

IS INTIMATE PARTNER ABUSE A RISK FACTOR FOR POSTPARTUM FECAL INCONTINENCE? FINDINGS FROM AN AUSTRALIAN MULTICENTRE NULLIPAROUS PREGNANCY COHORT STUDY.

Hypothesis / aims of study

Fecal incontinence – the involuntary leakage of solid or liquid stool – has been estimated to affect approximately 9% of women during the first 3 months postpartum.(1) There is ongoing controversy about the role of method of birth in the aetiology of postpartum fecal incontinence. Most studies lack adequate power to investigate causal pathways, including both obstetric and non-obstetric factors which may pre-dispose to postpartum fecal incontinence.

We examined outcomes in the first 12 months postpartum and at 4.5 years after the index birth. We hypothesised that postpartum fecal incontinence would be more common in women experiencing intimate partner abuse.

Study design, materials and methods

The Maternal Health Study is a multi-centre, prospective, nulliparous pregnancy cohort study. Nulliparous women were recruited in early pregnancy (<25 weeks' gestation) at 6 metropolitan public hospitals in Melbourne, Australia between April 2003 – December 2005. Participants were followed up at 3, 6, 9 and 12 months postpartum and at 4.5 years following the index birth using a combination of self-administered questionnaires and telephone interviews. The type, frequency and severity of fecal incontinence were assessed using standardised questions based on instruments previously validated in Australian, Scandinavian and United Kingdom populations, and conforming to ICS/IUGA definitions.(2) For period prevalence, women were classified as incontinent if they reported fecal incontinence at any follow-up in a defined period (e.g. first 12 months postpartum) and continent if they reported no incontinence in all completed follow-up questionnaires and telephone interviews within the defined period. Women completing less than two postpartum follow-up visits were classified as missing rather than continent. Intimate partner abuse in the first 12 months postpartum and at 4.5 years was assessed using the short 18-item version of the Composite Abuse Scale.(3)

Results

1507 nulliparous women were recruited in early pregnancy (mean gestation=15 weeks). The estimated response fraction is 28-31%. Participants are representative of women giving birth in the state of Victoria in the recruitment period in terms of method of birth and infant birthweight. However, younger women (18-24 years) and women born overseas of non-English speaking backgrounds are under-represented. At 3, 6, 9 and 12 months postpartum, response fractions were: 95%, 93%, 92% and 90% respectively. At 4.5 years, 80% of eligible women took part in follow-up. The sample for this paper comprises 1059 women who completed the 3 month, 12 month and 4.5 year questionnaires, excluding 9 multiple births (n=1050).

Eight percent of women reported fecal incontinence in the first 3 months postpartum (86/1044), 12% between 4-12 months postpartum (127/1048), and 7% at 4.5 years (77/1047). Of the women reporting incontinence in the first three months following the birth, 33% (28/86) also reported fecal incontinence between 4-12 months postpartum. Of the women reporting fecal incontinence between 4-12 months postpartum, 24% (30/126) also reported fecal incontinence at 4.5 years.

Fifteen percent of women (156/1045) reported intimate partner abuse in the first 12 months postpartum and 16% at 4.5 years (163/1042). The majority reported emotional abuse alone: 58% (90/156) in the first 12 months postpartum, and 66% (107/163) at 4.5 years. 29% (45/156) and 27% (44/163) respectively reported both emotional and physical abuse, and 13% (21/156) in the first 12 months postpartum and 7% (12/163) at 4.5 years reported physical abuse alone.

Fecal incontinence at 4-12 months postpartum was significantly more common among women who had experienced intimate partner abuse in the first 12 months postpartum; 17.3% of women who experienced intimate partner abuse reported fecal incontinence 4-12 months postpartum compared with 11.1% of women who did not experience intimate partner abuse (OR=1.69, 95% CI 1.06-2.68). Adjusting for maternal age, method of birth, pre-pregnancy body mass index did not alter the finding of a significant association between intimate partner abuse and postpartum fecal incontinence (Adj OR = 1.94, 95% CI 1.2-3.1). A similar pattern of association between exposure to intimate partner abuse and fecal incontinence was also present at the 4.5 year follow-up (Adj OR = 1.74, 95% CI 0.98-3.1).

Interpretation of results

To our knowledge this is the first study to investigate the relationship between intimate partner abuse and postpartum fecal incontinence. The findings show that women experiencing abuse by an intimate partner have a greater likelihood of reporting fecal incontinence in the first 12 months postpartum and at 4.5 years following a first birth. Co-morbid anxiety and a higher occurrence of irritable bowel syndrome among women experiencing intimate partner abuse may partially explain the higher prevalence of fecal incontinence among women reporting abuse. It is also likely that previous and current sexual abuse may play a role in postpartum fecal incontinence.

Over representation of older women in the cohort may have resulted in slightly higher prevalence of fecal incontinence, but is likely to have been offset by exclusion of women attending late for antenatal care, who are known to be at higher risk of intimate partner abuse. There was no evidence of differential recruitment of women with previous bowel disease such as Crohn's disease or ulcerative colitis compared with community prevalence studies.

Concluding message

Fecal incontinence is a relatively common condition among postnatal women. Clinicians need to be aware that intimate partner abuse is a risk factor for fecal incontinence, and incorporate assessment for intimate partner abuse and appropriate support and

referral into their clinical practice. Future prospective studies investigating the aetiology of fecal incontinence should include measurement of intimate partner abuse as an important upstream exposure.

References

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2. For details of standardised measures see: Brown SJ, Lumley J, McDonald E, Krastev A. The Maternal Health Study: a prospective cohort study of nulliparous women recruited in early pregnancy. *BMC Pregnancy and Childbirth* 2006;6:12.
3. Hegarty, K., R. Bush, and M. Sheehan, The Composite Abuse Scale: further development and assessment of reliability and validity of a multidimensional partner abuse measure in clinical settings. *Violence Vict* 2005. 20(5): p. 529-547.

Disclosures

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