

I thank the reviewers for their insightful comments and suggestions, which have been addressed and incorporated in the revised manuscript. They improved the clarity and applicability of the manuscript

SPECIFIC COMMENTS TO AUTHORS

Strengths:

1. The author summarizes the common pathological mechanism of depression and diabetes exhaustively, and innovatively concluded it from two aspects: behavioural and biological , which helps to deepen our understanding of diabetes.
2. Considering the bottlenecks of managing both diabetes and depression and limited medical resource, the author turn to focus on a new collaborative care model with better availability and applicability. In spite of practical limitations in wider applicability, this embedded integrated approach involving in well-trained non-physicians supervised by physicians and a psychiatrists showed effective improvements in composite measure of depressive symptoms and indices of cardiometabolic health.

Limitation:

- (1) According to the independent study in this article, the democratized management should be limited in type 2 diabetes and the title of this article extend the range of application improperly.

Response: The title of the manuscript has been revised to limit the scope to only Type 2 diabetes

- (2) 'Diabetes can be classified according to different criteria, such as type 1 diabetes and type 2 diabetes, and gestational diabetes and diabetes in older adults have different features. However, this review mainly focused the type 2 diabetes in the democratized management of depression in diabetes and overlook other type 1 diabetes which shows great difference in the management and treatments. And those limits the universality of the conclusion and application in future research.'

Response: The broad spectrum of diabetes mellitus and the potential psychological distress in different forms has been addressed. A statement has been added that the current manuscript is confined to depression in type 2 diabetes mellitus'

'Diabetes mellitus is not a homogenous condition, but results from a variety of pathogenic factors, not always exclusive[7] . However, for clinical purposes, diabetes is classified into (a) Type 1 diabetes due to autoimmune destruction of the pancreatic β -cell leading to absolute insulin deficiency (b) Type 2 diabetes mellitus having insulin resistance and a progressive loss of β -cell insulin secretion (c) Gestational diabetes and (d) Other specific causes leading to diabetes[8] . It is evident that psychological reactions differ in each of the different varieties of diabetes. In this presentation, management of depression is focused on the common type 2 diabetes.'

(3). In the part of "Screening and diagnosis of depression", further detailed description on the difference between the depression and diabetes distress had not been explained. Other articles pointed out that distinguishing depression and diabetes improved the quality of life of patients with diabetes and reduce medical costs.

Response: The differences between depression and of diabetes distress has been emphasized and amplified:

'The grades of anxiety and depression associated with diabetes vary from subclinical depression to diabetes distress, which refers to emotional distress resulting from living with a chronic non-remitting disease[16]. There are serious clinical implications when depression coexists with diabetes: the quality of life is impaired; the risk of morbidity and death is also increased. Operating factors include poor health care behaviour which affects dietary habits, treatment, compliance to treatment, motivation and productivity[16]. Long term diabetic complications are more common with comorbid depression[17]. Finally, the impact of combined diabetes and depression on quality of life is significant. Healthcare costs of

managing type 2 diabetes associated with depression is higher than that of diabetes without depression[18]. Depression in type 2 diabetes can be treated,[19] which improves the quality of life[17]. One must distinguish depression from diabetes distress. Diabetes distress is an emotional response to having diabetes: the restricted lifestyle with having to follow self-management and the potential of complications in the long term[20]. Diabetes distress is associated with lessened self-care, and poorer emotional well being, which, if left untreated may progress to severe depression[21]. Diabetes distress is far more common than clinical depression, and is associated with poorer glycemic control[22]. The poor outcome is mediated in part by perceived control over diabetes, such as one's innate ability to influence the course of diabetes[23].'

4. The emphasis on subjective diagnosis of depression should be connected with the increased risk of false positives shown in some studies, which was not been elucidated in this review.

Response: The subjective diagnosis of depression has been expanded:

'Considering the subjective nature of diagnosing depression, and the potential for false positive results, some national guidelines have not recommended population screening for depression[38]. A systematic review of screening tools for measuring depression in diabetes has shown that little data is available on their validity and reliability, with even lesser evidence for their being culturally appropriate[39]. In general, screening for major depressive disorders is based on screening instruments which do not generally consider the conceptual basis of emotional models[40]. Quite apart from the risk of false positive diagnosis of depression by assessing subjective methods, the outcomes of different methods of psychotherapy are not clear. The latter is being addressed by an ongoing trial: cRCT PSYCHOnlineTHERAPY[41]. '

Second reviewer's comments:

The manuscript is well written and informative. While the manuscript tends to the narrative review, the authors can provide a critical analysis of the literature findings.

The clinical effect of INDEPENDENT Study for long term follow up of depression in diabetes can be added.

Response: to the authors can provide a critical analysis of the literature findings

(a) A critical analysis of the literature has been summarized:

Judging from the number of publications, one could draw an erroneous opinion that the relation between depression in type 2 diabetes is fully established, that effective treatment options are available and that the only constraint is to scale up intervention strategies to manage depression and type 2 diabetes. At the outset there is an asymmetry in the diagnoses of both conditions: whereas diabetes is identified by objective criteria involving measurement of biomarkers, the diagnosis of depression is based on subjective criteria. The results from self-administered questionnaires and expert face to face interviews often diverge, as do different forms of questionnaires. The sensitivity and specificity of questionnaires need to be refined by including the cultural contexts of different populations. Therefore, there is a spectrum of conditions of what is referred to as depression associated with type 2 diabetes, from diabetes distress to subclinical depression, stretching to full blown depression. Interventions improve the outcomes of depression and of diabetes distress; however, treatment of depression improves depressive symptoms, without significant improvement of metabolic control. In contrast, treatment of diabetes distress results in improved glycemic control. Furthermore, the measures to manage them are varied and there are no accepted standard methods, rendering comparisons difficult. Therefore, despite epidemiological and mechanistic evidence for the co-existence of depression and type 2 diabetes mellitus, further refinements are necessary to define and measure the outcome of different treatment modalities of depression. However, most studies report improvement of depressive symptoms with interventions despite equivocal or no improvement of glycemic control. Therefore, it is worthwhile to identify depression in type 2 diabetes mellitus, and provide treatment by psychological and pharmacological measures. Although depression has been shown to respond to treatment, care must be taken in the choice of anti-depressant medications, some of which can worsen insulin sensitivity

leading to metabolic consequences. There is a lack of qualified mental care specialists to deal with the burgeoning burden of diabetes and depression. The employment of trained clinical care coordinators is a worthwhile attempt to improve access to subjects with type 2 diabetes having coexistent depressive symptoms. Preliminary results suggest the efficacy of such interventions. Further studies must be carried out to scale up across different cultural, ethnic and geographic populations.'

(b) The potential outcomes of clinical effect of INDEPENDENT Study for long term follow up of depression in diabetes can be added

Response: The following has been added

'The use of care coordinators in managing depression among subjects with type 2 diabetes has shown promising results a year following active interventions. Further follow up and replication in other settings should be carried out to assess the generalizability of the findings from INDEPENDENT Study. Recently, anxiety was shown to respond favorably to interventions in the INDEPENDENT Study[60].'

6 EDITORIAL OFFICE'S COMMENTS

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) **Science editor:**

First, this review focuses on the democratizing management of depression in type 2 diabetes, while ignoring that other types of type 1 diabetes vary widely in management and treatment. This limits the generality of the findings and the application of future research. Second, the difference between depression and diabetic distress is not described in more detail.

Response: Both the issues have been addressed (Ref: responses to Reviewer 1 above)

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade C (Good)

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Diabetes, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, the **author(s) must add a table/figure to the manuscript**. There are no restrictions on the figures (color, B/W).

Response: A Table has been added (Table 1).