AIMS For a better birth...

Perineums and positions

AIMS Journal, 2016, Vol 28 No 4

Perineal injuries and birth positions among 2992 women with a low risk pregnancy who opted for a homebirth.
Edqvist et al, *BMC Pregnancy and Childbirth* (2016) 16:196
Reviewed by Gemma McKenzie

The study

The researchers aimed to explore the prevalence of perineal injuries at home births. Between 2008 and 2013, 2992 women in Norway, Sweden, Denmark and Iceland, women who had low risk pregnancies, spontaneous labours, and either had a planned home birth or planned a home birth and transferred into hospital were studied. The attending midwife answered a questionnaire one week after the birth. Women who ended up with a caesarean section or instrumental delivery in hospital were not included in the study. The questionnaire captured:

- Demographic data
- Birth position.
  This was divided into two categories:
  Flexible sacrum positions
  These positions expand the pelvic outlet and take weight off the sacrum (the large triangularbone at the base of the spine) – kneeling, standing, all-fours, squatting, using the birth seat, lateral (lying on one side).
  Non-flexible sacrum positions
  Semi-recumbent (reclining), lithotomy/supine (lying on one's back).
- Perineal injuries.
  These were reported as:
  Non-sutured injuries (no tear at all, small abrasions or minor injuries)
  Sutured injuries (stitches)
  Episiotomy
  Severe perineal trauma (SPT was defined as involving the anal sphincter complex).

Results

Four major points emerged from the study.

There was a low prevalence of SPT and episiotomy, which did not differ between the countries. This adds

to the growing body of evidence that suggests home birth for women with low risk pregnancies is associated with positive maternal outcomes and low levels of intervention.

Episiotomy was associated with giving birth in a nonflexible sacrum position. Interestingly, however, 30% (nine women) of the women who underwent an episiotomy did so in positions other than semi-recumbent or supine. These positions included lateral, squatting, and all fours, with five of the episiotomies taking place under water (presumably in the birthing pool).

No association was found between flexible sacrum positions and SPT or sutured injuries.

The most frequently used birth position was kneeling (24.6%). However, for primiparous women (those that have not given birth before), the most frequent position used was semi-recumbent (29.06%), followed by kneeling (19.1%).

AIMS Comments

One limitation to the study was that midwives were only asked to document women's positions at the moment the baby was born, presumably when the baby leaves the mother's body. Perhaps of relevance to perineal injuries would be (where possible) to have also documented the positions a woman adopted while pushing her baby down the birth canal (including the duration of the pushing stage), during crowning, when the shoulders emerged and then finally the position during 'birth'. Taking this wider view of birth may incorporate factors that could have an effect on perineal trauma, whilst also avoiding the presumption that women birth statically.

The researchers also admit to limitations within the study. Importantly, it is impossible to know how the attending midwife influenced the woman's birthing position. Further, there is a lack of information as to whether skilled midwives were adopting practices that prevented perineal injuries during birth. There is also a lack of information as to whether midwives' experience and training enabled them to accurately assess and classify the perineal injuries, especially as midwives from four different countries were entering the data.

Regardless of the limitations however, this study reinforces the message that where a woman births can affect the likelihood of interventions and the extent of any perineal injuries she sustains more than the position she adopts to do birth her baby.