

# Putting patients at the centre of pain management

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## **BJOG mini commentary on study BJOG-21-1829**

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### **Putting patients at the centre of pain management**

Pelvic pain affects 15% of women yet we still have limited understanding of the underlying mechanisms resulting in a dearth of effective treatments. Chronic pain represents an increasing burden on both individuals and societies negatively influencing finances, productivity, and psychological wellbeing (Mathias et al, *Obstet Gynecol.* 1996 Mar;87(3):321-7). Establishing the association between pelvic and other pain syndromes is important but commonly hindered by a lack of non-invasive diagnostic strategies to exclude nociceptive pathologies causes such as endometriosis, adenomyosis, adhesions, or infection.

In this study, Beales et al explore the association between pelvic pain bothersomeness and women's sensitivity to pressure or cold on various skin sites in a community-based cross-sectional study of adult females based on data from the Raine Study (Beales et al, *BJOG*, 2022). The results demonstrated that pelvic pain bothersomeness was associated with higher pressure and cold pain sensitivity and the authors hypothesise that higher pain sensitivity may be the underlying mechanism for high levels of non-cyclical pelvic pain bothersomeness, independent of musculoskeletal pain presence.

The clinical applicability of these important findings must be considered alongside the study's limitations: the response rate of this questionnaire-based study was low (34%) introducing the possibility of selective response bias affecting statistical analysis; a small sample size of women reporting high pelvic bothersomeness (39, 8.2%); and the narrow age range (20.7 to 24.4 years old) limit the generalisability of the findings. It was unclear where participants were in their menstrual cycle when sensitivity testing was performed as increased pressure and cold sensitivity has been associated with severe dysmenorrhoea (Hapidou et al, Pain. 1988 Sep;34(3):277-283). The analysis of non-cyclical pelvic pain further limits the conclusions and applicability of the study as the authors provide no distinction between the underlying causes of pain (gynaecological, urinary, digestive, or musculoskeletal). Menstrual pain was noted to be a highly prevalent in this population of young women, but interestingly it was those women experiencing non-cyclical pain that were found to have significantly increased pressure and cold pain sensitivities, with the authors hypothesising an augmentation in nociception as a possible symptom mechanism.

The findings of heightened sensitivity in the upper extremity rather than being exclusively limited to the area of the pelvis are in keeping with our current understanding of pain centralisation. Should these findings be oversimplified, healthcare professionals risk minimising patients' pain symptoms as intrinsic non-modifiable factors. We must appreciate that centralised pain may result from prolonged repeated nociceptive stimulation from genitourinary pathologies such as endometriosis that can be difficult to diagnose. Collectively we must seek to understand whether early diagnosis and treatment of conditions such as endometriosis can prevent centralisation of pain.

As highlighted by this study, it is possible that women with high pelvic bothersomeness have increased sensitivity to pain. Although these findings do not yet yield direct clinical implication, they identify an important target for future research and treatment. It is essential clinicians approach patient care according to the bio-psycho-social model, considering treatable pathologies while optimising modifiable lifestyle factors, psychological interventions, and appropriate pharmacological management.

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