Author's response to reviews

Title: Comparison of the CES-D and PHQ-9 depression scales in people with type 2 diabetes in Tehran, Iran

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Author's response to reviews: see over
Dear Editor-in-Chief

Thank you indeed for considering our manuscript for publication in your well-known journal.

On behalf of authors, I would like to answer all requested points by respectful reviewers.

Reviewer Mr Nicholas T Van Dam

1.1-We agree with respectful reviewer however in a recent systematic review and meta-analysis by Nouwen and colleagues (Diabetologia (2010) 53:2480-2486), they emphasized these vulnerable groups should be screened regularly for depression.

1.2-In response to this question we would like to say that after a comprehensive search in Iranian publications we noticed that majority of studies in Iran employed other questionnaire as a tool for screening diabetes while CES-D has not been used for patients with diabetes; the only study used CES-D was based on elderly population (Non-Diabetics). Based on literature review we have found that PHQ-9 (short form) is a valid tool for detecting depression in primary care and it was also proved to be an efficient and well-received screening instrument for MDD in the sample of patients with diabetes in a specialized outpatient clinic; however the sensitivity and specificity of this questionnaire varied in different studies, therefore we aimed to compare these well-know questionnaire in Iranian population. It should be stressed again that majority of studies in Iran used BECK, even we conducted a study in 2006 (Ref 24 of our paper) which its findings surprisingly showed a high rate of depression, however other unpublished and published studies in Iranian journals (in Farsi language) confirmed our findings.

1.3-“no history of psychological disorder” meant that our patients did not have any mental disorders such as Dementia or Alzheimer. The history of psychological disorders was ascertained through patients’ medical files, taking history of any medications in this regard. We added this sentences in revised version.

1.4-We would like to confirm that unfortunately the depression has a high rate in Iranian population, Noorbala and colleagues reported their findings in the British Journal of Psychiatry (2004) 184: 70-73, other studies from different parts of Iran identified high rate of depression in patients with Diabetes such as;

Isfahan the prevalence of depressive disorder was 53% (Shafiei K, Amini M. Psychological problems in diabetic patients. Journal of Research In Medical Sciences 1999;3-2(4): 96-94)

Depression was observed in 53.3% of males and 57.7% of females in Kashan (Sepehr Manesh Z, Sarmast H, Sadr SF. Prevalence and severity of depression in diabetic subjects. FEYZ,
and 71.6% of non-Insulin dependent diabetic patients in Semnan (Behnam B, Ghorbani R. Epidemiologic features of depression in non-Insulin dependent diabetic patients in Semnan. JOURNAL OF THE SHAHEED BEHESHTI UNIVERSITY OF MEDICAL SCIENCES AND HEALTH SERVICES 2005;1(29): 49-45)

and also 72.2% of diabetic patients in Ahwaz (Norouzi Nejad Gh. H, Boostani H, Nemat Pour S, Behrouzian F. Comparison of depression among diabetic and non-diabetic patients. Scientific Medical Journal of Ahwaz University of Medical Sciences 2006;48 (5): 391-385)

Another study in Iran showed that 40.6% have moderate to severe depression on the Beck test. (Taziki SA, Bazrafshan HR, Behnampour N, Paviz M. Relationship between depressive’s symptoms and diabetes. JOURNAL OF GORGAN UNIVERSITY OF MEDICAL SCIENCES 2001;8(3): 64-59)

In addition some other studies from Iran found that majority of patients with diabetes have had a low quality of life based on standard questionnaire (or other measurements) which indicating an alarm sing for health care professionals.

Therefore the finding of our study (43.2% rate of depression in diabetics) was expected however as we mentioned earlier majority of previous studies used Beck questionnaire while we used two different tools to detect depression in this group with clinical interview as gold standard.

Of course as we stated in our paper, people with chronic diseases and also patients who are referred to a tertiary clinic seems have more medical problems, therefore it is rational this group of patients suffer from more psychological problems rather than other type of patients.

1.5- In response to this issue we would like to say that recent studies have emphasized that general practitioners should consider depression in people with diabetes in their daily practice.

1.6- There are enough evidences about the consequences of depression on diabetes however the aim of current study was not to evaluate the efficacy of any interventions. It would be further research to find out more about this issue. (Diabetologia (2010) 53:2480-2486).

2.1- Whenever was necessary text were changed in a consistent with relevant references

2.2- It is amended
2.3- We changed the sentence to be followed more clear “Despite its relevance to the course of diabetes and its chronic character, depression is recognized and treated appropriately in fewer than 25% of depressed diabetic patients.”

2.4- The reference is www.scid4.org if there is any necessity we can add it to reference list.

2.5- We asked a native language to edit the current paper.

2.6- We asked a native language to edit the current paper.

3.1- It is a good point but Hamilton Depression Scale and HADS-D measure the severity of depression. These are inappropriate for screening.

Reviewer Bruno Falissard

1- The gold standard in this study was Structured Clinical Interview which was done by an expert psychiatrist who is an academic staff (Associate Clinical Professor) of Tehran Psychiatry Institute. She interviewed patients blindly based on SCID (reference: Sharifi V, Assadi SM, Mohammadi MR, Amini H, Kaviani H, Semnani Y, et al. Reliability and feasibility of the Persian version of the structured diagnostic interview for DSM-IV (SCID). Adv Cogn Sci. 2004; 6: 10 – 22.). The average duration of interview took between 20-40 minutes. The interview had implications only for research proposal however after diagnosis of depression for each patient, the Psychiatrist started the necessary treatment and/or any medications for them. Based on our result, approximately, near 40 percent of patients have received medications.

2- We would like to confirm that unfortunately the depression has a high rate in Iranian population, Noorbala and colleagues reported their findings in the British Journal of Psychiatry (2004) 184: 70-73), other studies from different parts of Iran identified high rate of depression in patients with Diabetes for example;

In Isfahan city the prevalence of depressive disorder was estimated near 53% (Shafiei K, Amini M. Psychological problems in diabetic patients. Journal of Research In Medical Sciences 1999;3-2(4): 96-94) and/or depression was observed in 53.3% of males and 57.7% of females in Kashan (another city) (Sepehr Manesh Z, Sarmast H, Sadr SF. Prevalence and severity of depression in diabetic subjects. FEYZ, KASHAN UNIVERSITY OF MEDICAL SCIENCES & HEALTH SERVICES 2003;27(7): 75-69)

and 71.6% of non-Insulin dependent diabetic patients in Semnan city had depression (Behnam B, Ghorbani R. Epidemiologic features of depression in non-Insulin dependent diabetic
patients in Semnan,  


and also 72.2% of diabetic patients in city of Ahwaz was diagnosed to have depression (Norouzi Nejad Gh.H, Boostani H, Nemat Pour S, Behrouzian F. Comparison of depression among diabetic and non-diabetic patients. Scientific Medical Journal of Ahwaz University of Medical Sciences 2006;48 (5): 391-385)

Another study in Iran showed that 40.6% have moderate to severe depression on the Beck test. (Taziki SA, Bazrafshan HR, Behnampour N, Paviz M. Relationship between depressive’s symptoms and diabetes. JOURNAL OF GORGAN UNIVERSITY OF MEDICAL SCIENCES 2001;8(3): 64-59)

In addition some other studies from Iran found that majority of patients with diabetes have had a low quality of life based on standard questionnaire (or other measurements) which indicating an alarm sing for health care professionals.

Therefore the finding of our study (43.2% rate of depression in diabetics) was expected however as we mentioned earlier majority of previous studies used Beck questionnaire while we used two different tools to detect depression in this group in comparison with clinical interview as clinical interview.

Of course as we stated in our paper, people with chronic diseases and also patients who are referred to a tertiary clinic seems have more medical problems , therefore it is rational this group of patients suffez from more psychological problems rather than other type of patients.

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a) The LR’s explanation(has been mentioned based on Users’ guide to medical literature fy Guyatt, some more explanation added based on request

b) The comparison of AUC belongs to PHQ-9 and CES-D was statistically significanô and this has been mentioned in revised version .

c) The reliability of PHQ-9 and CES-D were calculated by Cronbach -alfa in 46 patments as our pilot and also in the total sample finally ( 185 individuals), 0.873 and 0.936 respectively . This has been added in revised version.