Measuring Faecal Incontinence in Australia

Abstract:

Background: The Wexner Faecal Continence Grading Scale and some faecal incontinence items were included in a population-based survey (N=3015) to obtain current prevalence estimates for Australia and to examine the psychometric properties of these items.

Methods: The additional faecal incontinence items covered urgency, frequency, soiling and bowel patterns.

Examination of the psychometric properties of these items included: item endorsement and discrimination, item-total correlations, internal consistency reliability and exploratory factor analysis.

Results: The Cronbach’s alpha for the standard Wexner was $\alpha = 0.57$ which is considered unacceptable. The item concerning flatus had a low corrected item-total correlation (0.20). Removal of this item improved the reliability to 0.77.

The flatus item from the Wexner may confound prevalence estimates. The prevalence estimates were 8% if flatus was excluded but rose to 35% when included.

The exploratory factor analysis indicated a 3 factor structure, explaining 61% of the variance. The first factor appeared to be a ‘general faecal incontinence’ factor, as all items were concerned with leakage and soiling. Flatus and bowel pattern items loaded on the second factor. The only item that loaded on the third factor is ‘frequency of bowel motions’ and this item had low loadings on the other two factors.

Following removal of items with poor properties a 5-item scale resulted, the Revised Faecal Incontinence Scale (RFIS).

Conclusion: The RFIS has superior psychometric properties to the standard Wexner, it includes an item associated with urge incontinence and could be considered by those looking for a short, reliable and valid scale of faecal incontinence for older age groups. Further research is examining the validity of this measure in clinical settings.