibly neglecting guidelines, but exercising their responsibility as an individual person in a different way.

The process of transforming pictures of expectations (*Expecting)*, through opening and closing during making the experience *(Familiarising)*, into pictures of women's own experiences of becoming a mother *(Embarking)*, resembled an experiential learning process (Chapter 8.2). Experiential learning in the current study involved first making the (physical) experience, which then generated questions, and thus the need for information. Women sought personal information from antenatal care that assisted in developing their pictures, as to close each picture ("experience") and have peace of mind. Effective information was therefore experience-and time-related. This way of learning shed new perspectives on the provision of antenatal and postnatal education as well as the creation of a bond with the baby, while highlighting that current antenatal care focuses rather on raising expectations than guiding the experience (Chapter 11.2.3). Firstly, although women appreciated antenatal classes for provision of information, they emphasised the requirement of individual timely guidance timely matching their own unique experience. Secondly, whereas antenatal preparation for the postnatal period provided information for women's picture of expectation, it was not guiding their actual experience, and therefore women stressed the need for postnatal classes. Thirdly, in line with experiential learning, the bond with the baby started with physically experiencing its movements and women sought information to match this experience. Many women in the current study had seen the baby on ultrasound before feeling it move, and integrated this information in their picture of expectation. Although the current study did not further investigate the consequences of a reversal of the experiential learning process in pregnancy, it gives rise to several questions with regard to the effects on women's relationship with their own body, the mother-child bond and health, and coping with loss.

Whereas few researchers had mentioned women's reconstruction of a picture in the postnatal period, the central role of this "awareness" process, and thus the picture, in defining the beginning and end of women's personal development while becoming a

mother, had not been previously described. The role of this picture affects several aspects of provision of care during pregnancy and childbirth, such as risk prevention and making choices, as well as research and evaluation. In the current study, the construction of the picture was a continuous process of opening and closing, which provided women with the confidence to go forward and a basis for autonomous mothering and family responsibility. A focus on risk prevention and complications during care emphasised opening rather than closing their pictures, and thus worrying and anxieties increased. In such case, women prioritised restoring their picture and thus their confidence, and they focused on physical survival while depending on their care provider. Further consequences for women's process, including the development of autonomy and family responsibility, but were not followed up within the framework of the current study.

Confident women had particular preferences as a result of the closed picture and could decide in an autonomous way. Less confident women made choices that closed their picture and increased their confidence, in which they often relied on their care providers. Differences in confidence affected women's mode of decision making and choices for care. As a consequence, this could influence participation in trials, where women with low confidence levels might agree to participate and be randomised more frequently than confident women. These differences might influence the validity of maternity care studies.

Final closure of the picture took place at the end of the process, leaving the experience behind to embark on the journey of motherhood. Although women changed their minds during the process due to the adaptation of the picture, they had a fixed, but detailed view about their experience after its closure. Judgement of the experience involved comparing the experience with the expectation (Chapter 9.2). As a result of reconciliation and setting priorities during the last stage of *Becoming a mother*, women were usually satisfied with this experience. Following the comparison with their expectations, they could define what they missed. These findings indicate that evaluation of care during pregnancy and childbirth firstly, should take place only after closure of the picture, and secondly, should not ask for women's satisfaction, but for what they missed. Concurrently, *Becoming a mother* provides a basis for development of indicators for evaluation of this process by describing aims, process and outcomes from women's points of view.

11.2.2 Creating a bond

The component of *Creating a bond* linked the process of *Becoming a mother* to *Mothering the mother*, and was an essential condition for provision of effective content of care. Knowing and trusting are well-known features of healthcare relationships, synchronisation with women's pictures (including views and values) and its resulting intimacy and orientation for care has been mentioned infrequently, and might be a particular aspect of care in normal pregnancy (Chapter 7.2). Female mentoring models were often characterised by psychosocial and emotional support in a sharing relationship, whereas male mentoring emphasised acceptance of hierarchy and task activity (Williams-Nicholson 2003). In the current study, synchronising had to lead to being on the women's side in being there for another. Bergum and Dossetor (2005) described such participation as "relational engagement". This led to the creation of an ethical environment, in which mutual reflection and reflexion allowed the client to construct their own (embodied) knowledge. Likewise in the current study, synchronising was the key process to making the experience together, through which a close match between expectation and experience could be achieved.

The core role of *Creating a bond* in achieving effective content of care was particularly highlighted by cross-national comparisons. These led to new perspectives on the results of existing evaluation of content of maternity care and an extension of knowledge about women's views both for the UK as well as internationally. Previous English studies on women's views emphasised reassurance and providing information and did not address the influence of the relationship with the care provider. Cross-national comparison in this study indicated the central role of this relationship. Personal information provided through this relationship was more important than general information and led to reassurance. Scottish studies of women's views had mentioned the importance of issues such as choice, decision-making and control, whereas these were mentioned less in the other countries. Although national backgrounds could account for these phenomena, the findings of the current study pointed in the direction of the absence of a continuous relationship. During antenatal care, women created pictures of expectations and built up a feeling of confidence. As these pictures were often not realised during childbirth and postnatal period through fragmentation of the system, women built up their own

confidence through informing themselves in a subsequent pregnancy in order to gain control. Swiss women, on the other hand, often perceived themselves being in an unequal relationship with a medical expert (care provider), in which little sharing and transfer of experience took place. They received little information, but did not look for it themselves as they perceived this information as expert knowledge. To feel confident and autonomous, Swiss women therefore often relied more on support from the relationship with their care provider than on their own information.

11.2.3 Mothering the mother

Mothering the mother described effective content of care during pregnancy, childbirth and the postnatal period, and resembled a mentoring model. It consisted of four components involving an experienced mothering person, who provided of a familiar environment, which led to a flexible mentoring process of a less experienced mother-to-be during her journey towards becoming a mother, and came to an end as women took up family responsibility on their own and the guiding person gradually stepped back. Based on these characteristics, *Mothering the mother* resembled an holistic (or social) than a medical model of care (Walsh 2007). While women in the current study experienced these contrasts in the attitudes of care providers, they viewed the medical components as part of a larger holistic model of care.

In line with a mentoring model, women in the current study sought for care providers with experiential knowledge in becoming a mother ("seen it, done it"), in contrast to current definitions of experts in the national maternity care systems. Being closest to their worlds, (Chapter 11.2.2), women initially turned to experts in their direct environment. However they experienced the tension between nationally defined experts and the experts needed to complement their own experience, which meant that they either had to conform to guidelines or search for alternatives. While such tensions were also found in studies addressing use of antenatal care by ethnic minority groups (Chapter 5.4.2), increased involvement of women’s environment, particularly involvement of elder women, had been advised. Such considerations had not been mentioned in previous European studies on care in pregnancy.

New knowledge particularly centred on the provision of a familiar (“human or social”) environment, which was enabled by the care provider’s holistic philosophy of care. Although in the current study, this environment was a consequence of the bond ("micro-level"), it was influenced by the philosophy of the health care system as well as national politics ("macro-level") (Chapter 10.4). Through synchronisation of views and values (Chapter 11.2.2), a safe and nurturing environment was shaped, in which the development of women’s pictures was central (Chapter 11.2.1). Mentoring in the current study was based on “awareness work”, which involved "raising”, and to be effective, "sharing” and "closing” women’s awareness. Thus content of care was flexible and individual, and medical components of antenatal care were instruments to assist this process. Additionally, shared awareness was also the basis for an effective passive (“being an anchor”) and active presence (“support”) of the “mothering” person. The mere presence of this person caused an increase in women’s feelings of confidence, autonomy and responsibility, which positively affected their well-being and development. Provision of effective content of care in pregnancy thus has to account for the central role of shared awareness.

The findings of the current study have shown that provision and evaluation of effective content of care in pregnancy has to include characteristics of the maternity care system, as these are requirements for effective guidance. A division between *Being experienced* and the *Provision of a familiar environment* negatively influenced effective provision of care. The model of *Mothering the mother* thus emphasises the need for one mentor to be the lead professional and to be responsible for all aspects of maternity care. Although a secondary care provider could perform some particular, complementary tasks, she was not able to provide the same familiar environment as the primary care provider as this was linked to the earlier establishment of a bond. The role of current care providers is defined by the healthcare systems, and the care providers themselves can only be as effective as their roles and responsibilities allows them to be within this system. Improving provision of effective content has implications for content as well as organisation of care in pregnancy, which will be addressed in the next chapter.

11.3 Improving provision of effective content of routine care during pregnancy

Provision of effective content of antenatal care could be much improved through using the conceptual model of *Mothering the mother* as a basis for designing women's care. Although this model is a general representation of the multiple views of the women in this study, its components account for the individuality of this care. Its generation from data grounded in women's everyday reality account for the relevance of the model for maternity care practice. *Mothering the mother* represents an ideal model of care in pregnancy from women's points of view (Chapter 4.7.4). In this section, this model is compared with existing models of content of routine antenatal care, and suggestions for its implementation are made.

Mothering the mother is most likely to be implemented as a mentoring model of maternity care. Although historically, midwifery in Europe was based on such an experiential model, this disappeared as a consequence of the professionalisation of midwifery (Spitzer 1999). Mentoring models were re-introduced in maternity care as a basis for the work of doulas as well as for comprehensive programmes aiming for improvement of antenatal care amongst socially disadvantaged groups in the USA (Chapter 10.2). Experienced mothers are trained to be a mentor to a mentee in their own community. The mentor that the women bond with is not the lead care provider responsible for medical care, which affects the process of guidance and thus the provision of effective content (Chapter 11.2.3). Organisational models with a relationship with one lead care provider with professional rather than mothering experience are therefore more adequate to implement *Mothering the mother*.

The models of antenatal care that women in the current study attended involved a traditional model and a revised, reduced model (Chapter 2.4.4). Both models focused on the number of visits and medical content such as blood pressure measuring, which applied only to the guidance process in *Mothering the mother* (Chapter 10.5, 11.2.3). Risk assessment is the focus of both existing models, whereas the model of *Mothering the mother* emphasises health promotion through guiding and supporting women's process of becoming a mother (Chapter 11.2.1). Due to the reduced emphasis on risk while providing equal medical effectiveness and safety (Chapter 3.4.6), *Mothering the mother* fitted the revised rather than the traditional model. As the reduction of visits led to an increase in women's worries

and anxieties (Chapter 3.4.6), women's care should be improved by supplementary provision of non-medical visits for reassurance and support, which has also been suggested by others (Chapter 3.4.6). An additional increase of communication with women about tests and their results could support sharing and participation in their care, as well as to close their picture as result of it (Chapter 11.2.3). Ultimately to achieve provision of effective content, both models need to be embedded in organisational models based on process-orientation through continuity instead of fragmentation of maternity care.

Organisational models of maternity care based on one-to-one relationships with a care provider and continuity of care involved independent practice, case-load midwifery and the partnership model. Effective content in the current study was most often provided in a community-based model of independent practice. Access to care was uncomplicated, and women were offered a choice of care provider as well as a philosophy of care. Although this model was by GPs as well as gynaecologists and midwives, women's options were restricted by the maternity care system in some countries (Chapter 7.5.1). These restrictions related to differences in professional autonomy in regard to routine antenatal care within the system, access to the hospitals as well as in payments for the same services. While all these care providers could provide continuity of guidance, these conditions should be improved to provide women equal choice of care provider, particularly in regard to midwives. A sharing relationship was more likely to be developed with a midwife or a GP than a gynaecologist due to attitude and difference in expertise (Chapter 11.2.2). Continuous guidance as part of *Mothering the mother* was limited by the large caseload of women cared for as well as the personal availability of the single care provider in independent practice.

These limitations are reduced in caseload midwifery and the midwifery partnership model, which both aim at providing a continuity of the relationship between each woman and her midwife throughout the whole process of becoming a mother (Pairman 2000, Fontein 2006). Although caseload midwives normally work in a team (Sandall et al 2001, Fontein 2006), each midwife organises her own caseload of about 40 women per year, which is lower than those of Dutch midwives in independent practice (about 100 women per year). As a midwifery partner, who is

also known to the woman, backs up the primary midwife, availability is increased. Involvement of women's environment is enhanced by additional, informal meetings. Another possibility for women of involving and creating their environment is the model of Centering Pregnancy, which focuses on group antenatal care (Moos 2006). Additionally, the midwifery partnership model focuses on the equal status of partnership between woman and care provider. *Mothering the mother* however showed an unequal partnership between an experienced mentor and a less experienced mentee (Chapter 11.2.3). Sharing of power and control much relied on the care provider's attitude and philosophy of care. Although both models could be provided in an independent as well as health care centre or hospital practice, for provision of effective content autonomy of the care provider and a choice of care provider for women should be secured. An example of such a model of care is the NHS Community Midwifery Model (van der Kooy 2005). Although caseload midwifery increased satisfaction of women and midwives, main questions concerning their practicability involve costs and resources. The feasibility of these models was not subject to the current study, evaluations showed that continuity of midwifery care reduces interventions, and one-to-one midwifery can be provided at the same or low cost (Beake et al 2001, Sandall et al 2001).

In conclusion, provision of effective content of antenatal care could be realised in a community-based, caseload model of care with a reduced frequency of medical visits and content and supplementary non-medical visits. The model does not relate to a particular group of care providers, but rather to a holistic philosophy of care in pregnancy. Due to this philosophy and holistic approach to care, such a model is likely to be delivered by a midwife working in a small team, although it could also be provided by a GP or a gynaecologist. Involvement of women's environment could be enhanced by additional, informal meetings or participative programmes like Centering Pregnancy.

11.4 Limitations of the study

Information about the limitations and strengths allows the reader to judge the credibility, accuracy and truth of the findings and their transferability (Chapter 4.13). The limitations that were met in this study involved four aspects: methodology and method; research participants; findings; and trustworthiness.

11.4.1 Methodology and method

Methodological limitations that were encountered in the current study due to its cross-national character were caused by factors which could be divided in two categories: organisational and linguistic.

Existing literature described grounded theory research as a process in which data collection and analysis took place simultaneously (Chapter 4.2). Due to limitations time and finances, the number of women per unit had to be planned in advance (Chapter 4.6) and not all interviews could be analysed before the next interview took place in each of the settings. The latter issue was resolved with the assistance of field notes for data collection (4.8.1). Constant comparison analysis therefore could not always be done within one unit, but the principles of grounded theory were adhered to.

The different languages did not limit organisation and data collection as they were part of the researcher's prerequisites, but they did influence data analysis. The interpretation of the different languages involved “line-by-line” or even “word-by-word” analysis (Chapter 4.8.4). Labelling and coding took place in the original language, and translation of the concepts at a category level, which resulted in meta-concepts (Chapter 4.3). Theoretical sampling was richer as the meaning of these similarities and differences for the women could be explored and verified in the interviews in each of the countries involved. Although this process did not affect the construction of the categories, the intensity of this process influenced the number of women and the amount of time needed to achieve the objectives, and thus saturation of the categories (Chapter 4.8.8). Using meta-concepts (Chapter 4.3), however, increased the credibility of qualitative cross-national interpretation as meanings were validated before being integrated.

11.4.2 Research participants

Although demographic data were collected in this study (Chapter 4.6.1), nothing about the personality of the women was known, other than what was learnt during the interviews. According to Glaser (1978) anything relevant will emerge in the study. Two issues emerged concerning women's personalities: their way of learning

and cultural background. Further study revealed that there was no need to explore these in depth.

Women in the samples of this study were not selected based on any existing (national or international) risk selection lists for pregnancy (Treffers 1993) The definition for sampling involved healthy women attending routine antenatal care as defined in each of the countries (Chapter 4.4, 4.6). Women appeared to have their own way of defining risk, which was also found in a study on women's perceptions and management of chronic illness in pregnancy (Corbin 1987).

Access to the women differed between the countries, and was influenced both by the means of obtaining ethical approval and recruitment (Chapter 4.4, 4.6). The findings of the study were not affected by these differences.

11.4.3 The findings

The elements of the model that could be explored in more depth were national and cross-national variations in autonomy and control while becoming a mother, as well as throughout pregnancies (Chapter 11.2.2), and women's development of autonomy and family responsibility in complicated pregnancies (Chapter 11.2.1). As the current study focused on the research question (Chapter 4.1.2), these elements were not explored in any further depth.

11.4.4 Trustworthiness

Limitations to trustworthiness were experienced with regard to prolonged engagement and persistent observation of the field (Chapter 4.13.1). Although the researcher engaged in the study over a six-year period, the time and place for extensive engagement and observation in each of the countries involved in this study were limited.

This study aimed to reconstruct a representation of the multiple experiences of care during pregnancy of the women involved (Chapter 4.1.4). Therefore the women who had this experience were the appropriate experts to judge the credibility of the findings, although understanding might be difficult due to the theoretical abstraction

of the reconstruction (Chapter 4.13.1). Despite the increasing level of discussion of theoretical abstractions such as security and control, this understanding was found with women in the current study. Repeated interviewing of some informed participants may have contributed to this (Chapter 4.6.1). Women in each of the countries were also very interested in the results of the data from other interviews, and were surprised to recognise their own experience during cross-national verification of these results (Chapter 4.13.1). Thus the credibility and adequacy of the emerging theory was checked, while at the same time the collection of additional information was integrated. Next to this, critical challenging and questioning of the findings took place in regular meetings with both study supervisors (Chapter 4.13.1), but also in ongoing discussions with English, Dutch and Swiss health professionals and mothers (Chapter 4.7.1, 4.13). This information fed back on the findings and attitude during the research process, and helped to develop new thoughts as well as the next methodological steps.

11.5 Reflexive view of the research process

Reflexivity is an integral element of grounded theory both to the process of data collection as well as analysis, and is guided by memo-writing (Chapter 4.11.1). Although at the beginning of this research process, I realised that it was essential to use myself as a research instrument, I was little aware of the challenges met during its progress, and consequently, the amount of reflexive moments involved. Whereas in Chapter 4.12.1, a personal account of my previous experiences was presented, possible effects of these experiences and personal values on the research process and the data collected are reflected on in this section.

The current study was initially planned in two stages (MPhil/PhD stage) (Chapter 4.1.1, Appendix 3). During the first stage, I aimed to develop a woman-centred model of care during pregnancy, which would be tested against current European guidelines on antenatal care. Whereas this stage started as originally planned, the cross-national context posed a challenge, which could not be met by rigidly following the grounded theory approach as described in the textbooks (Glaser 1978, Glaser 1992, Strauss & Corbin 1998, Glaser & Strauss 1999). Organisational challenges included balancing my available time and finances with the aims of the study. One particular problem that arose was the determination of an effective

number of participants per unit. This was influenced by considerations regarding consistency of meaning in each of the languages involved (Chapter 4.3).

An important question during the first stage of the study was whether there was a country-specific model of antenatal care, or one cross-national model for all countries (Chapter 4.1.1). As analysis of the first three national units following open sampling showed a divergence of the data, I assumed the existence of multiple models (Chapter 4.8.1, Appendix 4). The transfer from Master to Doctoral stage was characterised by new emerging concepts, and saturation of categories was not achieved at the first stage. As the aims of the first stage had not been achieved, they were pursued during the second stage of the study in accordance with the grounded approach. During further theoretical sampling, I found indicators for a common model as both the woman-care provider relationship (Chapter 7) and the "picture" emerged as common categories for all the countries involved.

Although I had actively involved in research before entering this study (Roumen & Luyben 1991, Luyben & Gross 2001), several challenges were met. These challenges were caused by being new to grounded theory and cross-national research (Chapter 4.12.1), and involved:

Finding access and sampling (Chapter 4.4, 4.6) - Finding access to the women, first of all needed knowledge of how the healthcare systems in each country was constructed. I had experiential knowledge of the Dutch and Swiss healthcare system, but access for research purposes presented a different perspective. Written documentation provided me with knowledge about the Scottish system, but I needed guidance from insiders with experience to get in touch with the right people. An in-depth orientation for healthcare system was necessary. This included meeting people who knew how it was in real life "behind the scenes".

Interviewing (Chapter 4.7.4) - As a midwife, listening and questioning had been part of my everyday activities. This study deepened and extended my knowledge of interviewing and of myself as an interviewer. During the interviews, I noticed the effect that our discussions had on women's awareness, indicating that interviewing was not just a harmless activity. Listening to the interview tapes and transcribing

them myself, taught me that I had intuitively asked the right questions. It also fed back to me how these questions were formulated and what the key words were for establishing familiarity during an interview. Interviewing women in this study was not only a case of knowing each of the languages, but there also appeared to be a cultural language of mothers.

Being a researcher as well as a professional (Chapter 4.12) - Although my role in the current study was as a researcher, it could not totally be separated from being a midwife. Firstly this role meant consciously balancing the provision of information, so that this would not interfere with women's care. A significant aspect of being a professional that I had underestimated was being a representative of a whole professional group. Being a representative applied both to women's positive as well as negative experiences (Chapter 4.5.3).

Coding and analysing (Chapter 4.8) - Having carried out quantitative research previously, including factor analysis (Roumen & Luyben 1991), provided me with some background knowledge of coding and analysing (Chapter 4.12.1), although I was a novice to the grounded theory approach. Through background knowledge regarding the origins of this approach (Chapter 4.2), I could relate this to my previous experiences, which helped me to start coding and analysing. More difficult was living in three linguistical worlds for analysis and interpretation (4.12.2), which led to my feeling a loss of home during the stage of open coding. Other supportive elements included discussing my steps in coding and analysing with my supervisors and other international researchers doing grounded theory.

Conceptualisation (Chapter 4.8) - Although I thought of myself as an analytical thinker, always looking for bigger concepts beyond what seems to be there, the complexity of the subject combined with the magnitude of the research area was overwhelming, and thus only just “under control”. Grounded theory was about waiting until such a concept emerged. This experience was quite a contrast to the deductive philosophy of research I had been using prior this study (Chapter 4.12.1), and my Director of Study repeatedly told me to “let it flow”. Once I developed a feeling for this flow, I noticed the emergence of things.

Writing (Chapter 5.2, 5.3) - I considered several ways of putting the results of the study onto paper. Strauss and Corbin (1998) mentioned the components of the story, but not how it should be written. Writing started with an overview of all the categories involved and how they related to each other which provided the structure for the results sections. The most difficult thing to do was deciding what data were needed for a good story line, and what should be left out. During the writing process, details were added through the memos and new questions that emerged, and some names of labels changed. The overview between chapters as well as for each of the single chapters was improved by using diagrams and graphs as well as the "Conclusion" section at the end of each result chapter.

Learning from women (Chapter 4.12.2) - In my previous practical, professional life as a midwife, I had had little opportunity to have the time to really listen to women's stories and relate women's histories to the care I gave. During this study, I learnt a lot about these histories and was amazed that so little time was provided for and spent in professional practice listening to them. I also learnt how important the philosophy of a health care system as well as an individual care provider was for the quality of women's experience of becoming a mother. I experienced the current study as if I was in another, sometimes hidden, culture, while learning about what it was like going and being there.

11.6 Implications for maternity care practice, policy and future research

The current study explored the provision of the effective content of routine care during pregnancy from women's perspectives in three European countries, in order to define requirements necessary for routine antenatal care programmes (Chapter 4.1.1). The new knowledge led to several implications for maternity care practice, policy and future research. Although the EPICOT framework (Brown et al. 2007) was used as a reference, as indicated by Greenhalgh (2007), limitations to its use were experienced due to the qualitative as well as cross-national character of the current study.

11.6.1 Implications for maternity care practice

Effective content of routine care during pregnancy can only be provided if it takes into account what is important to a mother and her baby. Following the suggestions made for improving provision of this content in Chapter 11.3, the implications of the current study for maternity care practice, including its evaluation and education, are as follows:

- In order to provide effective content of care during pregnancy as well as during childbirth and postnatal period, effective models of maternity care should be offered, consisting of a continuing partnership with an experienced lead care provider of women's choice (Chapter 11.3). Such models should be based on an holistic philosophy of care, and thus be orientated towards women's process of becoming a mother rather than medical activities. An exemplary model is caseload midwifery (Chapter 11.3). Information about the available options of models of care and care provider should be improved. In all countries involved in the current study, choice of models of care and care provider should be extended, in particular in Switzerland, more information about these options should be provided.

- Maternity care professionals in the countries involved in the current study should pay more attention to the effects of their attitude towards women, which reflect their philosophy of care (Chapter 11.2, 11.3). A caring, women-centred attitude particularly involves respect, being interested in the women and their worlds and being willing to listen. The development this attitude could be achieved by the use of role models with a holistic philosophy of care in education (mentors), in both theory and practice.

- Provision of content of routine antenatal care should focus on the provision of personal information and communication, as to facilitate women’s experience and increase their confidence (Chapter 11.2.3). This information should be realistic and objective information as to match the experience, and include learning about loss and how to cope with it (Chapter 8.4). The package of antenatal care should contain medical tests that assist this process and interventions that increase uncertainty and risks should be reduced. Additionally, complementary discussion

and explanation should be increased as to relate to women's experience, and thus help them to close their picture (Chapter 11.2.3)

- The timing and length and content of postnatal care should be improved in order to better fit women's process (Chapter 11.2.1), particularly in regard to current hospital care. Next to this, postnatal classes should be increased in all of the countries involved.

- The involvement of women's social environments in antenatal care should be improved in all the countries involved in the current study (Chapter 11.2.2). This involvement increased understanding and support during and after women's experience of becoming a mother, and prevented isolation in the postnatal period. Experienced mothers from the community could also play an important role in providing care during pregnancy, particularly for socially disadvantaged groups and areas (Chapter 11.3).

- Evaluation of the quality of maternity care should be take place at the end of women's process of becoming a mother, after closure of their picture (Chapter 11.2.1). Women should not be asked for their satisfaction, but for what they missed. Indicators of provision of effective content of care should account for women's process of becoming a mother, as described in the current study (Chapter 11.2.1). Evaluation methods should be chosen accordingly. Effective evaluation of maternity care should include views of women who do attend, do not attend and women visiting care providers outside the formal system (Chapter 11.2.2, 11.3), in order to increase representative findings.

11.6.2 Implications for policy

Improving provision of effective content of antenatal care also has implications for policies in regard to the organisation of maternity care services. These implications are:

- Provision of maternity care services should aim for continuity of care provider during pregnancy, childbirth and postnatal period (Chapter 11.3). This continuity of care was most often offered in the Dutch midwifery model, where other

provision of women-centred care was limited due to fragmentation of these services. Such fragmentation leads to a division of responsibilities and competencies, including the duplication of activities, and consequently an increase of health care costs. Rethinking of national and international maternity care services with a focus on women's process of becoming a mother is therefore indicated as to aim for the smallest fragmentation of these services.

- Maternity care should be provided in primary care models based in the community (Chapter 11.3). National trends towards centralisation of healthcare were noticed in the current study, which aimed for cost-efficiency and concentration of medical expertise. Community-based models improved women's access to maternity care services and choice care provider. Women's well-being and health were affected through the increased involvement of their environment as well as the likelihood of meeting their expectations through sharing familiar philosophies (Chapter 11.2.3). While focusing on the service users, a decentralised, community-based organisation of maternity care services is indicated.

- Professional autonomy of midwives and ability to practice the full scope of routine maternity care should be improved (Chapter 11.3). Particularly in Scotland and Switzerland, the autonomy of midwives in regard to antenatal care was limited, which made them secondary instead of primary care providers (Chapter 11.2.3). Improvement of autonomy involved alteration of their competencies, such as visiting, prescribing and referral rights, as well as their funding in comparison to medical practitioners. Women-centred care provision indicates a need for a review of the role and competencies of the midwife within the maternity care system.

11.6.3 Implications for future research

New knowledge from the current study raises new questions through a different perspective on "old problems", which could not all be answered within the framework of the study. The implications for future research therefore include:

- The model of *Mothering the mother* (Chapter 11.2) should be studied in other European countries and other international regions, in order to determine its generalisation and applicability to other groups or similar groups in other contexts

(Chapter 4.13.2). As the current study involved three European countries, a potential for international application could be assumed.

- A follow up of the current study should take place in order to develop indicators of provision of effective content of care in pregnancy based on women's process of becoming a mother (Chapter 11.2.3). Through the pursuit of grounded theory, this indicator set from women's points of view should be developed into an overall indicator set for effectiveness of routine antenatal care by the inclusion of the views of other stakeholders (for example GPs, midwives, gynaecologists, insurance companies, policy makers).

- The national and international variations and differences in autonomy and control before, during and after becoming a mother as well as throughout pregnancies (Chapter 11.4.3), should be studied in depth using an explorative research approach.

- Further study of the effects of visualisation of the baby before feeling it, should be carried out (Chapter 11.2.1). Comparative research should address the short- and long-term effects of becoming a mother between the process of experiential learning in pregnancy and getting to know the baby accordingly, versus the reverse process. This research should address several questions with regard to effects on women's relationships with their own bodies, the mother-baby bond, health and coping with loss.

- Further study should explore the effects of risks and complications in pregnancy, as well as medicalisation and the use of increased technology, on women's' process of becoming a mother, in particular on the development of autonomy and taking up family responsibility (Chapter 11.2.1). Whereas a longitudinal study should address the effects of risk and complications on long-term health of women, a cross-national study involving countries with different degrees of medical involvement in maternity care should investigate the effects of medicalisation.

11.7 Concluding statement

In the current study, the provision of effective content of routine care during pregnancy was investigated from women's points of view in three European countries with different systems of maternity care: the Netherlands; Scotland and Switzerland. A grounded theory approach led the research, in which language units were used to assess meaning. In contrast to previous studies highlighting the diversity of antenatal care in Europe, one woman-centred model (*Mothering the mother*) of effective content of care during pregnancy for all three countries emerged. Effective content of care consisted of an experienced mothering person and a familiar environment, leading to a flexible mentoring process of a less experienced mother-to-be during her journey towards becoming a mother. In order to be effective, this model had to be linked through a bond between woman and mothering person to one cross-national model of becoming a mother, which consisted of three stages of changes in women's pictures with regard to their confidence, autonomy and responsibility. Despite the emergence of one model of content of care, cross-national differences were noticed within subcategories.

This new knowledge resulted from the cross-national design of the study, but also from the inductive generation of the theory while focusing on women as clients, as well as on the content of care. While the cross-national design limited a rigid application of grounded theory, it was also the strength of the study in showing new or different aspects of care during pregnancy. Provision of effective content involved both experience in the field of becoming a mother, as well as a familiar, caring attitude in care providers and the maternity care system. This content could be realised in antenatal care models in which choice of care provider, woman-care provider partnership, involvement of women’s environment and continuity in the guidance process from early pregnancy to about a year after giving birth are central issues. Characteristics of these models, including the woman-provider relationship in particular, should be taken into account in the provision and evaluation of care that aims to be effective in improving the health and well-being of pregnant women and their families.

GLOSSARY

Autarky	(or autarchy) Self-governing, self-sufficient. Absolute sovereignity.
Deontology	Science of obligation or duty. An approach to ethics that focuses on the rightness or wrongness of actions themselves, as opposed to the rightness or wrongness of the consequences of those actions
EuroNatal	European Project studying the value of PMR as an indicator for the quality of maternity services
Eurostat	Statistical Office of the European Union
PERISTAT	Perinatal Statistics Project carried out within the European Union
Teleology	The philosophical study of design, purpose, directive principle, or finality in nature or human creations, focuses on the rightness of wrongness of the consequences of actions.

REFERENCES

Affonso, D.D. (1977) “”Missing pieces”: a study of postpartum feelings”, *Birth and the Family Journal*, Vol. 4, no. 4, pp. 159-164

Affonso, D.D., De, A.K., Korenbrot, C.C. & Mayberry, L.J. (1999) “Cognitive adaptation: a women's health perspective for reducing stress during childbearing”, *Journal of Women's Health and Gender-Based Medicine*, Vol. 8, no. 10, pp. 1285-1294

Ahern, K.J. (1999) “Ten tips for reflexive bracketing”, *Qualitative Health Research*, Vol. 9, pp. 407-411

Alexander, S. & Keirse M.J.N.C. (1989) “Formal risk scoring during pregnancy” In: Chalmers, I., Enkin, M. & Keirse, M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford, pp. 345-365

Alfirevic, Z. & Neilson, J.P. (1996) “Biophysical profile for fetal assessment in high risk pregnancies”, *Cochrane Database of Systematic Reviews*, Issue 1

Allen, R.E. (1990) *The Concise Oxford dictionary of current English*, Clarendon Press: Oxford.

Alran, S., Sibony, O., Oury, J.-F., Luton, D. & Blot, P. (2002) “Differences in management and results in term-delivery in nine European referral hospitals: descriptive study”, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 103, pp. 4-13

Amelink-Verburg, M.P., Richardus, J.H., Van der Pal-de Bruin, K.P., Graafmans, W., Mackenbach, J.P. & Verloove-Vanhorick, S.P. (2000) “Is het perinatale sterftecijfer een goede uitkomstmaat voor kwaliteit van zorg?” *Tijdschrift voor Verloskundigen*, Vol. 25, no. 11, pp. 738-744

Ammerman, P.A., McLaughlin, G.W. & Brozosky, P.V. (1999) *Assessing the effect of programs designed to enhance student success*, AIR 1999 Annual Forum Paper [online]. Available from: http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/10/76/8c.pdf [Accessed 25th February 2007]

Anderson, T. (2000) "Feeling safe enough to let go: the relationship between a woman and her midwife during the second stage of labour" In: Kirkham, M. *The midwife-mother relationship*, Palgrave: Hampshire, pp. 92-119

Anderson, E.M. & Shannon, A.L. (1988) "Toward a conceptualization of mentoring", *Journal of Teacher Education*, Vol. 39, no 1, pp. 38-42

Areskog, B., Uddenberg, N. & Kjessler, B. (1981) "Fear of childbirth in late pregnancy", *Gynecologic and Obstetric Investigation*, Vol. 12, pp. 262-266

Arizmendi, T.G. & Affonso, D.D. (1987) "Stressful events related to pregnancy and postpartum", *Journal of Psychosomatic Research*, Vol. 31, no. 6, pp. 743-756

Armellini, C.J. (2003) "Sheltering: the perception of women on the trajectory of childbearing" (Portuguese), Abstract Medline, *Revista Gaucha de Enfermagem*, Vol. 24, no. 3, pp. 305-15.

Armstrong, S. (2006) ""The only time I ever wanted to be a guy was on the slopes". Interview with Felicity Huffman", *British Airways High Life*, May, pp. 58-62

Ayerle, G., Kethler, U., Krapp, C. & Lohmann, S. (2005) "Which components are important aspects of well-being in pregnancy? An empirical panorama view", *MIDIRS Midwifery Digest*, Vol. 15, no. 2, pp. 187-194

Ayers, A &, Pickering, A.D. (2005) "Women's expectations and experience of birth", *Psychology and Health*, Vol. 20, no. 1, pp.79-92

Babchuck, W.A. (1997) “Glaser or Strauss? Grounded theory and adult education”, *Midwest Research-to-Practice Conference in Adult, Continuing and Community Education* [online] 15-17 October, 1997, East Lansing. Available from: http://www.anrecs.msu.edu/research/gradpr96.htm [Accessed 26th June 2002]

Backman, K. & Kyngäs, H.A. (1999) “Challenges of the grounded theory approach to a novice researcher”, *Nursing and Health Sciences*, Vol. 1, pp. 147-153

Bailes, A. & Jackson, M.E. (2000) “Shared responsibility in home birth practice: collaborating with clients”, *Journal of Midwifery and Women's Health*, Vol. 45, no. 6, pp. 537-543

Barclay, L., Donovan, J. & Genovese, A. (1996) “Men's experiences during their partner's first pregnancy: a grounded theory analysis”, *Australian Journal of Advanced Nursing*, Vol. 13, no. 3, pp. 12-24

Barclay, L., Rogan, F., Schmied, V. & Wyllie, A. (1997) “Becoming a mother- an analysis of women's experience of early motherhood”, *Journal of Advanced Nursing*, Vol. 25, no. 4, pp. 719-728

Barlow, C.A. & Cairns, K.V. (1997) “Mothering as a psychological experience: a grounded theory exploration”, *Canadian Journal of Counselling*, Vol 31, no. 3, pp. 232-237

Barnes, D.M. (1996) “An analysis of the grounded theory method and the concept of culture”, *Qualitative Health Research*, Vol. 6, no. 3, pp. 429-441.

Beake, S., McCourt, C., Page, L. (2001) *Evaluation of one-to-one midwifery: second cohort study*, Thames Valley University: London

Beck, C.T. (1999) “Available instruments for research on prenatal attachment and adaptation to pregnancy”, *MCN: The American Journal of Maternal/Child Nursing*, Vol. 24, no. 1, pp. 25-32

Beck, C.T. (2002) “Postpartum depression: a meta-synthesis”, *Qualitative Health Research*, Vol. 12, no. 4, pp. 453-472

Belenky, M.F., Clinchy, B.M., Goldberger, N.R. & Tarule, J.M. (1997) *Women's ways of knowing*, Basic Books: New York

Belsky, J. & Kelly, J. (1994) *The transition to parenthood: how a first child changes a marriage: why some couples grow closer and others apart: based on a landmark study*, Delacorte Press: New York

Bender, D.E., Harbour, C., Thorp, J. & Morris, P. (2001) “Tell me what you mean by “Si”: perceptions of quality of prenatal care among immigrant Latina women”, *Qualitative Health Research*, Vol. 11, no. 6, pp. 780-794

Benjafaar, S. & Ramakrishnan, R. (1996) “Modelling, measurement and evaluation of sequencing flexibility in manufacturing systems”, *International Journal of Production Research*, Vol. 34, no. 5, pp. 1195-1220

Benner, P. (1994) *Stufen zur Pflegekompetenz. From novice to expert*, Verlag Hans Huber: Bern

Bensel, J. (2005) “Der Uebergang zur Elternschaft in westlichen und traditionalen Kulturen”, *Die Hebamme*, Vol. 18, pp. 212-219

Benzies, K.M. & Allen, M.N. (2001) “Symbolic interaction as a theoretical perspective for multiple method research”, *Journal of Advanced Nursing*, Vol. 33, no. 4, pp. 541-547

Berg, C.J. & McDermott, J.C. (1996) “Fundal height measurement” In: Wildschut, H.J., Weiner, C.P., Peters, T.J. (eds) *When to screen in obstetrics and gynaecology*, Saunders: London, pp. 133-144

Berg, M. (2005) “A midwifery model of care for childbearing women at high risk: genuine caring in caring for the genuine”, *Journal of Perinatal Education*, Vol. 14,

no. 1, pp. 9-21

Berg, M., Lundgren, I., Hermansson, E. & Wahlberg, V. (1996) “Women's experience of the encounter with the midwife during birth”, *Midwifery*, Vol. 12, pp. 11-15

Berg, M. & Terstad, A. (2006) “Swedish women's experiences of doula support during childbirth”, *Midwifery*, Vol. 22, pp. 330-338

Bergsjö, P. & Villar, J. (1997) “Scientific basis for the content of routine antenatal care. II. Power to eliminate or alleviate adverse newborn outcomes; some special conditions and examinations”, *Acta Obstetricia et Gynecologica Scandinavica*, Vol. 76, no. 1, pp.15-25.

Bergum, V. (1989) *Woman to mother. A transformation*, Bergin & Garvey Publishers: Granby

Bergum, V. (1997) *A child on her mind*, Bergin & Garvey: Westport

Bergum, V, Dossetor, J. (2005) *Relational ethics. The full meaning of respect*, University Publishing Group: Hagerstown

Beuselink, I. (2000) “Internationalisation and doctoral study: some reflections on cross-cultural case study research” In: Pole, C.J. & Burgess, R.G. (eds) *Cross-cultural case study. Studies in qualitative methodology*, Volume 6, Elsevier Science Inc: New York, pp. 83-94

Bidmead, C. & Cowley, S. (2005) “A concept analysis of partnership with clients”, *Community Practitioner*, Vol. 78, no. 6, pp. 203-208

Biley, F.C. (1992) “Some determinants that effect patient participation in decision-making about nursing care”, *Journal of Advanced Nursing*, Vol. 17, pp. 414-421

Binstock, M.A. & Wolde-Tsadik, G. (1995) “Impact of reduced visit frequency, focused visits and continuity of care”, *Journal of Reproductive Medicine*, Vol. 40, pp. 507- 512

Blondel, B. (1986) “Antenatal care in the countries of the European Community over the last twenty years” In: Kaminsky, M., Bréart, G., Buekens, P., Huisjes, H.J., McIlwaine, G. & Selbmann H.-K. (eds) *Perinatal care delivery systems. Description and evaluation in European Community countries*, Oxford University Press: Oxford, pp. 3-15

Blondel, B., Pusch, D. & Schmidt, E. (1985) “Some characteristics of antenatal care in 13 European countries”, *British Journal of Obstetrics and Gynaecology*, Vol. 92, pp. 565-568

Blumer, H. (1998) *Symbolic interactionism. Perspective and method*, Renewed, University of California Press: Berkeley

Boddy, J. (1992) “Interpersonal perspectives of health and illness” In: Boddy, J. & Rice, V. (eds) *Health: perspectives and practices*, The Dunmore Press: Palmerston North

Boncham, M.A. & Blacksmith, J.A. (2006) “The voices of older women in a disadvantaged community: issues of health and social capital”, *Social Science and Medicine*, Vol. 62, no. 2, pp. 269-279

Bondas, T. (2002) “Finnish women's experiences of antenatal care”, *Midwifery*, Vol. 18, pp. 61-71

Boufoy-Bastick, B. (2003) *Academic attainments and cultural values*, Lincom Europa GmbH: München

Bowling, A. (2005) *Measuring health. A review of quality of life measurement scales*, 3rd ed., Open University Press: Maidenhead

Bradley, F., Wiles, R., Kinmonth, A.L., Mant, D. & Gantley, M. (1999) "Development and evaluation of complex interventions in health services research: case study of the Southampton heart integrated care project (SHIP)", *British Medical Journal*, Vol 318, pp. 711-715

Brazelton, T.B. & Cramer, B.G. (1990) *The earliest relationship. Parents, infants and the drama of early attachment*, Da Capo Press: Cambridge

Brazelton, T.B. (1995) "Working with families. Opportunities for early interventions", *Pediatric Clinics of North America*, Vol. 42, no.1, pp. 1-9

Bréart, G., Barros, H., Wagener, Y. & Prati, S. (2003) "Characteristics of the childbearing population in Europe", *European Journal of Obstetrics & Gynaecology and Reproductive Biology*, Vol. 111, pp. S45-S52

Brezinka, C. (1997) *Schwangerschaft in Österreich. Medizin, Kostenrechnung und Sozialgesetz-gebung in der Schwangerenvorsorge, Geburt und Karenzzeit*, Hartung-Gorre Verlag: Konstanz

Brezinka, C. (1998). *Schwangerschaft und Geburt in den Niederlanden. Organisation, Kostenrechnung und medizinische Qualitätskontrolle*, Hartung-Gorre Verlag: Konstanz

Brislin, R.W., Lonner, W.J. & Thorndike, R.M. (1973) *Cross-cultural research methods. Comparative studies in behavioural science*, John Wiley & Sons: New York

Broadfoot, P. (2000) "Interviewing in a cross-cultural context: some issues for comparative research" In: Pole, C.J. & Burgess, R.G. (eds) *Cross- cultural case study. Studies in qualitative methodology*, Volume 6, Elsevier Science Inc: New York

Brown, M.A. & Olshansky, E. (1998) "Becoming a primary care nurse practitioner: challenges of the initial year of practice", *Nurse Practitioner*, Vol. 23, no. 7, pp. 46,

52, 55-56

Brown, P., Brunnhuber, K., Chaldikou, K., Chalmers, I., Clarke, M., Fenton, M., Forbes, C., Glanville, J., Hicks, N.J., Moody, J., Twaddle, S., Timimi, H. & Young, P. (2007) “How to formulate research recommendations”, *British Medical Journal*, Vol. 333, no. 7572, pp. 804-806

Bryar, R.M. (1995) *Theory for midwifery practice*, Palgrave: Basingstoke

Büchi, S., Cignacco, E., Lüthi, D. & Spirig, R. (2006) “Bedürfnisse und Erwartungen von tamilischen Frauen in der Schwangerenvorsorge eines Schweizerischen Universitätsspital”, *Pflege*, Vol 19, pp. 295-302

Bull, B.P. (1959) “The historical development of clinical therapeutical trials”, *Journal of Chronic Diseases*, Vol. 10, pp. 218-243

Bullock, C.B. & Pridham, K.F. (1988) “Sources of confidence and uncertainty and perceptions of problem-solving competence”, *Journal of Advanced Nursing*, Vol. 13, pp. 321-329

Butler, N.R. & Bonham, D. (1963) *Perinatal mortality*, E.W. Livingstone: Edinburgh

Butter, I. (1986) “The role of women’s attitude in obstetric care” In: Kaminsky, M., Bréart, G., Buekens, P., Huisjes, H.J., McIlwaine, G. & Selbmann H.-K. (eds) *Perinatal care delivery systems. Description and evaluation in European Community countries*, Oxford University Press: Oxford, pp. 77- 89

Caines, J., Stone-Farrugia, S. & Macouley, L. (2001) “Doulas - mothering the mother”, *Essence: Newsletter of the Nursing Mothers' Association of Austrialia*, Vol. 37, no. 2, pp. 20-21

Callaghan, L., Jones, J. & Leonard, L. (2001) “Evaluation of a childbirth and parenting education service”, *Birth Issues*, Vol. 10, no. 2, pp. 41- 49

Canella, B.L. (2005) “Maternal- fetal attachment: an integrative review”, *Journal of Advanced Nursing*, Vol. 50, no. 1, pp. 60-68

Carlson, N.S. & Lowe, N.K. (2006) “Centering pregnancy: a new approach in prenatal care”, *MCN: the American Journal of Maternal and Child Nursing*, Vol. 31, no. 4, pp. 218-223

Carolan, M. (2005) “”Doing it properly”: the experience of first mothering over 35 years”, *Health Care for Women International*, Vol. 26, no. 9, pp. 764-787

Carpenter, D.R. (2003a) “Grounded theory as method” In: Streubert Speziale, H.J. & Carpenter, D.R. (eds) *Qualitative research in nursing. Advancing the human imperative*, 3rd ed., Lippincott Williams & Wilkins: Philadelphia, pp. 107-122

Carpenter, D.R. (2003b) “Ethical considerations in qualitative research” In: Streubert Speziale, H.J. & Carpenter, D.R. (eds) *Qualitative research in nursing. Advancing the human imperative*, 3rd ed., Lippincott Williams & Wilkins: Philadelphia, pp. 311-322.

Cartwright, A. (1979) *The dignity of labour*, Tavistock: London

Chalker, S. & Weiner, E.S.C. (2003) *Oxford dictionary of English Grammar*, Oxford University Press: Oxford

Chalmers, I. (1989) “Evaluating the effects of care during pregnancy and childbirth” In: Chalmers, I., Enkin, M. & Keirse, M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford, pp 3-38

Chalmers, I., Enkin, M. & Keirse, M.J.N.C. (1989) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford

Charmaz, K. (1995) “Grounded theory” In: Smith, J.A., Harré R. & Van Langenhove, L. (eds), *Rethinking methods in psychology*, Sage Publications: London, pp. 27-49

Charmaz, K. (2000) “Grounded theory. Objectivist and constructivist methods” In: Denzin, N.K. & Lincoln, Y. (eds) *Handbook of Qualitative Research*, 2nd ed., Sage Publications: Thousand Oaks, pp. 509-535

Charmaz, K. (2002) “Qualitative interviewing and grounded theory analysis” In: Gubrium, J.F. & Holstein, J.A. (eds) *Handbook of Interview Research*, Sage Publications: Thousand Oaks, pp. 675-694.

Chenitz, W.C. (1986) “The informal interview” In: Chenitz, W.C. & Swanson, J.M. (eds) *From practice to grounded theory*, Addison-Wesley Publishing Company: Menlo Park, pp. 79-90

Chesler, N.C. & Chesler, M.A. (2002) “Gender-informed mentoring strategies for women engineering scholars: on establishing a caring community”, *Journal of Engineering Education*, Vol. 91, no. 1, pp. 49-51.

Cheung, N.F. (2002) “Choice and control as experienced by Chinese and Scottish childbearing women in Scotland”, *Midwifery*, Vol. 18, pp. 200-213

Christians, C.G. (2000) “Ethics and politics in qualitative research” In: Denzin, N.K., Lincoln, Y. (eds) *Handbook of Qualitative Research*, 2nd ed., Sage Publications: Thousand Oaks, pp. 133-155

Churchill Livingstone (1989) *Churchill's Illustrated Medical Dictionary* Churchill Livingstone: New York

Clement, S., Sikorski, J., Wilson, J., Das, S. & Smeeton, N. (1996) “Women's satisfaction with the traditional and reduced antenatal visit schedules”, *Midwifery*, Vol. 12, pp. 120- 128

Clement, S., Candy, B., Sikorski, J., Wilson, J., Das, S. & Smeeton, N. (1999) "Does reducing the frequency of routine antenatal care visits have long term effects? Follow up of participants in a randomised controlled trial", *British Journal of Obstetrics and Gynaecology*, Vol. 106, no. 4, pp. 367-370

Cochrane, A (1989) "Foreword" In: Chalmers I., Enkin M. & Keirse M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford

Cochrane, A (1999) *Effectiveness and efficiency. Random reflections on health services*, Reprint, Royal Society of Medicine Press Ltd: London

Coffman, S. & Ray, M.A. (1999) "Mutual intentionality: a theory of support processes in pregnant African American women", *Qualitative Health Research*, Vol. 9, no. 4, pp. 479-492.

Collopy, B., Boyle P. & Jennings, B. (1991) "New directions in nursing home ethics", *The Hastings Center Report*, Vol. 21, no. 2, pp. 1-15

Condon, J.T. (1985) "The parental- fetal relationship: a comparison of male and female expectant parents", *Journal of Psychosomatic Obstetrics and Gynaecology*, Vol. 4, pp. 271-284

Condon, J.T. (1993) "The assessment of antenatal emotional attachment: development of a questionnaire instrument", *British Journal of Medical Psychology*, Vol. 66, no. pt 2, pp. 167-183

Condon, J.T., Boyce, P. & Corkindale, C.J. (2004) "The First-Time Fathers Study. A prospective study of mental health and wellbeing of men during the transition to parenthood", *Australian and New Zealand Journal of Psychiatry*, Vol. 38, pp. 56-64

Cooke, J.F. (2003) "The recovery phase in Guillain-Barré syndrome: moving from dependency to independence", *Rehabilitation Nursing*, Vol. 28, no. 4, pp. 105-108

Corbin, J. (1986) “Coding, writing memos and diagramming” In: Chenitz, W.C. & Swanson, J.M. (eds) *From practice to grounded theory*, Addison- Wesley Publishing Company: Menlo Park, pp. 102-120

Corbin, J. M. (1987) “Women's perceptions and management of a pregnancy complicated by chronic illness”, *Health Care for Women International*, Vol. 8, no. 5-6, pp. 317-337

Coverstone, C.R., Franklin, C.Y. & Patterson Davis, J. (2003) “Seeking safe passage: Argentine women's perceptions of routine prenatal care”, *Health Care for Women International*, Vol. 25, pp. 620-635.

Cresswell, J.W. (1998) *Qualitative inquiry and research design. Choosing among five traditions*, Sage Publications: Thousand Oaks

Cronin, C. (2003) “First-time mothers - identifying their needs, perceptions and experiences”, *Journal of Clinical Nursing*, Vol. 12, no. 5, pp. 260-267

Crooks, D.L. (2001) “The importance of symbolic interaction in grounded theory research on women's health”, *Health Care for Women International*, Vol. 22, pp. 11-27.

Crotty, M. (2005) *The foundations of social research. Meaning and perspective in the research process*, Sage Publications: London

Cutcliffe, J.R. (2000) “Methodological issues in grounded theory”, *Journal of Advanced Nursing*, Vol. 31, no. 6, pp. 1476-1484

Dancy, R.B. & Fullerton, J.T. (1995) “Preparing couples for home birth”, *Journal of Nurse-Midwifery*, Vol. 40, no. 6, pp. 522-527

Daniels, M. & Hill, A.B. (1952) “Chemotherapy of pulmonary tuberculosis in young adults: an analysis of the combined results of three medical research council trials”, *British Medical Journal*, Vol. 1, pp.1162- 1168

Davies, S., Laker, S. & Ellis, L. (1997) “Promoting autonomy and independence for older people within nursing practice: a literature review”, *Journal of Advanced Nursing*, Vol. 26, pp. 408-417

Delvaux, T., Buekens, P., & the Study group on barriers and incentives to prenatal care in Europe (1999) “Disparity in prenatal care in Europe”, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 83, pp. 185-190

Denzin, N.K. (1989) *Interpretive interactionism*, Sage Publications: Newbury Park

Denzin, N.K. & Lincoln, Y. (2000) “Introduction: The discipline and practice of qualitative research”, In: Denzin, N.K. & Lincoln, Y. (eds) *Handbook of Qualitative Research*, 2nd ed., Sage Publications: Thousand Oaks, pp. 1-29

Denzin, N.K. & Lincoln, Y.S. (2003) “Introduction. The discipline and practice of qualitative research” In: Denzin, N.K., Lincoln, Y.S. (eds) *Collecting and interpreting qualitative materials*, 2nd ed., Sage Publications: Thousand Oaks, pp. 1-45

Department of Health (DoH) (1993) *Changing Childbirth. Part I: Report of the expert maternity group*, HMSO: Norwich

Devane, D., Begley, C.M., Clarke, M., Horey, D. & O'Boyle, C. (2007) “Evaluating maternity care: a core set of outcome measures”, *Birth*, Vol. 34, no. 2, pp. 164-172

De Vries, R.G. (1989) “Care givers in pregnancy and childbirth” In: Chalmers, I., Enkin, M. & Keirse, M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford, pp. 143-161

Dey, I. (1999) *Grounding grounded theory. Guidelines for qualitative inquiry*, Academic Press: San Diego

Donner, A., Piaggio, G., Villar, J., Pinol, A., al-Mazrou, Y., Ba'aqeel, H., Bakketeig, L., Belizan, J.M., Berendes, H., Carroli, G., Farnot, U. & Lumbiganon, P. (1998)

"Methodological considerations in the design of the WHO Antenatal Care Randomised Controlled Trial", *Paediatric and Perinatal Epidemiology*, Vol. 12, no. Suppl 2, pp. 59-74

Dorland, W.A.N. (2000). *Dorland's Illustrated Medical Dictionary,* 29th ed., Saunders: Philadelphia

Downe S., McCourt C. (2004) "Ways of seeing", In: Downe, S. (ed), *Normal childbirth. Evidence and Debate,* Churchill Livingstone: London, pp. 3-24

Dudenhausen, J.W. (1986) "Medical evaluation of prenatal care programmes for women at low risk" In: Kaminski, M., Bréart, G., Buekens, P., Huisjes, H., McIlwaine, G. & Selbmann, H.-K. (eds) *Perinatal care delivery systems. Description and evaluation in European Community countries*, Oxford University Press: Oxford, pp.52- 58

Dudenredaktion (2001) *Duden Herkunftswörterbuch. Etymologie der deutschen Sprache,* 3. völlig neu und überarbeitete Auflage, Dudenverlag: Mannheim

Dudenredaktion (2002) *Duden. Das Bedeutungswörterbuch*, Dudenverlag: Mannheim

Dunn, P.M. & McIlwaine, G. (1996) *Perinatal audit*, The Panthenon Publishing Group: London

Edwards, N. (1998) "Getting to know midwives", *MIDIRS Midwifery Digest*, Vol. 8, no. 2, pp. 160-163

Eidgenossischen Departement des Inneren (EDI) (1964), *Bundesgesetz über die Krankenversicherung*, Eidgenossischen Departement des Inneren: Bern

Eidgenossischen Departement des Inneren (EDI) (1996) *Krankenversicherungs-gesetz. Kapitel 4. Besondere Leistungen bei Mutterschaft. Verordnung des EDI über Leistungen in der obligatorischen Krankenpflegeversicherung SR 832.112.31*

[online] Eidgenossischen Departement des Inneren: Bern. Available from: http://www.admin.ch/ch/d/sr/832_112_31/a13.html [Accessed 9th June 2007]

Eidgenossische Kommission für Frauenfragen (1999) *Frauen-Macht-Geschichte. Zur Geschichte der Gleichstellung in der Schweiz 1848- 2000* [online] Eidgenossische Kommission für Frauenfragen: Bern. Available from: http://www.frauenkommission.ch/geschichte_chronik_d.htm#download [Accessed 10th January 2007]

Ekele, B.A. (2003) "Letter to the editor. The WHO antenatal care trial: the defects", *Acta Obstetrica et Gynecologica Scandinavica*, Vol. 82, pp. 1063-1064

Elias, N. (2003) *Die Gesellschaft der Individuen*, Suhrkamp Taschenverlag: Frankfurt am Main

Encyclopedia Britannica (1986) *Webster's third new international dictionary of the English language, unabridged, with seven language dictionary*, Encyclopedia Brittanica: Chicago

Endress, M. (2002) *Vertrauen*, transcript Verlag: Bielefeld

Enkin, M. (1982) "Antenatal classes", In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 151-162

Enkin, M. (1998) "Foreword", In: Jadad, A. *Randomised controlled trials*, BMJ Books: London, pp. vii- x

Enkin, M. (2006) "Beyond evidence: the complexity of maternity care", *Birth*, Vol. 33, no. 4, pp.265- 269

Enkin, M. & Chalmers, I. (1982a) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London

Enkin, M. & Chalmers, I. (1982b) “Effectiveness and satisfaction in antenatal care”, In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 266-290

Enkin, M., Keirse, M.J.N.C., Neilson, J., Crowther, C., Duley, L., Hodnett, E. & Hofmeyr, J. (2000) *A guide to effective care in pregnancy and childbirth*, 3rd ed., Oxford University Press: Oxford

Enkin, M., Keirse, M.J.N.C., Neilson, J., Crowther, C., Duley, L., Hodnett, E. & Hofmeyr, G.J. (2001) “Effective care in pregnancy and childbirth: a synopsis”, *Birth*, Vol. 28, no. 1, pp.41-51

Enstrom, R.E., Grote, M.D. & Brill, M.H. (2000) “Display performance assessment and certification at NIDL”, *Proceedings of SPIE - The International Society for Optical Engineering*,Vol. 4022, pp. 358- 368

Eraut, M. (1998) “Concepts of competence”, *Journal of Interprofessional Care*, Vol. 12, no. 2, pp. 127-139

Eraut, M. (2002) *Developing professional knowledge and competence*, Reprinted, Falmer Press: London

Erikson, E. H. (1966) *Identität und Lebenszyklus*, Suhrkamp Verlag: Frankfurt am Main

Eskes, T.K.A.B., Krakers, R.Ph.M. & Evers, J.L.H. (1980) “Preventable aspects of perinatal mortality; consequences for education and refresher courses”, *Nederlands Tijdschrift voor Geneeskunde*, Vol. 124, pp. 1811-1814

European Union (1992) *Council Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (tenth individual Directive within the meaning of Article 16 (1) of*

Directive 89/391/EEC) [online]. Available from: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0085:EN:HTML [Accessed 13th September 2007]

Fenwick, J., Barclay, L. & Schmied, V. (2001) “”Chatting”: an important tool in facilitating mothering in neonatal nurseries”, *Journal of Advanced Nursing*, Vol. 33, no. 5, pp. 583-593

Fenwick, N. (2003) “Continuity of carer: the experience of midwives” In: Clement, S. (eds) *Psychological perspectives on pregnancy and childbirth*, Churchill Livingstone: Edinburgh, pp. 61-80

Fertman, C.I., Schlesinger, J., Fichter, C., Taresevich, S., Zhang, X. & Wald, H. (2000) *Student assistance program in Pennsylvania. Evaluation Report* [online] Pennsylvania State Commission on Crime and Delinquency: Harrisburg. Available from: http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/23/ba/33.pdf [Accessed 25th February 2007]

Field, P.A. (1990) “Effectiveness and efficacy of antenatal care”, *Midwifery*, Vol. 6, pp. 215-223

Fink, A., Yano, E.M. & Goya, D. (1992) “Prenatal programs: what the literature reveals”, *Obstetrics and Gynecology*, Vol. 80, no. 5, pp. 867- 872

Finnbogadottir, H., Svalenius, E.C. & Persson, E.K. (2003) “Expectant first- time fathers' experiences of pregnancy”, *Midwifery*, Vol. 19, pp. 96-105

Fiscella, K. (1995) “Does prenatal care improve birth outcomes? A critical review” *Obstetrics and Gynecology*, Vol. 85, no. 3, pp. 468- 479

Fleming, V.E.M. (1998a) “Women-with-women-with-women: a model of interdependence”, *Midwifery*, Vol. 14, pp. 137-143

Fleming, V.E.M. (1998b) “Women and midwives in partnership: a problematic relationship?”, *Journal of Advanced Nursing*, Vol. 27, no. 1, pp. 8-14

Fontana, A. & Frey, J.H. (2000) “The interview. From structured questions to negotiated text” In: Denzin, N.K. & Lincoln, Y. (eds) *Handbook of Qualitative Research*, 2nd ed., Sage Publications: Thousand Oaks, pp. 645-672

Fontein, Y. (2007) “Making the transition from "being delivered" to "giving birth". A literature review and reflection for introducing the UK model of “caseload midwifery” to the Netherlands”, *MIDIRS Midwifery Digest*, Vol. 17, no. 1, pp. 35-40(6)

Fosbinder, D. (1994) “Patient perceptions of nursing care: an emerging theory of interpersonal competence”, *Journal of Advanced Nursing*, Vol. 20, pp. 1085-1093

Fowler, H.W. & Burchfield, R.W. (1998) *The new Fowler's modern English usage*, Oxford University Press: London

Fraser, C.M. (1983) “Selected perinatal procedures. Scientific basis for use and psycho-social effects. A literature review”, *Acta Obstetrica et Gynecologica Scandinavia*, Vol. Supplement 117, pp. 1-39

Frei, I.A. (2005) *First-time mothers' experiences and the perception of nurses' provision of postnatal care*, Doctoral thesis, University of Edinburgh: Edinburgh

Frei, I.A. (2006) “Erfahrungen erstgebärender Frauen auf einer Wochenbettstation”, *Die Hebamme*, Vol. 19, pp. 110-115

Friedemann, M.L. (1996) *Familien-und umweltbezogene Pflege. Die Theorie des systemischen Gleichgewichts*, Verlag Hans Huber: Bern

Friedli-Nyffenegger, L. (2005) “Den Ablösungsprozess bewusst gestalten”, *Krankenpflege*, Vol. 8, pp. 20-21

Fullilove, M.T. (1996) “Psychiatric implications of displacement: contributions from the psychology of place”, *American Journal of Psychiatry*, Vol. 153, no. 12, pp. 1516-1523

Gagnon, A.J. & Sandall, J. (2007) “Individual or group antenatal education for childbirth or parenthood, or both”, *Cochrane Database of Systematic Reviews*, Issue 3

Garcia, J. (1982) “Women’s views on antenatal care” In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 81-91

Garcia, J., Bricker, L., Henderson, J., Martin, M.-A., Mugford, M., Nielson, J. & Roberts, T. (2002) “Women's views of pregnancy ultrasound: a systematic review”, *Birth*, Vol. 29, no. 4, pp. 225-205

Geissbühler, V. & Eberhard, J. (2002) “Fear of childbirth: a study of more than 8000 pregnant women”, *Journal of Psychosomatic Obstetrics and Gynecology*, Vol. 23, no. 4, pp. 229-235

Geister, Chr. (2004) "*Weil ich für meine Mutter verantwortlich bin". Der Uebergang von der Tochter zur pflegenden Tochter*, Verlag Hans Huber: Bern

General Register Office for Scotland (2005) *Annual review 2004* [online] Available from: http://gro-scotland.gov.uk/statistics/library/annreport/04annual-report/ [Accessed 11th January 2007]

Gennerich, C. (2000) *Vertrauen. Ein beziehungsanalytisches Modell- untersucht am Beispiel der Beziehung von Gemeindegliedern zu ihrem Pfarrer*, Verlag Hans Huber: Bern/Göttingen

George, L. (2005) “Lack of preparedness. Experiences of first-time mothers”, *MCN American Journal of Maternal Child Nursing*, Vol. 30, no. 4, pp. 251-255

Gilbert, T. (2005) “Impersonal trust and professional authority: exploring the dynamics”, *Journal of Advanced Nursing*, Vol. 49, no. 6, pp. 568- 577

Giles, W., Collins, J., Ong, F. & MacDonald, R. (1992) “Antenatal care of low risk obstetric patients by midwives. A randomised controlled trial”, *Medical Journal of Australia*, Vol. 157, pp. 158-161

Gilligan, C. (1993) *In a different voice*, Harvard University Press Cambridge

Glaser, B.G. (1978) *Theoretical Sensitivity. Advances in the Methodology of Grounded Theory*, Sociological Press: Mill Valley

Glaser, B.G. (1992) *Basics of Grounded Theory Analysis. Emergence vs. Forcing*, Sociological Press: Mill Valley

Glaser, B.G. & Strauss, A.L. (1965) *Awareness of dying*, Aldine Publishing Company: New York

Glaser, B.G. & Strauss, A.L. (1999) *The discovery of grounded theory: strategies for qualitative research*, Aldine de Gruyter: New York

Glezerman, M. (2006) “Five years to the term breech trial: The rise and fall of a randomized controlled trial”, *American Journal of Obstetrics and Gynaecology*, Vol. 194, pp. 20-25

Gonzi, A. (1994) “Competency based assessment in the professions in Australia”, *Assessment in education: principles, policy and practice*, Vol. 1, no. 1, pp. 27-44

Gordis, L., Kleinman, J.C., Klerman, L.V., Mullen, P.D. & Paneth, N. (1990) “Criteria for evaluating evidence regarding the effectiveness of prenatal interventions” In: Merkatz, I.R., Thompson, J.E., Mullen, P.D. & Goldenberg, R.L. (eds) *New perspectives on prenatal care*, Elsevier: New York, pp. 31-38

Goulding, C. (2002) *Grounded Theory. A practical guide for management, business and market researchers*, Sage Publications: London

Goulet, C., Bell, L., St-Cyr Tribble, D., Paul, D. & Lang, A. (1998) "A concept analysis of parent-infant attachment", *Journal of Advanced Nursing*, Vol. 28, no. 5, pp. 1071-1081

Graafmans, W.C., Richardus, J.H., MacFarlane, A., Rebagliato, M., Blondel, B., Verloove-Vanhorick, S.P. & Mackenbach, J.P. (2001) "Comparability of published perinatal mortality rates in Western Europe: the quantitative impact of differences in gestational age and birthweight criteria", *British Journal of Obstetrics and Gynaecology*, Vol. 108, pp. 1237-1245

Graham, H. & McKee, L. (1980) *The first months of motherhood - Summary report of a survey of women's experiences of pregnancy, childbirth and first six months after birth*, Health Education Council Monograph No. 3, Health Education Council: London

Graham, H. & Oakley, A. (1981) "Competing ideologies of reproduction. Medical and maternal perspectives on pregnancy" In: Roberts, H. (eds) *Women, health and reproduction*, Routhledge & Kegan Paul: London, pp. 69-74

Grant, A. & Mohide, P. (1982) "Screening and diagnostic tests in antenatal care" In: Enkin, M. & Chalmers. I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 22- 59

Grant, A., Chalmers, I. & Enkin, M. (1982) "Physical interventions intended to prolong pregnancy and increase fetal growth" In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 198-208

Grant, W. (1931-75) *Scottish National Dictionary, designed partly on regional lines and partly on historical principles, and containing all the Scottish words known to*

be in use or to have been in use since c. 1700, The Scottish National Dictionary Association Ltd: Edinburgh

Grbich, C. (1999) *Qualitative research in health: an introduction*, Sage Publications: London

Green, J.M. (1999) "Commentary: What is this thing called "control"?", *Birth*, Vol. 26, no. 1, pp. 51-52

Green, J.M. & Baston, H.A. (2003) "Feeling in control during labor: concepts, correlates, and consequences", *Birth*, Vol. 30, no. 4, pp. 235- 247

Green, J.M., Coupland V.A. & Kitzinger, J.V. (1990) "Expectations, experiences, and psychological outcomes of childbirth: a prospective study of 825 women", *Birth*, Vol. 17, no. 1, pp. 15-24

Green, J.M., Coupland, V.A. & Kitzinger, J.V. (1998) *Great expectations. A prospective study of women's expectations and experiences of childbirth*, Books for Midwives: Cheshire

Green, J.M., Renfrew, M.J. & Curtis, P. (2000) "Continuity of carer: What matters to women? A review of evidence", *Midwifery*, Vol. 16, pp. 186-196

Greenhalgh, T. (2007) "The pie or the slice?", *British Medical Journal*, Vol. 333, no. 7574, pp. 917

Gregory, K. & Davidson, D. (1999) "Prenatal care: who needs it and why?", *Clinical Obstetrics and Gynaecology*, Vol. 42, no. 4, pp. 725-736

Guba, E. (1981) "Criteria for assessing the thrustworthiness of naturalist inquiries", *Educational Communications and Technology Journal*, Vol. 29, pp. 75-91

Gudjons, H. (2003) *Pädagogisches Grundwissen*, 8. Auflage, Verlag Julius Klinkhardt: Bad Heilbrunn

Haertsch, M., Campbell, E. & Sanson- Fisher, R. (1999) "What is recommended for healthy pregnant women? A comparison of seven clinical practice guidelines documents?", *Birth*, Vol. 26, no. 1, pp. 24-30

Hakulinen, T. & Paunonen, M. (1995) "The family dynamics of childbearing and childrearing families", *Journal of Advanced Nursing*, Vol. 22, pp. 830-834

Hall, E., Wulff, T., White, M. & Wilson, M. (1994) "Family dynamics during the third trimester of pregnancy in Denmark", *International Journal Nursing Studies*, Vol. 31, no. 1, pp. 87-95

Hall, M. (1992) "The content and process of antenatal care", In: Chamberlain, G. & Zander, L. (eds) *Pregnancy care in the 1990s: proceedings of a symposium held at the Royal Society of Medicine*, Parthenon: Carnforth, pp. 121-126

Hall, M. & Chng, P. (1982) "Antenatal care in practice" In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 60-68

Hall, M., Macintyre, S. & Porter, M. (1985) *Antenatal care assessed: a case study of an innovation in Aberdeen*, The University Press: Aberdeen

Hall, S.M. & Holloway, I.M. (1998) "Staying in control: women's experiences of labour in water", *Midwifery*, Vol. 14, pp. 30-36

Hall, W.A. & Carty, E.M. (1993) "Managing the early discharge experience: taking control", *Journal of Advanced Nursing*, Vol. 18, pp. 574-582

Hallsdorsdottir, S. & Hamrin, E. (1997) "Caring and uncaring encounters within nursing and health care from the cancer patient's perspective", *Cancer Nursing*, Vol.

20, no. 2, pp. 120-128

Hallsdorsdottir, S. & Karlsdottir, S.I. (1996) “Empowerment or discouragement: caring and uncaring encounters during childbirth”, *Health Care for Women International*, Vol. 17, no. 4, pp. 361-379

Hallgren, A., Kihlgren, M., Forslin, L. & Norberg, A. (1999) “Swedish fathers' involvement in and experiences of childbirth preparation and childbirth”, *Midwifery*, Vol. 15, pp. 6-15

Handler, A., Rosenberg, D., Raube, K. & Lyons, S. (2003) “Satisfaction and use of prenatal care: their relationship among African-American women in a large managed care organization”, *Birth*, Vol. 30, no. 1, pp. 23-30

Hanks, P. (1979) *Collins dictionary of the English language*, Collins: London

Hannah, M.E., Hannah, W.J., Hewson, S.A., Hodnett, E.D., Saigal, S. & Willan, A.R. (2000) “Planned cesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. Term Breech Trial Collobarative Group”, *Lancet*, Vol. 356, no. 9239, pp. 1375-1383

Harman, R.L. & O'Neill, C. (1981) “Neuro Linguistic Programming for counselors”, *The Personal and Guidance Journal*, Vol. 59, no. 7, pp. 449-453

Harris, T. (2002) “The use of qualitative research in midwifery practice: a grounded theory study entitled “Midwifery practice in the third stage of labour””, *International Confederation of Midwives' 26th Triennial Congress*, 14-18 April, 2002, Vienna.

Harrison, M., Kushner, K.E., Benzies, K., Rempel, G. & Kimak, C. (2003) “Women's satisfaction with their involvement in health care decisions during high-risk pregnancy”, *Birth*, Vol. 30, pp. 109-115

Hart, M.M. (1981) *Becoming a mother: motherhood from the woman's perspective*, Doctoral thesis, The Pennsylvania State University

Hartrick, G.A. (1997) "Women who are mothers: the experience of defining self", *Health Care for Women International*, Vol. 18, no. 3, pp. 263-277

Hatem, M., Hodnett, E.D., Devane, D., Fraser, W.D, Sandall, J. & Soltani, H. (2004) "Midwifery-led versus other models of care delivery for childbearing women", *Cochrane Database of Systematic Reviews*, Issue 1.

Hauck, Y.L. & Irurita, V.F. (2002) "Constructing compatibility: managing breast-feeding and weaning from the mother's perspective", *Qualitative Health Research*, Vol. 12, no. 7, pp. 897-914

Hawkins, J.W., Aber, C.S., Cannan, A., Coppinger, C.M. & Rafferty, K.O. (1998) "Women's reported self-care behaviors during pregnancy", *Health Care for Women International*, Vol. 19, pp. 529-538

Heaman, M., Beaton, J., Gupton, A. & Sloan, J. (1992) "A comparison of childbirth expectations in high-risk and low-risk pregnant women", *Clinical Nursing Research*, Vol. 1, pp. 252-265

Hebammenpraxis Zürcher Weinland (2003) *Schwangerschafskontrollen. Flussplan*, Hebammenpraxis Zürcher Weinland: Andelfingen

Helman, C.G. (2007) "Culture, Health and Illness", 5th ed., Hodder Arnold: London

Hemminki, E. (1982) "Effects of routine haematic and vitamin administration in pregnancy" In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 114- 121

Hemminki, E., Blondel, B. & the Study Group on Barriers and Incentives to Prenatal care in Europe (2001) "Antenatal care in Europe; varying ways of providing high-

coverage services", *European Journal of Obstetrics & Gynaecology and Reproductive Biology*, Vol. 94, pp. 145- 148

Heringa, M. (1998) *Computer-ondersteunde screening in de prenatale zorg* (Computer-aided screening in antenatal care), Doctoral thesis, University of Groningen, Dijkhuizen Van Zanten bv: Groningen

Heringa, M. & Huisjes, H.J. (1988a) "Prenatal screening: current policies in the EC countries", *European Journal of Obstetrics & Gynaecology and Reproductive Biology*, Vol. 28, no. Suppl, pp. 7-52

Heringa, M.P. & Huisjes, H.J. (1988b) "Antenatal care; current practice in debate", *British Journal of Obstetrics and Gynaecology*, Vol. 95, pp. 836-840

Heuvelmann, M. (1999) *Auf dem Weg zur Abschaffung der weiblichen Mutterschaft? Deutsch-sprachige akademische Gynäkologie 1920 bis 1930*, Mabuse-Verlag Wissenschaft 46, Mabuse-Verlag: Frankfurt am Main

Hickey, G. (1997) "The use of literature in grounded theory", *NT Research*, Vol. 2, no. 5, pp. 371-378

Hicks, C. (1998) "The randomised controlled trial: a critique", *Nurse Researcher*, Vol. 6, no. 1, pp. 19-32

Higgins, P.G. & Woods, P.J. (1999) "Reasons, health behaviors, and outcomes of no prenatal care: research that changed practice", *Health Care for Women in International*, Vol. 20, no. 2, pp. 127-136

Hill, A.B. (1952) "The clinical trial", *New England Journal of Medicine*, Vol. 47, pp. 113-119

Hindley, J. (2005) "Having a baby in Balsall Health: women's experiences and views of continuity and discontinuity of midwifery care in the mother- midwife relationship. A review of the findings from a report of a research project

commissioned by “Including women””, *MIDIRS Midwifery Digest*, Vol. 15, no. Supplement 2, pp. S35-S46

Ho, I. & Holroyd, E. (2002) “Chinese women's perceptions of the effectiveness of antenatal education in the preparation for the motherhood”, *Journal of Advanced Nursing*, Vol. 38, no.1, pp. 74-85

Hodnett, E.D. (2000) “Continuity of caregivers for care during pregnancy and childbirth”, *Cochrane Database of Systematic Reviews*, Issue 1

Holdsworth, C. & Morgan, D. (2005) *Transitions in context: leaving home, independence and adulthood*, Open University Press: Maidenhead

Holzgreve, W. & Hösli, I. (2003) *Hausbuch/Geburtshilfe und Schwanger-schaftsmedizin/19.08.03/Weisung 2.043*, Universitätsfrauenspital: Basel

Houston, H.R. & Venkatesh, A. (1996) “The health care consumption pattern of Asian immigrants: grounded theory implications for consumer acculturation theory”, *Advances in Consumer Research*, Vol. 23, pp. 418-423

Huch, A. (1994) *Pflichtenheft. Leitfaden. Departement für Frauenheilkunde, Klinik und Poliklinik für Geburtshilfe*, Universitätsspital Zürich: Zürich

van Huis, M. (2004) “De politiek en prenatale screening”, *Tijdschrift voor Verloskundigen*, Vol. 29, no. 3, pp. 111

Hulskers, H. (2001) “Die Qualität der pflegerischen Beziehung: Ein Anforderungsprofil”, *Pflege*, Vol. 14, no. 1, pp. 39-45

Hundt, G.L., Beckerley, S., Kassem, F., Abu Jafar, A.M., Belmaker, I., Abu Saad, K. & Shoham-Vardi, I. (2000) “Women's health custom made: building on the 40 days postpartum for Arab women”, *Health Care for Women International*, Vol. 21, no. 6, pp. 529-542

Hunt, J.M. & Lumley, J. (2002) “Are recommendations about routine antenatal care in Australia consistent and evidence-based?”, *Medical Journal of Australia*, Vol. 176, pp. 255-259

Hunt, S.C. (2004) *Poverty, pregnancy and the health care professional*, Books for Midwives: Edinburgh

Hunter, B. (2001) “Emotion work in midwifery. a review of current knowledge”, *Journal of Advanced Nursing*, Vol. 34, no. 4, pp. 436-444

Hunter, B. (2004) “Conflicting ideologies as a source of emotion work in midwifery”, *Midwifery*, Vol. 20, no. 3, pp. 261-272

Hunter, B. (2005) “Emotion work and boundary maintenance in hospital-based midwifery”, *Midwifery*, Vol. 21, no. 3, pp. 253-266

Husler, M., Krähenmann, F., Streicher, A. & Zimmermann, R. (2002). “Schwangerenvorsorge state of art aus Schweizer Sicht”, *Therapeutische Umschau*, Vol. 59, pp. 641-649

Hutchinson, S.A. (1993) “Grounded theory: the method” In: Munhall, P.L. & Boyd, C.A. (eds) *Nursing research: a qualitative perspective*, 2nd ed., National League for Nursing Press: New York, pp. 180-212

Hutchinson, S. & Wilson, H.S. (1992) “Validity threats in scheduled semistructured research interviews”, *Nursing Research*, Vol. 41, no. 2, pp. 117-119

International Confederation of Midwives (ICM) (1999) *International code of ethics for midwives* [online]. Available from: http://www.internationalmidwives.org/index.php?module=ContentExpress&func=display&ceid=24&bid=22&btitle=ICM%20Documents&meid=23 [accessed 10th March 2007]

Issel, L.M. (2000) “Women's perceptions of outcomes of prenatal case management”, *Birth*, Vol. 27, no. 2, pp. 120-126

Jackson, K., Ternestedt, B.M. & Schollin, J. (2003) “From alienation to familiarity: experiences of mothers and fathers of preterm infants”, *Journal of Advanced Nursing*, Vol. 43, no. 2, pp. 120-129

Jacoby, A. & Cartwright, A. (1990) “Finding out about the views and experiences of maternity-service users” In: Garcia, J., Kilpatrick, J. & Richards, M. (eds) *The politics of maternity care services for child-bearing women in 20th century Britain*, Oxford University Press: Oxford, pp. 239- 255

Jadad, A. (1998) *Randomised controlled trials*, BMJ Books: London

James, S.G. (1997) *With woman: the nature of the midwifery relation*, Doctoral thesis, University of Alberta: Edmonton

Johnson, S (1979) *A dictionary of the English language: in which words are deduced from their originals, explained in their different meanings, and authorized by the names of writers in whose work they are found*, 12th ed., Reprint 1755, Times Books: London

Jones, S. (2003) *Ethik für Hebammen*, Verlag Hans Huber: Bern

Kaminsky, M., Bréart, G., Buekens, P., Huisjes, H.J., McIlwaine, G. & Selbmann H.-K. (1986) *Perinatal care delivery systems. Description and evaluation in European Community countries*, Oxford University Press: Oxford

Käppeli, S. (2001) “Mit-Leiden - eine vergessene Tradition der Pflege?”, *Pflege*, Vol. 14, pp. 293-306

Keenan, J. (1999) “A concept analysis of autonomy”, *Journal of Advanced Nursing*, Vol. 29, no. 3, pp. 556-562

Kendall, J. (1999) “Axial coding and the grounded theory controversy”, *Western Journal of Nursing Research*, Vol. 21, no. 6, pp. 743-757

Kennedy, H.P. (2000) “A model of exemplary midwifery practice. Results of a Delphi study”, *Journal of Midwifery and Women's Health*, Vol. 45, no. 1, pp. 4-19

Kennedy, H.P., Rousseau, A.L. & Low, L.K. (2003) “An exploratory metasynthesis of midwifery practice in the United States”, *Midwifery*, Vol. 19, pp. 203-214

Kennedy, H.P., Shannon, M.T., Chuahorn, K. & Kravetz, M.K. (2004) “The landscape of caring for women: a narrative study of midwifery practice”, *Journal of Midwifery and Women's Health*, Vol. 49, pp. 14-23

Keyes, E.F. & Kane, C.F. (2004) “Belonging and adapting: mental health of Bosnian refugees living in the United States”, *Issues in Mental Health Nursing*, Vol. 25, pp. 809-831

Keyton, J., Kalbfleisch, P.J. (1993) “Building a normative model of women's mentoring relationships”, *Joint Meeting of the Southern States Communication Association and the Central States Communication Association* [online]14-18 April, Lexington. Available from: http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/22/91/f3.pdf [Accessed 26th November 2006]

Kirk, K. (1992) “Confidence as a factor in chronic illness care”, *Journal of Advanced Nursing*, Vol. 17, pp. 1238-1242

Kirkham, M. & Stapleton, H. (2004) “The culture of the maternity services in Wales and England as a barrier to informed choice” In: Kirkham, M. (ed.) *Informed choice in maternity care*, Palgrave Macmillan: Hampshire, pp. 117-145

Klaus, M.H., Kennell, J.H. & Klaus, P.H. (1993) *Mothering the mother. how a doula can help you have a shorter, easier, and healthier birth*, Perseus Books: Cambridge

Klein Remane, U. (2003) “Hebammen-Qualitätszirkel in der Schweiz. Projektleiterinnen gesucht”, *Schweizer Hebamme*, Vol. 101, no. 11, pp. 12-13

Kline, C.R., Martin, D.P. & Dey, R.A. (1998) “Health consequences of pregnancy and childbirth as perceived by women and clinicians”, *Obstetrics and Gynecology*, Vol. 92, no. 5, pp. 842-848

Kojima, Y., Irisawa, M. & Wakita, M. (2005) “The impact of a second infant on interactions of mothers and firstborn children”, *Journal of Reproductive and Infant Psychology*, Vol. 23, no. 1, pp. 103-114

van der Kooy, B. (2006) “NHS Community Midwifery Model proposed by the Independent Midwives Association”, *MIDIRS Midwifery Digest*, Vol. 15, no. 4, pp. S6-S8

Kotaska, A. (2004) “Inappropriate use of randomised controlled trials to evaluate complex phenomena: case study of vaginal breech delivery”, *British Medical Journal*, Vol. 329, pp. 1039-1042

Kotelchuck, M. (1994) “An evaluation of the Kessner adequacy of prenatal care index and a proposed adequacy of prenatal care index”, *American Journal of Public Health*, Vol. 84, pp. 1414-1420.

Krueger, P.M. & Scholl, T.O. (2000) “Adequacy of prenatal care and pregnancy outcome”, *Journal of the American Osteopathic Association*, Vol. 100, no. 8, pp. 485-492

Kuhn, T.S. (1996) *The structure of scientific revolutions*, 3rd ed., University of Chicago Press: Chicago

Kvale, S. (1996) *Interviews. An introduction to qualitative research interviewing*, Sage Publications: Thousand Oaks

Lack, N., Zeitlin, J., Krebs, L., Künzel, W. & Alexander, S. (2003) “Methodological difficulties in the comparison of indicators of perinatal health across Europe”, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 111, pp. S33- S44

Lambert, T.W., Soskolne, C.L., Bergum, V., Howell, J. & Dossetor, J.B. (2003) “Ethical perspectives and environmental health: fostering autonomy and the right to know”, *Environmental Health Perspectives*, Vol. 111, no. 2, pp.133-137

Langer, A., Villar, J., Romero, M., Nigenda, G., Piaggio, G., Kuchaisit, C., Rojas, G., Al- Osimy, M., Belizàn, J.M., Farnot, U., Al- Mazrou, Y., Carroli, G., Ba’aqeel, H.,Lumbiganon, P., Pinol, A., Bergsjö, P., Bakketeig, L., Garcia, J. & Berendes, H. (2002) “Are women and providers satisfied with antenatal care ? Views on a standard and a simplified, evidence-based model of care in four developing countries” *BMC Women's Health* [online] Vol. 2, pp. 7. Available from: http://www.biomedcentral.com/1472-6874/2/7 [Accessed 25. February 2007]

Langer, B., Caneva, M.P. & Schlaeder, G. (1999) “Routine prenatal care in Europe: the comparative experience of nine departments of gynaecology and obstetrics in eight different countries”, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 85, no. 2, pp. 191- 198.

LaRossa, R. & LaRossa, M. M. (1981) *Transition to parenthood. How infants change families*, Volume 19, Sage Library of Social Research, Sage Publications: Beverley Hills

Lazarsfeld, P.F., Sewell, P.F. & Wilensky, H.L. (1967) *The uses of sociology*, Basic Books: New York

Laxton-Kane, M. & Slade, P. (2002) “The role of maternal prenatal attachment in a woman's experience of pregnancy and implications for the process of care”, *Journal of Reproductive and Infant Psychology*, Vol. 20, no. 4, pp. 253-266

Lee, G. (1997) “The concept of “continuity” - what does it mean?” In: Kirkham M.J. & Perkins E.R. (eds) *Reflections on midwifery*, Baillière Tindall: London, pp. 1-25

Leung, S.S.K., Arthur, D. & Martinson, I.M. (2005) “Perceived stress and support of the Chinese postpartum ritual “Doing the month””, *Health Care for Women International*, Vol. 26, no. 3, pp. 212- 224

Levy, V. (1999) “Maintaining equilibrium: a grounded theory study of the process involved when women make informed choices during pregnancy”, *Midwifery*, Vol. 15, no. 2, pp.109- 119

Lewis, J.M. (2000) “Repairing the bond in important relationships: a dynamic for personality maturation”, *American Journal of Psychiatry*, Vol. 157, pp. 1375-1378

Lincoln, Y.S. & Guba, E. (1985) *Naturalistic inquiry*, Sage Publications: Newbury Park

Lindhard, A., Nielsen, P.V., Mouritsen, L.A., Zachariassen, A., Sorensen, H.U. & Rosnesno, H. (1990) “The implications of introducing the symphyseal-fundal height measurement. A prospective randomised controlled trial”, *British Journal of Obstetrics and Gynaecology*, Vol. 97, pp. 675-680

LoBiondo-Wood, G. & Haber, J. (1996) “Reliabilität und Validität” In: LoBiondo-Wood, G. & Haber, J. (eds) *Pflegeforschung. Methoden- kritische Einschätzung-Anwendung*, Ullstein Mosby: Berlin/Wiesbaden

Lohr, K.N. (1988) “Outcome measurement: concepts and questions”, *Inquiry*, Vol. 25, no. 1, pp. 37-50

Long, A.F. & Harrison, S. (1985) *Health services performance: effectiveness and efficiency*, Croom Helm Ltd: Beckenham

Long, C.R. & Curry, M.A. (1998) “Living in two worlds: Native American women and prenatal care”, *Health Care for Women International*, Vol. 19, pp. 205-215

Longman (1984) *Longman Dictionary of the English Language*, Longman: Harlow

Lowe, J. (2002) “Cherokee self-reliance”, *Journal of Transcultural Nursing*, Vol. 13, no. 4, pp. 287-295

Luhmann, N. (2000) *Vertrauen*, 4. Auflage, Lucius & Lucius: Stuttgart

Lumley, J. & Astbury, J. (1982) “Advice in pregnancy: perfect remedies, imperfect science” In: Enkin, M. & Chalmers, I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp. 132-150

Lumley, J., Oliver, S.S., Chamberlain, C. & Oakley, L. (2004) “Interventions for promoting smoking cessation during pregnancy”, *Cochrane Database of Systematic Reviews*, Issue 4

Lundgren, I. & Wahlberg, V. (1999) “The experience of pregnancy a hermeneutical/phenomenological study”, *Journal of Perinatal Education*, Vol. 8, no. 3, pp. 12-20

Lupton, D. & Fenwick, J. (2001) “”They've forgotten that I'm the mum”: constructing and practising motherhood in special care nurseries”, *Social Science and Medicine*, Vol. 53, pp. 1011-1021

Lüschen, G., Cockerham, W. & van der Zee, J. (1995) *Health systems in the European Union. Diversity, convergence and integration*, Oldenbourg Verlag: München

Luyben, A. (1997) *Das CTG in der Diskussion-neue Ergebnisse*, rufdruck gmbh: Karlsruhe

Luyben, A.G. & Gross, M.M. (2001) “Intrapartum fetal heart rate monitoring: do Swiss midwives implement evidence into practice?”, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 96, no. 2, pp. 179-182

Luyben, A.G. (2002) “And what about pregnancy? The discussion about routine antenatal care in Europe in the last decades”, *International Confederation of Midwives 26th Triennial Congress*, April 14-18, Vienna

Luyben, A.G. & Fleming, V.E.M. (2005) “Women's needs from antenatal care in three European countries”, *Midwifery*, Vol. 21, no. 3, pp. 212-223

MacFarlane, A., Bartley, M., Kerrison, S. & Head, J. (2000) “Looking at health inequilities: social class., ethnic origin and people with disabilities?” In: Kerrison, S. & MacFarlane, A. (eds) *Official health statistics. An unofficial guide*, Arnold: London

MacFarlane, A., Gissler, M., Bolumar, F. & Rasmussen, S. (2003) “The availability of perinatal health indicators in Europe”, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 111, pp. S15- S32

MacFarlane, A. (2004) “Confidential enquiries into maternal deaths: developments and trends from 1952 onwards” In: CEMACH (ed.) *Why mothers die 2000- 2002* [online] CEMACH: London. Available from: http://www.cemach.org.uk/publications/WMD2000_2002/wmd-22.htm [accessed 25th February 2007]

Majoko, F., Munjanja, S.P., Lindmark, G., Nystrom, L. & Mason, E. (2000) “A randomised controlled trial of a new antenatal care package in a rural area of Zimbabwe”, *International Journal of Gynecology and Obstetrics*, Vol. 70, pp. 104

Majoko, F., Munjanja, S.P., Nystrom, L., Mason, E. & Lindmark, G. (2007) “Randomised controlled trial of two antenatal care models in rural Zimbabwe”, *BJOG: An International Journal of Obstetrics & Gynaecology*, Vol. 114, no. 7, pp. 802-811

van Manen, M. (2002) “Care-as-Worry, or “Don't Worry, Be Happy”, Keynote Address: Fifth International Qualitative Health Research Conference”, *Qualitative Health Research*, Vol. 12, no. 2, pp. 262-278

Mansfield, B. (2007) “The social nature of natural childbirth”, *Social Science and Medicine*, Vol. 66, pp. 1084-1094

Marcellus, L. (2005) “The ethics of relation: public health nurses and child protection clients”, *Journal of Advanced Nursing*, Vol. 51, no. 4, pp. 414-420

Marck, P.B. (1994) “Unexpected pregnancy. The uncharted land of women's experiences” In: Field, P.A. & Marck, P.B. (eds) *Uncertain motherhood. Negotiating the risks of the childbearing years*, Sage Publications: Thousand Oaks, pp. 82-138

Maresh, M. (1998) “Quality in obstetrics and gynaecology: the example of the enquiries into maternal mortality”, *Journal of Quality in Clinical Practice*, Vol. 18, pp. 21-28

Martell, L.K. (2001) “Heading toward the normal: a contemporary postpartum experience”, *JOGNN Journal of Obstetric, Gynecologic and Neonatal Nursing*, Vol. 30, no. 5, pp. 496-506

Mayeroff, M. (1971) *On caring*, Harper & Row Publishers: New York

McCourt, C. (2003) “Social support and childbirth” In: Squire C. (ed.) *The social context of birth*, Radcliffe Medical Press: Oxon, pp. 187-210

McCourt, C. (2005) “Research and theory for nursing and midwifery: rethinking the nature of evidence”, *Worldviews on Evidence-Based Nursing*, Vol. 2, no. 2, pp. 75-

83

McDuffie, R.S., Beck, R., Bisschoff, K., Cross, J. & Orleans, M. (1996) “Effect of prenatal care visits on perinatal outcome among low-risk women: a randomized controlled trial”, *JAMA Journal of the American Medical Association*, Vol. 275, pp. 847-851

McFarlane, J. & Wiist, W. (1997) “Preventing abuse to pregnant women; implementation of a mentor mother “advocacy” programme”, *Journal of Community Health Nursing*, Vol. 14, no. 4, pp. 237-249

McMahon, M. (1995) *Engendering motherhood. Identity and self- transformation in women's lives*, The Guildford Press: New York

McQuide, P.A., Delvaux, T. & Buekens, P. (1998) “Prenatal care incentives in Europe. Study Group on Barriers and Incentives to Prenatal Care in Europe”, *Journal of Public Health Policy*, Vol. 19, pp. 331-349

Mead, G.H. (1967) *Mind, self and society. From the standpoint of a social behavorist*, The University of Chicago Press: Chicago

Melender, H.L. (2002a) “Experiences of fears associated with pregnancy and childbirth: a study of 329 pregnant women”, *Birth*, Vol. 29, no. 2, pp. 101-111

Melender, H.L. (2002b) “Fears and coping strategies associated with pregnancy and childbirth in Finland”, *Journal of Midwifery and Women's Health*, Vol. 47, no. 4, pp. 256-263

Melender, H.L. & Lauri, S. (1999) “Fears associated with pregnancy and childbirth - experiences of women who have recently given birth”, *Midwifery*, Vol. 15, pp. 177-182

Menzies, V. & Taylor, A.G. (2004) “The idea of imagination: an analysis of “imagery””, *Advances in Mind-Body Medicine*, Vol. 20, no. 2, pp. 4-10

Mercer, R.T. (1986) *First-time motherhood. Experiences from teens to forties*, Springer Publishing Company: New York

Mercer, R.T. (1995) *Becoming a mother*, Springer Publishing Company: New York

Mercer, R.T. (2004) “Becoming a mother versus maternal role attainment”, *Journal of Nursing Scholarship*, Vol. 36, no. 3, pp. 226-232

Mercer, R.T. & Ferketich, S.L. (1990) “Predictors of parental attachment during early parenthood”, *Journal of Advanced Nursing*, Vol. 15, pp. 268-280

Mercer, R.T. & Ferketich, S.L. (1995) “Experienced and inexperienced mothers' maternal competence during infancy”, *Research in Nursing and Health*, Vol. 18, pp. 333-343

Miller, T. (2005) *Making sense of motherhood. A narrative approach*, Cambridge University Press: Cambridge

Milligan, R., Wingrove, B.K., Richards, L., Rodan, M., Monroe- Lord, L, Jackson, V., Hatcher, B., Harris, C., Henderson, C. & Johnson, A.A. (2002) “Perceptions about prenatal care: views of urban vulnerable groups”, *BMC Public Health* [online] Vol 2, pp. 25. Available from: http://www.biomedcentral.com/1471-2458/2/25 [Accessed 25th February 2007]

Mitscherlich, A. & Mielke, A. (1995) *Medizin ohne Menschlichkeit. Dokumente des Nürnberger Aertzeprozesses*, Fischer Bücherei: Frankfurt am Main

Mohide, P. & Grant, A. (1989) “Evaluating diagnosis and screening during pregnancy and childbirth” In: Chalmers, I., Enkin, M. & Keirse, M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford, pp 66-80

Monney- Hunkeler, M.C. (2000) *Frauen und Mutterschaft. Bedürfnisorientierte Umfrage und Angebot in der geburtshilflichen Versorgung und Ansätze für die Entwicklung eines Versorgungsnetzes im südlichen Teil des Kantons Fribourg*, Master thesis postgraduate course "Management im Gesundheitswesen", Universität Bern: Bern

de Montigny, F., Lacharité, C. (2005) "Perceived parental efficacy: a concept analysis", *Journal of Advanced Nursing*, Vol. 49, no. 4, pp. 387-396

Moos, M. (2006) "Prenatal care: limitations and opportunities", *Journal of Obstetric, Gynecologic and Neonatal Nursing*, Vol. 35, pp. 278-285

Morison, M. & Moir, J. (1998) "The role of computer software in the analysis of qualitative data: efficient clerk, research assistant or Trojan horse?", *Journal of Advanced Nursing*, Vol. 28, no. 1, pp. 106-116

Morison, S., Hauck, Y., Percival, P. & McMurray, A. (1998) "Constructing a home birth environment through assuming control", *Midwifery*, Vol. 14,. pp. 233-241

Morse, J.M. (1991) "Strategies for sampling" In: Morse, J.M. (ed.) *Qualitative nursing research: a contemporary dialogue*, Sage Publications: London, pp. 126-145

Morse, J.M. & Field, P.M. (1998) *Qualitative Pflegeforschung. Anwendung qualitativer Ansätze in der Pflege*, Ullstein Medical: Wiesbaden

Munjanja, S.P., Lindmark, G. & Nystrom, L. (1996) "Randomised controlled trial of a reduced-visits programme of antenatal care in Harare, Zimbabwe?", *Lancet*, Vol. 348, pp. 364- 369

Myer, L. & Harrison, A. (2003) "Why do women seek antenatal care late? Perspectives from rural South Africa", *Journal of Midwifery and Women's Health*, Vol. 48, no. 4, pp. 268-272

Nau, J. (2005) “Empowerment als Konzept für die Pflege”, *Pflegepädagogik PrInterNet*, Vol. 7, no. 3, pp. 152-158

Navaie-Waliser, M., Gordon, S.K. & Hibberd, M.E. (1996) “The Mentoring Mothers Program: a community-empowering approach to reducing infant mortality”, *Journal of Perinatal Education*, Vol. 5, no. 4, pp. 47-58

Nederlandse Vereniging Obstetrie en Gynaecologie (NVOG) (2002) *Basis prenatale zorg. NVOG Richtlijn 46, juni 2002* [online] Nederlandse Vereniging Obstetrie en Gynaecologie: Utrecht. Available from: http//:www.nvog.nl/files/rl46basis-pr-z-q.def.pdf [accessed 5th January 2007]

Nederlandse Vereniging Obstetrie en Gynaecologie (NVOG) (2004) *Zwanger! Algemene Informatie* [online], Herziene versie. NVOG, KNOV, NHG, LHV, VVAH, IGZ, LVE and CVZ, VDA- groep: Apeldoorn. Available from: http//:www.nvog.nl/files/zwanger2004.pdf [accessed 5th January 2007]

Neilson, J.P. (1998a) “Symphysis-fundal height measurement in pregnancy”, *Cochrane Database of Systematic Reviews*, Issue 1

Neilson, J.P. (1998b) “Ultrasound for fetal assessment in early pregnancy”, *Cochrane Database of Systematic Reviews*, Issue 4

Neilson, J.P. & Alfirevic, Z. (1996) “Doppler ultrasound for fetal assessment in high risk pregnancies”, *Cochrane Database of Systematic Reviews*, Issue 4

Nelson, A.M. (2003) “Transition to motherhood”, *JOGNN Journal of Obstetric, Gynecologic and Neonatal Nursing*, Vol. 32, pp. 465-477

Newman, M.A. (1999) *Health as expanding consciousness*, 2nd ed., toExcel: New York

Nigenda, G., Langer, A., Kuchaisit, C., Romero, M., Rojas G., Al- Osimy, M., Villar, J., Garcia, J., Al- Mazrou, Y., Ba'agueel, H., Carroli, G., Farnot, U.,

Lumbiganon, P., Belizàn, J., Bergsjö, P., Bakketeig, L. & Lindmark, G. (2003) "Women's opinion on antenatal care in developing countries: results of a study in Cuba, Thailand, Saudi Arabia and Argentina", *BMC Public Health* [online] Vol. 3, pp. 17. Available from: http://www.biomedcentral.com/1471-2458/3/17 [Accessed 25th February 2007]

Noblit, G.W. & Hare, R.D. (1988) *Meta-ethnography: synthesising qualitative studies*, Qualitative research method series 11, Sage Publications: Newbury Park

Nolan, M. (1997) "Antenatal education, where next?", *Journal of Advanced Nursing*, Vol. 25, pp. 1198-1204

Norris, G. (1978) *The effective university*, Saxon House: Farnborough

Norris, N. (1991) "The trouble with competence", *Cambridge Journal of Education*, Vol. 21, no. 3, pp. 331-341

Notzon, F.C. (1990) "International differences in the use of obstetric interventions", *Journal of the American Medical Association*, Vol. 263, no. 24, pp. 3286-3291

Oakley, A. (1974) *The sociology of housework*, Martin Robinson: London

Oakley, A. (1979) *Becoming a mother*, Martin Robertson: London

Oakley, A. (1981) "Interviewing women: a contradiction in terms?" In: Roberts, H. (ed.) *Doing feminist research*, Routledge & Kegan Paul: London, pp. 31-61

Oakley, A. (1982) "The origins and development of antenatal care" In: Enkin M. & Chalmers I. (eds) *Effectiveness and satisfaction in antenatal care*, Heinemann Medical Ltd: London, pp 1-21

Oakley, A. (1984) *The captured womb*, Basil Blackwell Publisher Ltd: Oxford

Oakley, A. (1986) *From here to maternity*, Reprint, Penguin Books Ltd: Middlesex

Oakley, A. (2000) *Experiments in knowing. Gender and method in the social sciences*, The New Press: New York

Oakley, A. & Houd, S. (1990) *Helpers in Childbirth. Midwifery today*, Published on behalf of the World Health Organisation, Regional Office for Europe, Hemispere Publishing Corperation: London

O'Brien, M. & Smith, C. (1981) "Women's views and experiences of antenatal care", *Practitioner*, Vol. 225, pp. 123-125

O'Cathain, A., Thomas, K., Walters, S.J., Nicholl, J. & Kirkham, M. (2002a). "Women's perceptions of informed choice in maternity care", *Midwifery*, Vol. 18, no. 2, pp. 136-144

O'Cathain, A., Walters, S.J., Nicholl, J.P., Thomas, K.J. & Kirkham, M. (2002b) "Use of evidence based leaflets to promote informed choice in maternity care: randomised controlled trial in every day practice", *British Medical Journal*, Vol. 324, pp. 643-646

O' Reilly, M.M. (2002) *The experience of maternal transition to second- time parenthood*, Doctoral Thesis, University of Connecticut: Storrs

Page, L. (2002) "Putting humanity back in maternity", *British Journal of Midwifery*, Vol. 10, no. 6, pp. 346

Pairman, S. (2000) "Women-centred midwifery: partnerships or professional friendships?" In: Kirkham, M. (ed), *The midwife-mother relationship*, Palgrave MacMillan: Basingstoke, pp. 207-226

Parahoo, K. (1997) *Nursing research. Principles, process and issues*, Palgrave MacMillan: New York

Patterson, E.T., Freese, M.P. & Goldenberg, R.L. (1990) “Seeking safe passage: utilizing health care during pregnancy”, *IMAGE: Journal of Nursing Scholarship*, Vol. 22, no. 1, pp. 27-31

Peltenburg, M., Fischer, J.E., Bahrs, O., van Dulmen, S. & van den Brink- Muinen, A. for the investigators of the Euro-Communication Study (2004) “The unexpected in primary care: a multicenter study on the emergence of unvoiced patient agenda”, *Annals of Family Medicine*, Vol. 2, no. 6, pp. 534-540

Peplau, H.E. (1988) *Interpersonal relations in nursing*, Macmillan Education: London

Petermann, F. (1996) *Psychologie des Vertrauens*, Hogrefe Verlag: Göttingen

Peters, T.J., Wildschut, H.I.J. & Weiner, C.P. (1996) “Epidemiologic considerations in screening” In: Wildschut, H.I.J., Weiner, C.P. & Peters, T.J. (eds) *When to screen in obstetrics and gynecology*, W.B. Saunders Company Ltd: London, pp. 1-12

Phaff, J.M.L. (1986) *Perinatal services in Europe: searching for better childbirth*, Published on behalf of the World Health Organisation Regional Office for Europe, Croom Helm Ltd: Beckenham:

Pham, C.T. & Crowther, C.A. (2003) “Birth outcomes: utility values that postnatal women, midwives and medical staff express”, *BJOG: an International Journal of Obstetrics and Gynaecology*, Vol. 110, pp. 121-127

Piaget, J. (1975) *Das Erwachen der Intelligenz beim Kinde*, Ernst Klett Verlag: Stuttgart

Polit, D.F. & Hungler, B.P. (1995) *Nursing research. Principles and methods*, 5th ed., J.P. Lippincott Company: Philadelphia

Pollard, E. & Liebeck, H. (2000) *Oxford Paperback Dictionary*, Reissued, Oxford University Press: Oxford

Porter, M. & MacIntyre, S. (1984) "What is, must be best: a research note on conservative or deferential responses to antenatal care provisions", *Social Science Medicine*, Vol. 19, no. 11, pp. 1197-1200

Proctor, S. (1998) "What determines quality in maternity care? Comparing the perceptions of childbearing women and midwives", *Birth*, Vol. 25, no. 2, pp. 85-93

Prowe, G. & Schneider, J. (1997) *The Oxford-Duden German Minidictionary*, Oxford University Press: Oxford

Public Record Office (1998) *Data Protection Act. A guide for record managers and archivists*, Public Record Office: Richmond

von Rahden O. (2003) "Was erwarten Erstgebärende von der Betreuung während Schwangerschaft und Geburt", *Die Hebamme*, Vol. 16, no. 2, pp. 90- 95

Ramsden, I.A. (2003) *Cultural safety and nursing education in Aotearoa and Te Waipounamu*, Doctoral thesis [online] Victoria University: Wellington Available from: http://culturalsafety.massey.ac.nz/RAMSDEN%20THESIS.pdf [Accessed: 9th September 2006]

Randell, B.P. (1993) "Growth versus stability: older primiparous women as a paradigmatic case for persistence", *Journal of Advanced Nursing*, Vol. 18, pp. 518-525

Reid, M. (1986) "Non-medical aspects in the evaluation of prenatal care for women at low risk" In: Kaminsky, M., Bréart, G., Buekens, P., Huisjes, H.J., McIlwaine, G. & Selbmann H.-K. (eds) *Perinatal care delivery systems. Description and evaluation in European Community countries*, Oxford University Press: Oxford, pp. 59-76

Reid, M. & Garcia, J. (1989) “Women's views of care during pregnancy and chilbirth” In: Chalmers I., Enkin M. & Keirse M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford, pp 131-142

Reid, M.E. & McIlwaine, G.M. (1980) “Consumer opinion of a hospital antenatal clinic”, *Social Science and Medicine*, Vol. 14A, no. 4, pp. 363-368

Rempel, J.K., Holmes, J.G. & Zanna, M.P. (1985) “Trust in close relationships”, *Journal of Personality and Social Psychology*, Vol. 49, no. 1, pp. 95-112

Rhigetti, P.L., Dell'Avanzo, M., Grigio, M. & Nicolini, U. (2005) “Maternal/ paternal attachment and fourth- dimsensional ultrasound technique: a preliminary report”, *British Journal of Psychology*, Vol. 96, pp. 129-137

Rhodes, P. (1995) *A short history of midwifery*, Books for Midwives Press: Hale

Richardus, J.H. (2004) “European comparisons of perinatal care - the EuroNatal study” In: Maternal and Child Health Research Consortium (ed.) *Confidential Enquiry into Stillbirths and Deaths in Infancy CESFI), 8th annual report* [online] Maternal and Child Health Research Consortium: London, pp. 49-59. Available from: http://cemach.org.uk/publications/8threport/z-complete%20file.pdf [Accessed 11th January 2007]

Richardus, J.H., Graafmans, W.C., van der Pal-de Bruin, K.M., Amelink- Verburg, M.P., Verloove-Vanhorick, S.P. & Mackenbach J.P. (1997) “An European concerted action investigating the validity of perinatal mortality as an outcome indicator for the quality of antenatal and perinatal care”, *Journal of Perinatal Medicine*, Vol. 25, pp. 313-324

Richardus, J.H., Graafmans, W.C., Verloove-Vanhorick, S.P. & Mackenbach, J.P. (1998) “The perinatal mortality rate as an indicator of quality of care in international comparisons”, *Medical Care*, Vol. 36, no. 1, pp. 54-66

Richardus, J.H., Graafmans, W.C., Verloove-Vanhorick, S.P., Mackenbach J.P., the Euronatal audit Panel & the EuroNatal Working Group (2003) "Differences in perinatal mortality and suboptimal care between 10 European regions: results of an international audit", *BJOG: an International Journal of Obstetrics and Gynaecology*, Vol. 110, pp. 97-105

Riewpaiboon, W., Chengsatiansup, K., Gilson, L. & Tangcharoensathien, V. (2005) "Private obstetric practice in a public hospital: mythical trust in obstetric care", *Social Science and Medicine*, Vol. 61, pp. 1408-1417

Robin, O. (2006) "Approche par compétences: un effet de mode?", *Hebamme.ch*, Vol. 104, no. 11, pp. 28-29

Robinson, J. (1989) "The role of the social sciences in evaluating perinatal care" In: Chalmers I., Enkin M. & Keirse M.J.N.C. (eds) *Effective care in pregnancy and childbirth*, Oxford University Press: Oxford, pp 81-85

Robinson, K., Robinson, H. & Hilton, A. (1992) "What is research?", Module 3, *Research Awareness*, Distance Learning Centre, South Bank University: London

Rodgers, B.L. (2000a) "Philosophical foundations of concept development" In: Rodgers, B.L. & Knafl, K.A. (eds) *Concept development in nursing. Foundations, techniques and applications*, 2nd ed., Saunders: Philadelphia, pp. 7-38

Rodgers, B.L. (2000b) "Concept analysis: an evolutionary view?" In: Rodgers, B.L. & Knafl, K.A. (eds) *Concept development in nursing. Foundations, techniques and applications*, 2nd ed., Saunders: Philadelphia, pp. 77-102

Rogers, C.R. (1959) "A theory, personality, and interpersonal relationships as developed in the client-centered framework" In: Koch, S. (ed.) *Psychology: A study of science. Volume III. Formulations of the person and the social context*, McGraw-Hill: New York, pp. 184-256

Rooney, C. (1992) *Antenatal care and maternal health: how effective is it? A review of the evidence*, WHO: Geneva

Rosenthal, B. (2000) "Impact analyses: concepts and methods", *AIR 2000 Annual Forum Paper* [online] Available from: http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/23/5b/8d.pdf [Accessed 25th February 2007]

Ross, L., Simkhada, P. & Smith, W.C.S. (2005) "Evaluating effectiveness of complex interventions aimed at reducing maternal mortality in developing countries", *Journal of Public Health*, Vol. 27, no. 4, pp. 331-337

Rosser, J. (1997) "Informed Choice Series II", *MIDIRS Midwifery Digest*, Vol. 7, no. 1, pp. 22

Rosser, J., Watt, I.S. & Entwistle, V. (1996) "Informed choice: an example of reaching users with evidence-based information", *Journal of Clinical Effectiveness*, Vol. 1, no. 4, pp. 143-145

Rotter, J. (1971) "Generalised expectancies for interpersonal trust", *American Psychologist*, Vol. 26, pp. 443-452

Roumen, F.J.M.E. & Luyben, A.G. (1991) "Safety of the term vaginal breech delivery", *European Journal of Obstetrics & Gynaecology and Reproductive Biology*, Vol. 40, no. 3, pp. 171-177

Royal College of Midwives Trust (1999) *Transition to parenting. Transition to motherhood*, Royal College of Midwives¨ Cardiff

Rubin, R. (1984) *Maternal identity and the maternal experience*, Springer Publishing Company: New York

Ruddick, S. (1983) “Maternal thinking” In: Trebilcot, J. (ed.) *Mothering: essays in feminist theory*, Rowman & Allanheld: Totowa, pp. 213-230

Ryan, M., Merighi, J.R., Healy, B. & Renouf, N. (2004) “Belief, optimism and caring. Findings from a cross-national study of expertise in mental health social work”, *Qualitative Social Work*, Vol. 3, no. 4, pp. 411-429

Sackett, D. (1980) “Clinical disagreement. I: How often its occurs and why” *Canadian Medical Association Journal*, Vol. 123, pp. 499-504

Sandall, J., Davies, J., Warwick, C. (2001) *Evaluation of the Albany Midwifery Practice. Final report March 2001*, Florence Nightingale School of Nursing and Midwifery, King’s College London: London

Sawyer, L.M. (1999) “Engaged mothering: the transition to motherhood for a group of African American women”, *Journal of Transcultural Nursing*, Vol. 10, no. 1, pp. 14-21

Schafer, P. (2001) “Examining Peplau's pattern integrations in long-term care”, *Rehabilitation Nursing*, Vol. 26, no. 5, pp. 192-197

Schatzman, L. & Strauss, A. (1973) *Field research*, Prentice Hall: Englewood Cliffs

Schmidt, E. (1986) “Distribution of health personnel and neonatal care?” In: Kaminsky, M., Bréart, G., Buekens, P., Huisjes, H.J., McIlwaine, G. & Selbmann H.-K. (eds) *Perinatal care delivery systems. Description and evaluation in European Community countries*, Oxford University Press: Oxford, pp. 187- 197

Schneider, Z. (2002) “An Australian study of women's experiences of their first pregnancy”, *Midwifery*, Vol. 18, pp. 238-249

Schönholzer, S.M. & Götzmann, L. (2001) *Psychosoziale Aspekte der Ultraschall-Untersuchung in der Schwangerschaft. Schlussbericht*, Zentrum für Technologiefolgen-Abschätzung: Bern

Schreiber, R. (2001) “The “How to” of grounded theory: avoiding the pitfalls” In: Schreiber, R.S. & Stern, P.N. (eds) *Using grounded theory in nursing*, Springer Publishing Company: New York, pp. 55-84

Schreiber, R.S. & Stern, P.N. (2001) *Using grounded theory in nursing*, Springer Publishing Company: New York

Schubert, P.E. (1989) *Mutual connectedness: holistic nursing practice under varying conditions of intimacy*, Doctoral thesis, University of California: San Francisco

Schütz, A. (1972) *Gesammelte Aufsätze II. Studien zur soziologischen Theorie*, Martinus Nijhoff: Den Haag

Schwandt, T. (2000) “Three epistemological stances for qualitative inquiry. Interpretivism, hermeneutics and social constructivism” In: Denzin, N.K. & Lincoln, Y. (eds) *Handbook of Qualitative Research*, 2nd ed., Sage Publications: Thousand Oaks, pp. 189-214

Schweer, M., Thies, B. (2003) *Vertrauen als Organisationsprinzip. Perspektiven für komplexe soziale Systeme*, Verlag Hans Huber: Bern/Göttingen

Scottish Executive Health Department (2001) *A framework for the maternity services in Scotland* [online] Scottish Government: Edinburgh. Available from: http://www.scotland.gov.uk/library3/health/ffms-00.asp [Accessed 11th January 2007]

Shaw, N.S. (1974) *Forced Labour: Maternity care in the United States*, Pergamon: New York

Shieh, C., Kravitz, M. (2002) “Maternal-fetal attachment in pregnant women who use illicit drugs”, *JOGNN Journal of Obstetric, Gynaecologic and Neonatal Nursing*, Vol. 31, pp. 156-164

Shields, N., Holmes, A., Cheyne, H., McGinley, M., Young, D., Gilmour, W.H., Turnbull, D. & Reid, M. (1999) "Knowing your midwife during labour", *British Journal of Midwifery*, Vol. 7, no. 8, pp. 504-510

Shields, N., Turnbull, D., Reid, M., Holmes, A., McGinley, M. & Smith, L.N. (1998) "Satisfaction with midwife-managed care in different time periods: a randomised controlled trial of 1299 women", *Midwifery*, Vol. 14, pp. 85-93

Shyu, Y.L., Archbold, P.G. & Imke, M. (1998) "Finding a balance point: a process central to understanding family caregiving in Taiwanese families", *Research in Nursing and Health*, Vol. 21, pp. 261-270

Sikorski, J., Wilson, J., Clement, S, Das, S. & Smeeton, N. (1996) "A randomised controlled trial comparing two schedules of antenatal visits: the antenatal care project", *British Medical Journal*, Vol. 312, pp. 546-553

Silverman, D. (2003) "Analyzing talk and text" In: Denzin, N.K. & Lincoln, Y.S. (eds) *Collecting and interpreting qualitative materials*, 2nd ed., Sage Publications: Thousand Oaks, pp. 340-362

Simpson, J.A. & Weiner, E.S.C. (1989) *Oxford English Dictionary*, 2nd ed., Oxford University Press: Oxford

Smith, J.A. (1995) "Semi-structured interviewing and qualitative analysis", In: Smith, J.A., Harré, R. & Van Langenhove, L. (eds) *Rethinking methods in psychology*, Sage Publications: London, pp. 9-26

Smith, K. & Biley, F. (1997) "Understanding grounded theory: principles and evaluation", *Nurse Researcher*, Vol. 4, no. 3, pp. 17-30

Smith-Pierce, S. (1994) *Juggling: a heuristic study of first-time mothers*, Doctoral Thesis, The Union Institute Graduate School

Spinelli, A., Baglio, G., Donati, S., Grandolfo, M.E. & Osborn, J. (2003) "Do antenatal classes benefit the mother and her baby?", *Journal of Maternal-Fetal & Neonatal Medicine*, Vol. 13, no. 2, pp. 94-101

Spitzer, B. (1999) *Der zweite Rosengarten. Eine Geschichte der Geburt*, Elwin Staude Verlag: Hannover

Stapleton, H., Kirkham, M., Curtis, P. & Thomas, G. (2002a) "Framing information in antenatal care", *British Journal of Midwifery*, Vol. 10, no. 4, pp. 197-201

Stapleton, H., Kirkham, M. & Thomas, G. (2002b) "Qualitative study of evidence based leaflets in maternity care", *British Medical Journal*, Vol. 324, no. 7338, pp. 639-643

Stapleton, H., Kirkham, M., Thomas, G. & Curtis, P. (2002c) "Language use in antenatal consultations", *British Journal of Midwifery*, Vol. 10, no. 5, pp. 273-277

Stapleton, H., Kirkham, M., Curtis, P. & Thomas, G. (2002d) "Silence and time in antenatal care", *British Journal of Midwifery*, Vol. 10, no. 6, pp. 393-396

Stedman, Th.L. (1995) *Medical Dictionary*, 26th ed., Williams & Wilkins: Baltimore

Steffen-Bürgi, B.(1999) "Selbstkonzept" In: Käppeli S. (ed.) *Pflegekonzepte. Phänomene im Erleben von Krankheit und Umfeld*, Band 2, Verlag Hans Huber: Bern, pp. 9-30

van Sterkenburg P.J. (1996) *Van Dale Handwoordenboek van hedendaags Nederlands*, Tweede druk in de nieuwe spelling, Van Dale Lexicografie: Utrecht

Stevens-Simon, C. & Orleans, M. (1999) "Low-birthweight prevention programs: the enigma of failure", *Birth*, Vol. 26, no. 3, pp. 184-191

Stewart, R.B. (1990) *The second child. Family transition and adjustment*, Sage Publications: Newbury Park

Strauss, A.L. (1999) *Qualitative analysis for social scientists*, Reprint, Cambridge University Press: Cambridge

Strauss, A.L. (2005) *Mirrors and masks. The search for identity*, Transaction Publishers: New Brunswick/London

Strauss, A. & Corbin, J. (1990) *Basics of Qualitative Research. Grounded theory procedures and techniques*, Sage Publications: Thousand Oaks

Strauss, A. & Corbin, J. (1998) *Basics of Qualitative Research. Techniques and procedures for developing grounded theory*, Sage Publications: Thousand Oaks

Swanson, J.M. (1986) "The formal qualitative interview for grounded theory" In: Chenitz, W.C. & Swanson, J.M. (eds) *From practice to grounded theory*, Addison-Wesley Publishing Company: Menlo Park, pp. 66-78

Swanson, K.M. (1991) "Empirical development of a middle range theory", *Nursing Research*, Vol. 40, no. 3, pp. 161-166

Sword, W. (2003) "Prenatal care use among women of low income: a matter of "Taking care of self"", *Qualitative Health Research*, Vol. 13, no. 3, pp. 319-332

Symon, A., MacKay, A. & Ruta, D. (2003) "Postnatal quality of life: a pilot study using the Mother-Generated Index", *Journal of Advanced Nursing*, Vol. 42, no. 1, pp. 21-29

Tandon, S.D., Parillo, K.M. & Keefer, M. (2005) "Hispanic women's perceptions of patient-centeredness during prenatal care: a mixed-method study", *Birth*, Vol. 32, no. 4, pp. 312-317

Tarter, C.J. & Hoy, W.K. (2004) “A systems approach to quality in elementary schools. A theoretical and empirical analysis”, *Journal of Educational Administration*, Vol 42, no. 5, pp. 539- 554

van Teijlingen, E., Hundley, V., Rennie, A.-M., Graham, W. & Fitzmaurice, A. (2003) “Maternity satisfaction studies and their limitations: “What is, must still be best””, *Birth*, Vol. 30, no. 2, pp. 75-82

Ten Cate, O. (2005) “Orienting teaching toward the learning process”, *Academic Medicine*, Vol. 79, no. 3, pp. 219-228

Thiede, M. (2005) “Information and access to health care: is there a role for trust?”, *Social Science and Medicine*, Vol. 61, pp. 1452-1462

Thomas, J., Harden, A., Oakley, A., Oliver, S., Sutcliffe, K., Rees, R., Brunton, G. & Kavanagh, J. (2004) “Integrating qualitative research with trials in systematic reviews”, *British Medical Journal*, Vol. 328, pp. 1010-1012

Tillmann, K.J. (2004) *Sozialisationstheorien. Eine Einführung in den Zusammenhang von Gesellschaft, Institution und Subjektwerdung*, 13th ed., Rowohlt Taschenbuch Verlag GmbH: Reinbek bei Hamburg

Tomasdottir, M., Wilson, M., White, M. & Agustdottir, T. (1991) “Family dynamics and infant temperament in urban Iceland”, *Scandinavian Journal of Caring Sciences*, Vol. 5, no. 4, pp. 211-217

Tomaselli-Reime, S. (2005) “Unfähig und gelähmt”, *Deutsche Hebammenzeitschrift*, Vol. 8, pp. 6-9

Treffers, P.E. (1993) “Selection as the basics of obstetric care in the Netherlands” In: Abrahams-van der Mark, E. (ed.) *Successful home birth and midwifery. The Dutch model*, Bergin & Garvey: Westport, pp. 112-114

Tröhler, U. (2000) *"To improve the evidence of medicine". The 18th century British origins of a critical approach*, Royal College of Physicians of Edinburgh: Edinburgh

Tschudin, V. (1988) *Ethik in der Krankenpflege*, RECOM: Basel

Tucker, J.S., Hall, M.H., Howie, P.W., Reid, M.E., Barbour, R.S., Florey, C. du V. & McIlwaine, G.M. (1996) "Should obstetricians see women with normal pregnancies ? A multicentre randomised controlled trial of routine antenatal care by general practitioners and midwives compared with shared care led by obstetricians", *British Medical Journal*, Vol. 312, no. 7030, pp. 554- 559

Turnbull, D., Holmes A., Shields, N., Cheyne, H., Twaddle, S., Gilmour, W.H., McGinley, M., Reid, M., Johnstone, I., Geer, I., McIlwaine, G. & Lunan, C.B. (1996) "Randomised trial of efficacy of midwife-managed care", *Lancet*, Vol. 348, pp. 213-218.

Turner-Stokes, L., Paul, S. & Williams, H. (2006) "Efficiency of specialist rehabilitation in reducing dependency and costs of continuing care for adults with complex acquired brain injuries", *Journal of Neurology, Neurosurgery, and Psychiatry*, Vol. 77, pp. 634-639

Urdang, L. (1988) *Dictionary of Differences*, Bloomsbury: London

U.S. Department of Health, Education and Welfare (1979) *The Belmont Report. Ethical principles and guidelines for the protection of human subjects of research* [online] The National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research: Washington. Available from: http://www.irb.uiuc.edu/ethics/belmont.asp [Accessed 18th March 2005]

Vandenbussche, F.P.H.A., De Jong- Potjer, L.C., Stiggelbout A.M., Le Cessie, S. & Keirse, M.J.N.C. (1999) "Differences in the valuation of birth outcomes among pregnant women, mothers, and obstetricians", *Birth*, Vol. 26, no. 3, pp. 178-183

VandeVusse, L. (1999) “Decision making in analyses of women's birth stories”, *Birth*, Vol. 26, no. 1, pp. 43-50

Vera, H. (1993) “The client's views of high-quality care in Santiago, Chile”, *Studies in Family Planning*, Vol. 24, pp. 40-49

Verhoeven, J. (2000) “Some reflections on cross-cultural interviewing”, In: Pole, C.J. & Burgess, R.G. (eds) *Cross-cultural case study. Studies in qualitative methodology*, Volume 6, Elsevier Science Inc: New York, pp. 1-20

Villar, J. & Bergsjo, P. (1997) “Scientific basis for the content of routine antenatal care. I: Philosophy, recent studies, and power to eliminate or alleviate adverse outcomes”, *Acta Obstetrica et Gynecologica Scandinavica*, Vol. 76, pp. 1-14

Villar, J., Bakketeig, L., Donner, A., al-Mazrou, Y., Ba'aqeel, H., Belizan, J.M., Carroli, G., Farnot, U., Lumbiganon, P., Piaggio, G. & Berendes, H. (1998) “The WHO antenatal care randomised controlled trial: rationale and study design”, *Paediatric and Perinatal Epidemiology*, Vol. 12, no. Suppl 2, pp. 27-58

Villar, J., Ba’aqeel, H., Piaggio, G., Lumbiganon, P., Belizàn, J.M., Farnot, U., Al-Mazrou, Y., Carroli, G., Pinol, A., Donner, A., Langer, A., Nigenda, G., Mugford, M., Fox- Rushby, J., Hutton, G., Bergsjö, P., Bakketeig, L. & Berendes, H. (2001a) “WHO antenatal care randomised trial for the evaluation of a new model of routine antenatal care”, *Lancet*, Vol. 357, no. 9268, pp. 1551-1564.

Villar, J., Carroli G., Khan-Neelofur, D., Piaggio, G. & Gülmezoglu, M. (2001b) “Patterns of routine antenatal care for low- risk pregnancy”, *Cochrane Database of Systematic Reviews*, Issue 4

Wagner, M. (1994) *Pursuing the birth machine. The search for appropriate birth technology*, ACE Graphics: Camperdown

Waldenström, U. (1999) “Experience of labour and birth in 1111 women”, *Journal of Psychosomatic Research*, Vol. 47, pp. 471-482

Waldenström, U., Borg, I.M., Olsson B., Skold, M. & Wall, S. (1996) “The childbirth experience: a study of 295 new mothers”, *Birth*, Vol. 23, pp. 144-153

Walker, J., Brooksby, A., McInerny, J. & Taylor, A. (1998) “Patient perceptions of hospital care: building confidence, faith and trust”, *Journal of Nursing Management*, Vol. 6, pp. 193-200

Walker, D.S. & Koniak- Griffin, D. (1997) “Evaluation of a reduced-frequency prenatal visit schedule for low-risk women at a freestanding birthing centre”, *Journal of Nurse-Midwifery*, Vol. 47, pp. 295-303

Walsh, D. (1999) “An ethnographic study of women's experiences experience of partnership caseload midwifery practice: the professional as a friend”, *Midwifery*, Vol. 15, no. 3, pp. 165-176

Walsh, D.J. (2006) “”Nesting” and “Matrescence” as distinctive features of a free-standing birth centre in the UK”, *Midwifery*, Vol. 22, no. 3, pp. 228-239

Walsh, D. (2007) *Improving maternity services. Small is beautiful- lessons from a birth centre*, Radcliffe Publishing Ltd: Abingdon

Walsh, D., Newburne, M. (2002a) “Towards a social model of childbirth: part one”, *British Journal of Midwifery*, Vol. 10, no. 8, pp. 476-481

Walsh, D., Newburne, M. (2002b) “Towards a social model of childbirth: part two”, *British Journal of Midwifery*, Vol. 10, no. 9, pp. 540-544

Warren, C. (2003) “Exploring the value of midwifery continuity of carer” *British Journal of Midwifery*, Vol. 11, no. 10, pp. S34-S37

Weitzman, E.A. (2000) “Software and qualitative research” In: Denzin, N.K. & Lincoln, Y.S. (eds) *Handbook of qualitative research*, 2nd ed., Sage Publications: Thousand Oaks, pp. 803-820

Weitzman, E.A. (2003) “Software and qualitative research” In: Denzin, N.K. & Lincoln, Y.S. (eds) *Collecting and interpreting qualitative materials*, 2nd ed., Sage Publications: Thousand Oaks, pp. 310-339

Welzer, H. (1993) *Transitionen. Zur Sozialpsychologie biographischer Wandlungsprozesse*, edition diskord: Tübingen

Wepa, D. (2005) *Cultural safety in Aotearoa New Zealand*, Pearson Education New Zealand: Auckland

Wepler, D. (1998) “Heutige Schwangerenvorsorge?” In: Geist, C., Harder U. & Stiefel A. (eds) *Hebammenkunde*, De Gruyter: Berlin, pp. 99

Wheatley, S. (2003) “Psychosocial support in pregnancy” In: Clement S. (ed.) *Psychological perspectives and pregnancy and childbirth*, Churchill Livingstone: Edinburgh, pp. 45-60

White, M.A., Wilson, M.E., Tomlinson, B. & Tomasdottir, M. (1996) “Cross-national comparison of family dynamics during the third trimester of pregnancy in the United States and Iceland”, *Health Care for Women International*, Vol. 17, pp. 97-107

White, P.M. (2002) “Crossing the river: Khmer women's perceptions of pregnancy and postpartum”, *Journal of Midwifery and Women's Health*, Vol. 47, no. 4, pp. 239-246

White, P. M. (2004) “Heat, balance, humors, and ghosts: postpartum in Cambodia”, *Health Care for Women International*, Vol. 25, no. 2, pp. 179-194

Whittaker, A. (1996) “Quality of care for women in Northeast Thailand: Intersections of class, gender and ethnicity”, *Health Care for Women International*, Vol. 17, pp. 435-447

Wikipedia (2007) *History of the European Union* [online] Available from: http://en.wikipedia.org/wiki/History_of_the_European_Union [Accessed 12th January 2007]

Wildschut, H.I., ten Hoope-Bender, P., Borkent-Polet, M., Traas, H., van Agt, H.M., de Kroon, M.L. & van der Maas, P.J. (1999) “Practice variation of test procedures reportedly used in routine antenatal care in The Netherlands”, *Acta Obstetricia et Gynecologica Scandinavica*, Vol. 78, no. 1, pp. 27-32

Willemsen, E., Pardini, D., Andersen, E., Shirasu, L. & Barroga, H. (1999). *Evaluation of an undergraduate psychology program: a doable department response* [online]. Available from: http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/10/8b/c2.pdf [Accessed 25th February 2007]

Wilkins, C. (2006) “A qualitative study exploring the support needs of first- time mothers on their journey towards intuitive parenting”, *Midwifery*, Vol. 22, no. 2, pp. 169-180

Willi, J.(1987) *Ko-evolution. Die Kunst des gemeinsamen Wachsens*, Rowohlt Verlag: Reinbek bei Hamburg

Williams-Nickelson, C. (2003) *A model for women mentoring women in psychology*, Doctoral thesis, Our Lady of the Lake University: San Antonio

Williamson, S. & Thomson, A.M. (1996) “Women's satisfaction with antenatal care in a changing maternity service”, *Midwifery*, Vol. 12, no. 4, pp. 198-204

Wilson, H.S. & Hutchinson, S.A. (1996) “Methodologic mistakes in grounded theory”, *Nursing Research*, Vol. 45, no. 2, pp. 122-124

Wilson, J.M.G. & Jungner, G. (1968) *Principles and practice of screening for disease*, Public Health Papers 34, WHO: Geneva

Wiman, E., Wikblad, K. (2004) "Caring and uncaring encounters in an emergency department" *Journal of Clinical Nursing*, Vol. 13, pp. 422-429

Winnicott, D.W. (2004) *The maturational processes and the facilitating environment*, Karnac Books Ltd: London

World Health Organisation (WHO) (1987) *Wenn ein Kind unterwegs ist... Bericht über eine Studie*, Oeffentliches Gesundheitswesen in Europa 26, World Health Organisation Regional Office for Europe: Copenhagen

World Health Organisation (WHO) (1994) *Indicators to monitor maternal health goals. WHO/FHE/MSM/94.14* [online] WHO: Geneva. Available from: http://www.who.int/reproductivehealth/publications/MSM_94_14/MSM_94_14_table_of_contents.en.html [Accessed 25th February 2007]

World Health Organisation (WHO) (1997) *Reproductive health indicators for global monitoring* [online] WHO: Geneva. Available from: http://www.who.int/reproductivehealth/publications/HRP_97_27/reproductive_health_indicators_for_global_monitoring.pdf [Accessed 25th February 2007]

World Health Organisation Regional Office for Europe (WHO) (2006a) *The European Health Report 2005* [online].Available from: http://www.euro.who.int/document/e87325.pdf [Accessed 11th January 2007]

World Health Organisation Regional Office for Europe (WHO) (2006b). *European health for all database* [online]. Available from: http://www.euro.who.int/hfadb [Accessed 11th January 2007]

World Health Organisation (WHO) (2007) *Core Health Indicators* [online] Available from: http://www3.who.int./whosis/database/core/core_select.cfm [Accessed 11th January 2007]

Yin, R. K. (1994) *Case study research. Design and methods*, 2nd ed., Volume 5, Applied Social Research Methods Series, Sage Publications: Thousand Oaks

Yorke, D.M. (1989) *Four case studies of effectiveness in polytechnics and colleges*, CNAA Council for National Academics Awards: London

Zeitlin, J., Wildman, K., Bréart, G., Alexander, S., Barros, H., Blondel, B., Buitendijk, S., Gissler, M. & MacFarlane, A. (2003) "Selecting an indicator set for monitoring and evaluating perinatal health in Europe: criteria, methods and results from the PERISTAT project", *European Journal of Obstetrics & Gynecology and Reproductive Biology*, Vol. 11, pp. S5-S14

Zey, M.G. (1984) "A mentor for all reasons", *Personnel Journal*, Vol. 67, pp. 46-51

APPENDICES