Introduction & Purpose

Diagnostic procedures such as colonoscopy require adequate cleansing of the gut to be successful. This is commonly achieved by use of an orally administered liquid cleansing agent. The acceptability and tolerability of the specific bowel cleansing product will determine whether the patient is able to complete the prescribed dose and, hence, whether the bowel will be adequately cleansed. Poor cleansing may lead to missed underlying pathology and subsequent delays in treatment.

Methodology

Patients were recruited from St George’s Hospital and the Royal Free Hospital, London, UK.

Item generation
- Semi-structured qualitative interviews conducted with patients attending for colonoscopy, were recorded and transcripts produced
- Thematic content analysis conducted to identify key areas of impact.
- Draft questionnaire produced.

Cognitive Debriefing Interviews
- Semi-structured interviews conducted to assess face and content validity.

Validation survey
- Single administration survey conducted in clinic.

Results

Item generation
Interviews revealed three key areas of impact; satisfaction with preparation, symptoms & daily activities. A draft BOCLIR was produced assessing these key areas.

Item reduction / scaling assessment
- Rasch analysis (one-parameter logistic item response theory[1]) applied to BOCLIR data (RUML programme)[2].
- Items displaying misfit, redundancy or differential item functioning (DIF) were removed.

Assessment of psychometric properties
- Internal consistency assessed using Cronbach’s Alpha.
- Construct validity examined by relating BOCLIR scores to known groups using Mann Whitney U tests and Kruskal Wallis ANOVAs.

Conclusions

Rasch analysis revealed that the BOCLIR scales are unidimensional and, consequently, form indices yielding a single score. The new scales have excellent internal consistency and construct validity.

The BOCLIR will provide a valuable tool for measuring patients’ response to bowel cleansing preparations.

References

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