INTRODUCTION & OBJECTIVE

- Perinatal mortality differs between racial/ethnic groups.
- Are there racial/ethnic differences in the perinatal mortality at (post) term pregnancy?

HYPOTHESIS

We hypothesized that the distribution of pregnancy duration is race specific, which urges the need of a tailored approach of the management of post term pregnancy among white, Mediterranean, black and South-Asian women.

METHODS

- A prospective national cohort study based on data from the The Netherlands Perinatal Registry (PRN), which covers about 96% of all deliveries in The Netherlands.
- All singleton infants born from 40.0 weeks of gestation onwards without congenital anomalies were included. Data were available on 755,615 infants born between 1 January 1999 and 31 December 2007. Analysis were repeated for women with spontaneous start of labour.
- The four main racial/ethnic groups are Caucasians, Mediterranean (Turkish/Moroccan), African-Creole and South Asians.
- The outcome is perinatal mortality which is a combination of both fetal and neonatal mortality within 7 days after birth.
- We performed multivariate logistic regression analyses, crude and adjusted* (table 1) for parity, age, SES and gestational age.

RESULTS

- The overall perinatal mortality was n=1,586; 2.1 per 1000 (‰).
- Perinatal mortality risk was significantly increased at 41 weeks (odds 1.25 95%CI 1.23-1.39) and at 42 weeks (1.20 95%CI 1.02-1.42) compared to 40 weeks of gestation.
- Overall the South Asian, African/Creole and Mediterranean women had significantly increased risk of perinatal mortality at (post) term pregnancy (table 1).
- The risk was significantly (p<0.05) increased compared to Caucasian women for:
  - South Asian women at 40 weeks (3.4‰ vs 1.8 ‰) and at 41 weeks (9.2‰ vs 2.1‰),
  - African/Creole at 41 weeks (4.4 ‰ vs 2.1‰),
  - Mediterranean at 41 weeks (4.3 ‰ vs 2.1‰).
- Results in spontaneous start of labour were similar (Figure 1).

CONCLUSIONS

- South Asian, African/Creole and Mediterranean women have a significant increased risk for perinatal mortality at 40 and 41 weeks of gestation.
- South Asian and African women have a shorter duration of pregnancy as compared to Caucasian and Mediterranean women.
- These data suggest that induction of labour for post term pregnancy should be considered at an earlier gestational age for non-Caucasian women.
- Ethnic-specific definitions of optimal gestational age and post term pregnancy are needed.

Table 1: Perinatal mortality risk per 1000 births among racial groups from 40 weeks of gestation onwards.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total births</th>
<th>Mean gestational age days</th>
<th>Perinatal mortality (‰)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>n</td>
<td>n (%)</td>
<td>Adjusted* Odds (95% CI)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>670,597</td>
<td>278</td>
<td>1315 (2.0)</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>62,453</td>
<td>278</td>
<td>187(3.0)</td>
</tr>
<tr>
<td>African/Creole</td>
<td>16,074</td>
<td>276</td>
<td>48 (3.0)</td>
</tr>
<tr>
<td>South-Asian</td>
<td>6,491</td>
<td>274</td>
<td>36 (5.5)</td>
</tr>
<tr>
<td>Total</td>
<td>755,615</td>
<td>278</td>
<td>1586 (2.1)</td>
</tr>
</tbody>
</table>

Figure 1: Perinatal mortality risk per 1000 births among racial groups from 40 weeks onwards.