Reviewer's report

Title: Evaluation of gastrointestinal symptoms in different patient groups using the visual analogue scale for irritable bowel syndrome (VAS-IBS)

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Reviewer: Giovanni Barbara

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This is an interesting study evaluating 7 visual analogue scales (VAS) developed for patients with IBS, including abdominal pain, diarrhea, constipation, bloating and flatulence, vomiting and nausea, psychological well-being and the intestinal symptoms' influence on daily life, in 4 different female populations: 52 healthy volunteers; 39 patients with IBS; 21 patients with severe dysmotility disorders (16 with enteric dysmotility and 5 with chronic intestinal pseudo-obstruction); 26 patients with primary Sjogren’s syndrome (pSS). The Authors showed that patients with IBS and severe dysmotility disorders have more severe symptoms in comparison with healthy controls, but they do not differ from each other in VAS-IBS symptoms, except for vomiting and nausea. In addition, patients with pSS have more severe digestive symptoms in comparison with controls, but less severe symptoms in comparison with patients with IBS or dysmotility disorders.

The present study is interesting, however, there are several flaws that reduce the quality of the manuscript:

1) Selection criteria for the control group remain elusive. Were these subjects healthy volunteers, or the group is this group representative of the general population, as suggested in the Discussion? In case these subjects are healthy volunteers, the conclusion that in the general population people does not suffer from gastrointestinal complaints is inappropriate. Indeed, healthy volunteers (who by definition should not report gastrointestinal complaints), are not representative of the general population. On the other hand IBS represents a high-prevalent condition in the general population. In addition, it is not surprising that patients with IBS and severe dysmotility disorders have more severe digestive symptoms than healthy subjects.

2) In the present study, results showed that patients with IBS scored their symptoms as severe as those of patients with severe dismotility disorders. This is not in line with recent reports showing that severe dysmotility is associated with more severe symptoms as compared with IBS (Cogliandro et al Neurogastroenterol Motil 2011). This apparent lack of significance may depend by the small sample size of the present study, hence a likely type II error. In addition, a bias of selection of patients with IBS may explain these unexpected results. Patients with IBS referred to a tertiary gastrointestinal centre may present more severe symptoms in comparison with primary care or in community patients. For example, IBS female patients seen in referral centres versus
primary care are a highly selected group with reduced quality of life and more severe symptoms (Simren et al., Scand J Gastroenterology 2001;36:545-52). Caution is therefore needed in the interpretation and generalization of the reported results. These aspects should be thoroughly discussed in the manuscript.

3) A recently published study (Cogliandro et al., Neurogastroenterol Mot 2011, e-pub) evaluated clinical features, small bowel motility, and quality of life in patients with chronic idiopathic intestinal pseudo-obstruction (CIIP) or severe functional gastrointestinal disorders (SFGDI), in comparison with patients with IBS. In contrast to the present study, mean global and most of individual scores of severity of digestive symptoms were all significantly higher in CIIP patients and SFGDI patients than in patients with IBS. This study should be quoted in the discussion, analyzing the reasons that led to such different results.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'