

A service evaluation looking at perineal trauma and pelvic floor muscle training/education in pregnancy and in the postpartum period

Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
WALES
University Health Board

Dr Kudrat Kaur Kalra, Dr Anna Darbhamulla University Hospital of Wales, Cardiff, United Kingdom

INTRODUCTION

- Perineal trauma is defined as any type of injury to the perineum during childbirth, it can occur spontaneously or iatrogenically (episiotomies and instrumental deliveries) (1).
- These injuries can result in disabling immediate and long-term complications including urinary incontinence, anal incontinence, prolapse and can affect sexual function (2,3). These symptoms are more prevalent in obstetric anal sphincter injuries (OASIS), of which the reported incidence in England has tripled between 2000 and 2012 (1.8% to 5.9%).
- Pelvic floor muscle training (PFMT) is a protocol that outlines a plan including the frequency, intensity, and progression of pelvic floor exercises. These exercises refer to repeated voluntary contractions of the pelvic floor muscles (5).
- A review found that a high adherence to a PFMT training protocol, with close follow up, during the antenatal and postnatal period can prevent urinary incontinence (6).
- □ PFMT has been recommended for the antenatal and postnatal period to strengthen perineal muscles and prevent perineal injuries. The Royal College of Obstetricians and Gynaecologists' (RCOG) green top guidelines recommend that physiotherapy (including PFMT) following OASIS could be beneficial (4). The All-Wales Maternity Pathway includes PFMT as a discussion topic in the antenatal period.
- Our aim was to assess the information given to women during pregnancy and in the postpartum period on perineal trauma and PFMT. The study intended to explore the provision of information on PFMT in general and specific information relating to perineal injury during childbirth, including symptoms experienced and the impact on quality of life.

METHODS

- ☐ Cross-sectional study with data collection between September 2021- November 2021.
- ☐ We asked 33 patients attending the perineal trauma clinic in the University Hospital of Wales, during this time, to answer a questionnaire.
- ☐ The questionnaire had been devised and the validity checked by distributing the questionnaire to 5 patients prior to the data collection and their feedback was obtained.
- ☐ It contained questions covering patient demographics, birth injuries, education on PFMT and symptoms experienced post-trauma allowing for both quantitative and qualitative data to be collected. This was analysed using Microsoft Excel.

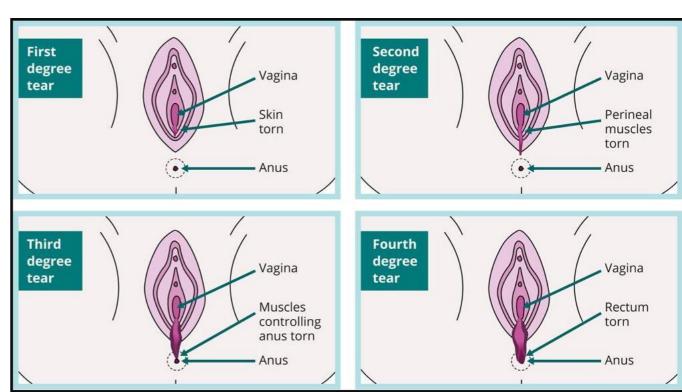
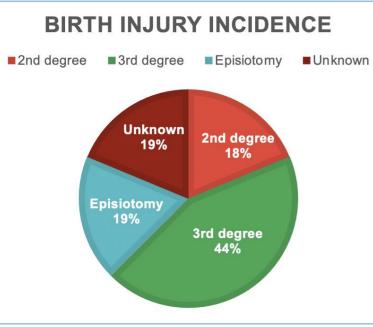
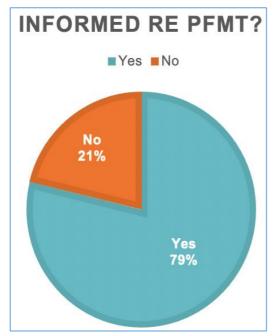
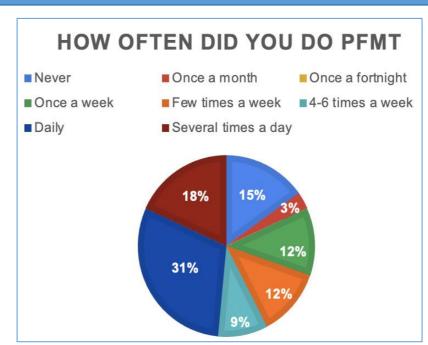


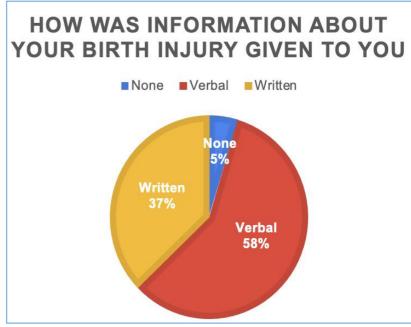
Figure 1: Classification of perineal tears (7)

RESULTS









- □ A key finding was that 79% of the women were informed about PFMT with 49% carrying out PFMT at least daily, 33% weekly, and 15% not doing them despite being informed leaving a 30% disparity between those being informed and those being compliant.
- ☐ In response to the questionnaire, 81% of the cohort of women were aware they had a perineal injury. However, 19% were unaware of their birth injury type. Of the cohort, 58% were given information at the birth verbally and 37% written. Qualitative data further showed the need for providing written information.
- Looking into the incidence of perineal trauma symptoms; 73% experienced urinary symptoms, ranging from mild to severe incontinence, 54% experienced flatus symptoms and 58% experienced bowel incontinence symptoms. Qualitative data collected highlighted the difficulties with the symptoms mentioned and the significant effect on quality of life.

CONCLUSIONS

- A significant proportion of women were informed about PFMT, highlighting that the discussion is being had with most women. However, 30% were not compliant. It would be interesting to find out more information from this cohort as to what affected their compliance, for example: how often were they told about PFMT and were they encouraged to do them? What was the quality of the information given? Did they feel confident in doing the exercises? Were they aware of the potential consequences of not doing PFMT?
- ☐ We recommend that PFMT is regularly discussed with women in both the antenatal and post-natal period, to emphasize the significant consequences these injuries can have on their future social, psychological and sexual aspects of life, including impacting future pregnancies.
- ☐ As per RCOG Green-top guidelines, giving verbal and written information to women that sustain 3rd and 4th degree tears at birth is also
- recommended.
- Thiagamoorthy G, Johnson A, Thakar R, Sultan AH. National survey of perineal trauma and its subsequent management in the United Kingdom. Int Urogynecology J. 2014 Dec;25(12):1621–7.
 Fenner DE, Genberg B, Brahma P, Marek L, DeLancey JOL. Fecal and urinary incontinence after vaginal delivery with anal sphincter disruption in an obstetrics unit in the United States. Am J Obstet Gynecol. 2003 Dec;189(6):1543–9.
 Signorello LB, Harlow BL, Chekos AK, Repke JT. Postpartum sexual functioning and its relationship to perineal trauma: A retrospective cohort study of primiparous women. Am J Obstet Gynecol. 2001 Apr;184(5):881–90.
 The management of third- and fourth-degree perineal tears. (Green-top Guideline No. 29). Royal College of Obstetricians and Gynaecologists.; 2015.
 - 5. Bø K. Pelvic floor muscle training is effective in treatment of female stress urinary incontinence, but how does it work? Int Urogynecol J Pelvic Floor Dysfunct. 2004 Apr 1;15(2):76–84.

 6. Mørkved S, Bø K. Effect of pelvic floor muscle training during pregnancy and after childbirth on prevention and treatment of urinary incontinence: a systematic review. Br J Sports Med. 2014 Feb;48(4):299–310.

 7. Australian Commission on Quailty and Safety in Healthcare. Information for women Third and Fourth Degree Perineal Tears Clinical Care Standard. https://www.safetyandquality.gov.au. 2021.