Reviewer's report

Title: Validation of a questionnaire for assessing fecal impaction in the elderly: impact of cognitive impairment, and using a proxy

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Reviewer: Soraia Tahan

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Validation of a questionnaire for assessing fecal impaction in the elderly: impact of cognitive impairment, and using a proxy
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General considerations
The fecal impaction in the elderly is a clinical condition with great relevance, especially considering that this population is more vulnerable to complications. This study is interesting, because a new model of questionnaire for assessing fecal impaction in the elderly was created and validated by a methodological process. The study also showed that questionnaire proposed was adequate for collecting information on fecal impaction in the population studied and the limitations imposed by cognitive impairment present in the portion of the population to answer the questionnaire were minimized by using a proxy.

Specific considerations
The title is adequate, clearly describes the study.
The abstract summarizes the study properly.
The rationale of the study was clearly described in the background/introduction.
The aim of study was well defined.
The population studied was adequate to propose.
The methods utilized were chosen correctly considering the type of study and all the necessary steps for the development of the questionnaire and evaluate the practical applicability of the instrument were realized. The validation process was carried out with great care, including the analysis of reproducibility of the test and evaluation about agreement between the self-reported occurrence of fecal impaction and the medical records.
I have some questions:
Page 5, Paragraph 2:
Population and methods
Development of the Instrument. We developed a five question questionnaire to gather information about self-reported episodes of faecal impaction, their frequency and therapeutic actions to remove them (manual removal, retrograde
lavage-enema and anterograde lavage-intensive laxative use), with a recall period of one year.

You described the objectives of the five questions set for the questionnaire (history of fecal impaction, frequency and methods of removal); however these five questions were not described. I believe that the full description of the questionnaire would be important for the reader to understand the formatting of each question, as the terms and language used.

Page 6, last paragraph:
Analysis. Faecal impaction was defined as an accumulation of hard faeces in the rectum that the subject was unable to evacuate themselves, occurring at least once in the last year.

What reference was utilized to this definition?
Another question is: Which was the basis to choose the recall period of one year?
The period of one year may be considered too long for the memory of an elderly person.
Furthermore, the discrimination of the period of occurrence of the fecal impaction may contribute to clinical interpretations. For example, the information that a fecal impaction occurred in a recent period may indicate constipation not controlled.
The results answered the objectives of the study. Thus, the description of the results focused the questionnaire development and features of validation, reproducibility and concurrent validity. Although the prevalence of fecal impaction in the study population was not the primary objective of the study, my suggestion is that this result deserves to be described in a similar format to other items, also highlighted. I think also that prevalence of fecal impaction must be included in the abstract.
The text is as follows (Page 9, paragraph 2o):
Among those with faecal impaction (N=11), simple agreement was 54,5% for frequency, 81,8% for manual removal, 54.5% for retrograde lavage, and 45.5% for anterograde lavage.
Suggestion:
Fecal impaction: occurrence of fecal impaction was X % (11/X). Among those with fecal impaction (N=11/X), simple agreement was 54,5% for frequency, 81,8% for manual removal, 54.5% for retrograde lavage, and 45.5% for anterograde lavage.
The text described that “Among those with faecal impaction (N=11)”, but was not clear what was the total utilized for this evaluation (N=11/?) to determine the frequency of fecal impaction (percentage). The authors did not describe the number of medical records that were adequate to realize the agreement analysis.
In the table 3 (page 19), the authors did not describe the number of questionnaire and medical records and the number of agreement and disagreement for each
variable studied. In the last line of table 3 (about use the proxy), the soma between those that used a proxy (140) and those that did not used the proxy (19) is 159, but IS described in the validation of results (last paragraph of page 8) that one hundred and sixty (80.4%) subjects completed the questionnaire... But, the authors did not describe the number of medical records that were adequate to realize the agreement analysis.

Discussion: The principal points of the study were discussed, including your limitations. There is none discussion about the prevalence of fecal impaction found in the study, and I think that this result deserves to be discussed, considering that are few studies realized with this specific population.

The references chosen were appropriate to the theme; however there are some interesting recent articles that may be included in the study. Some suggestions are listed below.


One cross-sectional study realized in USA with 33.413 patients #65 years from 2004 National Nursing Home (NNHS) evaluated the prevalence of undertreatment of nonpain symptoms and factors associated. Nearly half of patients were aged #85 years. Constipation/fecal impaction occurred in 8.8% of patients and were one of the most common nonpain symptoms (Rodriguez KL et al, 2010).

This study may be added in the background/introduction/discussion.


In this descriptive multicenter cross-sectional study, also realized in Spain, the objectives were to establish screening criteria for constipation, to determine data for diagnostic suspicion of constipation and to investigate the incidence of fecal impaction in palliative care patients (debilitated oncology patients with an average age of 70, the majority received opiates and also laxatives). A questionnaire with signs and symptoms of constipation and a verbal numerical scale (VNS, 0-10) about “discomfort or difficulty with constipation” was added with the purpose of finding a simple way to screen for constipation. The patients were asked about fecal impaction in the last 3 months. One hundred twenty patients completed the study. A diagnosis of suspicion of constipation was established in 48% of patients. VNS with cutoff point of 3 or more of 10, showed a sensitivity of 0.70 and specificity of 0.74 and positive predictive value (PPV) of 73% positive and negative predictive value of 70%. A number of 20% of the palliative patients studied reported episodes of fecal impaction in the last 3 months.

I think that this study may be added on discussion.

This retrospective study evaluated the medical records (clinical outcome and complications) of 130 patients, with mean age of 67.1 years, who were attended with fecal impaction in a tertiary medical center in Beirut, Lebanon. Patients with more than 80 years of age, or patients with heart or neurological disease presented higher risk of developing complications.

This study may be added in the background/introduction.

See the correct form to describe the reference 10.

Reference 10.

Suggestion: