Reviewer's report

Title: Detecting depressive and anxiety disorders in distressed patients in primary care; comparative diagnostic accuracy of the Four-Dimensional Symptom Questionnaire (4DSQ) and the Hospital Anxiety and Depression Scale (HADS)

Version: 1 Date: 16 February 2009

Reviewer: Adomas Bunevicius

Reviewer's report:

Methods. Patients and procedure.

1) Page 5, first paragraph. One of the inclusion criteria was that patients “had a 'nervous breakdown' according to the GP…”. Authors should explain in more details in the Methods section what is considered a “nervous breakdown” is and support their explanation with references.

2) Page 5, first paragraph. Among the inclusion criteria to the study were that patients were employed and were 18-60 years old. A great part of primary care patents are the ones that are retired. Indeed in the present study the mean age of study population was found to be 39.5 years (SD 9.2). It shows that older patients that comprise a great part of primary care patients were not included to the study. Therefore results of this study cannot be generalized in all GP patients. That needs to be discussed in the Discussion section.

3) Page 5, first paragraph. Authors state that: “The GPs were instructed not to include patients who, in their opinion, had a depressive or anxiety disorder”. This statement should be explained in more specifically. What does it mean 'in their (GPs) opinion'? Because depression and anxiety are clinical diagnoses.

Methods. Measurements.

1) Page 6 and 7, paragraphs 2 and 3. Not sufficient information on the 4DSQ and the HADS. Authors should provide scoring ranges of all of the subscales of the 4DSQ and the HADS, explain what are high scores and what are low scores in the HADS scale, and also provide the cutoff points of both scales (and subscales) used (or recommended).

Results.

1) Pages 10 and 11. Authors are looking for an optimal cut-off value of the 4DSQ subscales and the HADS. In my opinion this part is a major minor point of the study, because to my knowledge the Area under the ROC curve (AUC) is the most valuable value to determine the optimal cutoff point because it provides information on the balance between sensitivity and specificity of the test at a certain cutoff value and an optimal cutoff point of the scale is the one with the highest AUC. Therefore, I think it necessary to perform the ROC analyses
(calculate AUCs) for all cutoff values of the 4DSQ subscales and the HADS first and then determine the optimal values.

2) Tables 3 and 4. The names of the tables could be more specific. Need explanation on what is written in bold type in the table and explain all the abbreviations used. As I mentioned earlier I think that the AUC values are essential in determining an optimal cutoff values, and this information should be included in tables. Also what does abbreviation “4DKL-distress” in Table 3 mean?

Discussion
1) Authors should discuss more about their findings and compare them with the results from other validation studies: what were the AUCs of the HADS and 4DSQ found in other studies, what were the optimal cutoff values of the HADS and 4DSQ found in other studies etc.

Conclusions
1) Page 16. Authors state that: “The recommended cut-off points for the 4DSQ anxiety scale and both HADS scales probably need revision, but the optimal cut-off points should first be established in independent samples”. But cutoffs points of the HADS are being revised, including in a sample of primary care patients (for example in the paper by Bunevicius et al. paper in the Depression and Anxiety). As I have mentioned previously this needs to be discussed.

Minor essential revisions

Background
1) Page 4, first paragraph. References are not sufficient. The authors state that: “Depressive and anxiety disorders are prevalent in primary care patients, although these disorders are often not recognized as such by the general practitioner (GP)” and cite Verhaak, 1995. More and newer references are needed would be useful in supporting this statement.

2) Page 4, first paragraph. References are needed to support the description of the “distressed patient”. Also, authors state that: “These patients present with psychological complaints, such as nervousness or depression…” Are patients with a diagnosis of depression also considered distressed?

3) Page 5, second paragraph. Authors write that: “In distressed patients we do not need questionnaires to detect just any ‘depression’ or ‘anxiety’, or distress in general, since the psychological character of the problems is already apparent both to the doctor and the patient”. What authors mean by ‘depression’ or ‘anxiety”? Is it clinical diagnoses of depression and anxiety disorders or is it symptoms of depression or anxiety?

Methods. Measurements.

1) Page 6, first paragraph. References are needed to support the statement: “The section of simple phobia was omitted because of its questionable clinical
relevance in patients with a ‘nervous breakdown’, while the section of obsessive compulsive disorder was omitted because of the low prevalence of this disorder in general practice”. Why is simple phobia is of questionable clinical relevance in patients with ‘nervous breakdown”? Also, later in Table 2 last row authors name “panic/phobic disorders’. So have really patients with simple phobias were excluded from the study?

2) Authors use abbreviation HADS (Hospital Anxiety and Depression Scale), but sometimes in the text use the term “HADS scale”. For example page 7, second paragraph: “Like the 4DSQ, the HADS scales employ two…”. Authors should correct that.

Methods. Analysis.

1) Authors need to explain at which cutoff values of the HADS and the 4DSQ ROC analysis was performed.

Results

1) Table 1. Need to include information on the total number of patients. Also, a column providing information on how many percent of patients had each diagnosis would be useful. Abbreviations used in the table should be explained in the table.

2) Table 2. Abbreviations used in the table 2 (4 DSQ and HADS) should be explained in the table. Also it would be useful to include information at which cutoff values of the 4DSQ and the HADS the ROC analysis was performed and write significant p values in bold type. Also authors speak about panic/phobic patients in the Table 2 as well as in the text although in the Methods section they state that section of simple phobia of the CIDI was omitted. This should be stated more clearly.

3) Pages 9 -10 (ROC analyses subsection). Not sufficient information. The cronbach alpha values and p values should be provided in the sentence: “Only with respect to the ability to detect panic and phobic disorders, the 4DSQ anxiety scale performed significantly better than the HADS anxiety scale”.

4) Some of the information provided in the Results belongs in the Discussion section. For example the sentence in page 10: “All these HADS total score cut-off points are considerably higher than those recommended in other studies using the HADS total score that found 11+ and 12+ as optimal cut-off points [18,19].”

Discussion

1) Page 12, first paragraph. Avoid repeated information. Abbreviations of the 4DSQ and the HADS are already explained in the text previously.

2) Page 13, Limitations and strengths subsection. Sentence: “Distressed patients who are still working or who are not involved in paid employment, probably would have relatively mild distress on average, a small chance of caseness…. Should be supported by references. Doesn’t distressed and employed comprised study population of the present study?
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.