

764 - Ethnicity and associated Risk Factors in women and birthing People after an Obstetric Anal Sphincter Injury (OASIS): a Retrospective Cohort Study

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Hypothesis / aims of study

The aim of the present study was to explore the impact of ethnicity on the severity of obstetric anal sphincter injuries (OASI), associated risk factors, and subsequent pelvic floor symptoms.

Study design, materials and methods

This retrospective study was carried out at a tertiary colorectal pelvic floor unit in the UK, examining patients who suffered from an Obstetric Anal Sphincter Injury (OASI) between 2008 and 2023. Patients were assessed in our specialised interdisciplinary OASIS clinic 12 weeks after childbirth, where we conducted evaluations of pelvic floor symptoms and performed endoanal ultrasound scans.

The variables evaluated included age, number of pregnancies (gravida), number of births (parity), history of episiotomy, extent of tear as determined by endoanal ultrasound, birthweight, and various types of incontinence—flatus, passive faecal, and urge faecal incontinence. Additionally, the assessment covered the St. Mark's incontinence score for anal incontinence, along with symptoms of stress and urge urinary incontinence and urinary frequency.

Binary categorical variables were analysed across different groups using the Chi-square test. For categorical variables that included three or more categories, which were all ordinal, comparisons between groups were made using the Kruskal-Wallis test. The sole continuous variable in the study, age, was examined using analysis of variance (ANOVA).

Conclusions

This retrospective analysis has highlighted a greater occurrence of OASIS among White British women. While numerous risk factors for OASIS have been previously identified, our study reveals that women from diverse ethnic backgrounds exhibit distinct risk factors for OASIS:

- Black women exhibited higher numbers in terms of gravida (total pregnancies) and parity (number of deliveries).
 - The White British and White Other groups were characterised by older maternal age and higher birthweights.
 - Women from Other ethnic backgrounds were more likely to have experienced an episiotomy.
- The symptoms associated with OASIS appear to vary according to the patient's ethnicity:
- Flatus incontinence was predominantly observed in women of mixed race and those classified in the Other ethnic group.
 - The St. Mark's incontinence score, which assesses the severity of anal incontinence, was found to be lowest among Black women.
 - Stress Urinary incontinence was most frequently reported in mixed-race women.

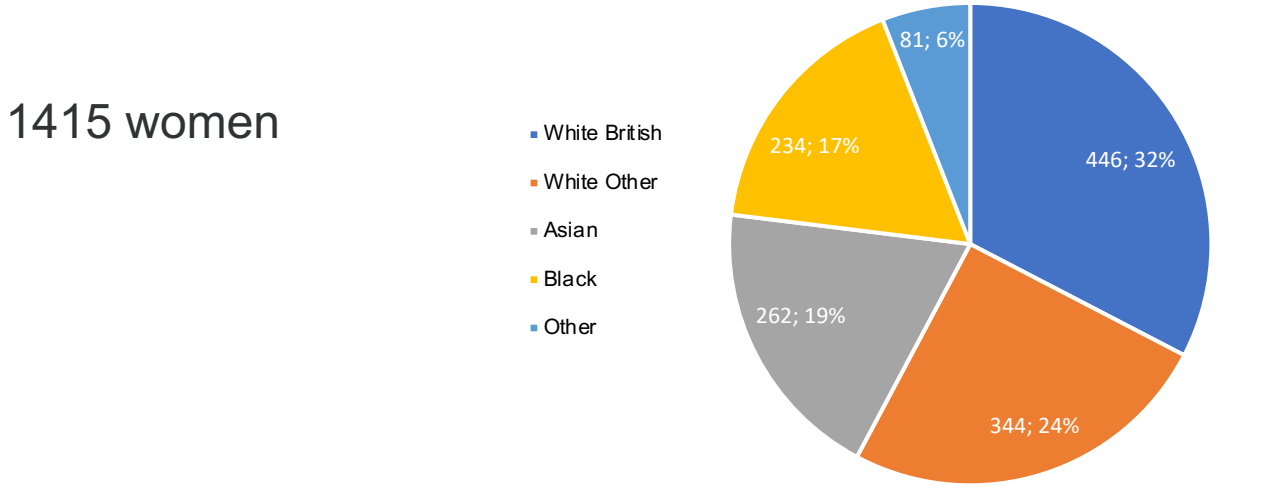
Recognising the ethnic differences in the impact and risk factors of OASIS is essential. This knowledge enables the adjustment of risk factors, supports collaborative and informed decision-making regarding future mode of delivery, and helps set realistic expectations for potential pelvic floor symptoms following an OASIS.

References

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Results and interpretation

Initially, 1497 women were considered for the study. However, 20 women were excluded due to incomplete data, and an additional 63 were excluded for lacking documented ethnicity information. After these exclusions, 1415 women remained for inclusion in the analysis. Comparisons were then made between various ethnic groups, with White British constituting the largest group at 32%, followed by White Other at 24%.



The analysis revealed statistically significant differences across the six ethnic groups in terms of age, number of pregnancies (gravida), number of births (parity), history of episiotomy, birthweight, flatus incontinence, the St. Mark's incontinence score, and stress urinary incontinence. Conversely, no statistically significant differences were found between ethnic groups regarding the extent of tear, passive faecal incontinence, urge faecal incontinence, urge urinary incontinence, or urinary frequency.

