

Contents lists available at [ScienceDirect](#)

Canadian Journal of Diabetes

journal homepage:

[www.canadianjournalofdiabetes.com](http://www.canadianjournalofdiabetes.com)

 Canadian  
Diabetes  
Association


Original Research

## Depressive Symptoms, Family Functioning and Quality of Life in Chinese Patients with Type 2 Diabetes

Jikun Wang MD, PhD<sup>a,b,\*</sup>, Ming He MD<sup>c</sup>, Xudong Zhao MD<sup>b</sup><sup>a</sup> Key Laboratory of Brain Functional Genomics, School of Psychology and Cognitive Science, East China Normal University, Shanghai, China<sup>b</sup> Department of Psychosomatic Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China<sup>c</sup> Department of Endocrinology, Tongji Hospital, Tongji University School of Medicine, Shanghai, China

## ARTICLE INFO

*Article history:*

Received 18 November 2014

Received in revised form

8 May 2015

Accepted 1 June 2015

*Keywords:*

Family Assessment Device

family functioning

quality of life

type 2 diabetes mellitus

## ABSTRACT

**Objective:** Patients with type 2 diabetes mellitus often have depression or depressive symptoms, impaired family functioning and poor quality of life. This study aimed to examine relationships among psychological variables, including depressive symptoms, family functioning and quality of life, for Chinese patients with type 2 diabetes and to explore the influencing factors on quality of life for these patients.

**Method:** In this cross-sectional study, 257 patients with type 2 diabetes and 259 nondiabetic community controls completed the Beck Depression Inventory, the Family Assessment Device, and the Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form.

**Results:** Patients with type 2 diabetes reported significant family impairment in the dimension of affective involvement compared with nondiabetic community controls ( $p < 0.05$ ). Mean Family Assessment Device scores were negatively associated with quality of life scores among patients with type 2 diabetes. Age, depressive symptoms, duration of diabetes, communication, affective involvement and behavioural control were associated with quality of life in patients with type 2 diabetes.

**Conclusions:** The results indicate that having type 2 diabetes was associated with some difficulties with family functioning and that poor family functioning was associated with a poorer quality of life. Additional factors, including older age, depressive symptoms, duration of diabetes, and some dimensions of family functioning, were found to be associated with quality of life in Chinese individuals with type 2 diabetes.

© 2015 Canadian Diabetes Association

## R É S U M É

*Mots clés :*

Questionnaire d'évaluation familiale

fonctionnement familial

qualité de vie

diabète sucré de type 2

**Objectif :** Les patients atteints de diabète de type 2 présentent souvent une dépression ou des symptômes dépressifs, des troubles familiaux et une faible qualité de vie. Cette étude visait à examiner les relations entre les variables psychologiques, dont les symptômes dépressifs, le mode de fonctionnement familial et la qualité de vie, pour des patients chinois atteints de diabète de type 2 et elle visait à explorer les facteurs qui influent sur la qualité de vie de ces patients.

**Méthode :** Dans cette étude transversale, 257 patients atteints de diabète de type 2 et 259 d'un groupe contrôle non diabétique ont rempli l'Inventaire de Dépression de Beck, un questionnaire d'évaluation familiale, et un court questionnaire de satisfaction et de bien-être éprouvés dans leur qualité de vie.

**Résultats :** Les patients atteints de diabète de type 2 ont montré une dépréciation significative dans la dimension de l'implication affective par rapport à la communauté contrôle non diabétique ( $p < 0,05$ ). Le score moyen du questionnaire d'évaluation familiale était associé négativement avec les scores de la qualité de vie chez les patients atteints de diabète de type 2. L'âge, les symptômes dépressifs, la durée du diabète, la communication, l'implication affective, et le contrôle du comportement étaient associés à la qualité de vie chez les patients atteints de diabète de type 2.

**Conclusions :** Les résultats indiquent qu'avoir un diabète de type 2 est associé à des difficultés avec le mode de fonctionnement familial et qu'un fonctionnement familial faible était associé à une qualité de

\* Address for correspondence: Jikun Wang, Key Laboratory of Brain Functional Genomics, Ministry of Education, East China Normal University, Shanghai 200062, China.

E-mail address: [jkwang@psy.ecnu.edu.cn](mailto:jkwang@psy.ecnu.edu.cn)

1499-2671/\$ – see front matter © 2015 Canadian Diabetes Association

<http://dx.doi.org/10.1016/j.cjcd.2015.06.001>

vie plus faible. D'autres facteurs, y compris un âge plus avancé, des symptômes dépressifs, la durée du diabète, et certains aspects du fonctionnement familial ont été trouvés être associés à la qualité de vie chez les individus chinois avec un diabète de type 2.

© 2015 Canadian Diabetes Association

## Introduction

Type 2 diabetes mellitus is a major chronic disorder that has resulted in a serious public health issue in China because of rapid lifestyle changes (1). In some countries, patients with type 2 diabetes commonly have depression or depressive symptoms, impaired family functioning and poor quality of life (QOL) (2–4).

Epidemiologic and clinical studies have found a strong relationship between depression/depressive symptoms and type 2 diabetes (2). The prevalence of depression is significantly greater in patients with type 2 diabetes compared to those without diabetes (5). In fact, there is some evidence that type 2 diabetes may increase the risk for developing depression (6), and having a chronic disease such as type 2 diabetes could be a chronic stress and burden to the patients, thus leading to their depression/depressive symptoms. Also, depression appears to increase the prevalence of the development of type 2 diabetes (7). For example, some research has demonstrated that depression/depressive symptoms are a major influence on the development of type 2 diabetes and may lead to the onset of diabetic complications (7,8). The patterns of association between diabetes and depression might vary in different countries (9).

Some studies have explored family functioning for patients with type 2 diabetes. Family issues are common in patients with type 2 diabetes. Having diabetes could potentially affect family functioning, and poor or positive family functioning could affect one's ability to manage diabetes.

For example, in a sample of Chinese patients, the family functioning of patients with type 2 diabetes and depressive symptoms was worse than that of patients with type 2 diabetes but without depressive symptoms (10). One possible explanation is that diabetes as a chronic illness could cause stress for the whole family, and the family with a patient who has type 2 diabetes must cope with such a chronic disease. The family members become the most important social support providers for the patients. Additionally, many studies suggest that control of type 2 diabetes is related to family functioning (3), and differing cultures may show differences in family functioning (11,12). One study found that family cohesion was related to good glucose levels in Japanese outpatients (3). Findings in an Indian study suggest that positive family functioning can help in managing diabetes more effectively (13). Also, a study of African-American women with type 2 diabetes indicated that a better understanding of subjects in the context of family may be important in identifying culturally meaningful strategies that improve self-care behaviours (12). Additionally, social support from family could provide patients with help. However, the mechanism by which this occurs has not yet been completely understood (14).

QOL is a multidimensional construct that includes 3 aspects: physical, mental and social functioning. A United States-based study of South Korean immigrants with type 2 diabetes showed that the relationship between QOL and depressive symptoms was stronger for men than for women, indicating that sex differences may influence QOL and depressive symptoms in immigrants from South Korea who have diabetes (4). Research involving a Chinese sample found that the QOL of patients with type 2 diabetes and depressive symptoms was worse than that of patients without depressive symptoms, and subjective social support was associated positively with QOL for patients with depressive symptoms (15). As previous work has highlighted, ethnic differences in QOL for

patients with type 2 diabetes exist (16), so it is important to explore the factors that influence Chinese patients' QOL.

Cultural differences should be observed when studying the relationships among depression, family functioning and type 2 diabetes. Research indicates the importance of studying family factors in the care of patients with type 2 diabetes in differing cultures (3,13), and some evidence suggests that the prevalence of and treatment outcomes for patients with type 2 diabetes vary significantly across countries (16). Evidence shows a strong interactive relationship between depression/depressive symptoms and type 2 diabetes, and a cultural perspective on this association would be timely (6). Furthermore, issues of culture and diversity should be considered when exploring family functioning in the context of illness (e.g. type 2 diabetes and depression) (3,13,17). Various factors influence QOL in Chinese patients with type 2 diabetes and without depressive symptoms (15). A longer duration of diabetes and depression is associated with poor QOL in Chinese patients (1). Furthermore, higher salaries and subjective social support relate positively to QOL for patients with type 2 diabetes and depressive symptoms (15). However, the family factors influencing QOL for Chinese patients with type 2 diabetes are not yet understood.

In summary, type 2 diabetes has a strong association with depressive symptoms, and QOL could be influenced by psychological and family factors in patients with type 2 diabetes worldwide. There may be different patterns of relationships among depressive symptoms, family functioning and QOL for patients with type 2 diabetes. Evidence indicates cultural differences, so it is important to explore the relationships among depressive symptoms, family functioning and QOL in Chinese patients with type 2 diabetes in order to guide proper interventions and improve patients' QOL.

The study aimed to explore relationships among depressive symptoms, family functioning and QOL in Chinese patients with type 2 diabetes and to examine the psychological and family factors influencing these patients' QOL.

## Methods

This study utilized a cross-sectional research design. The sample comprised 257 Chinese outpatients with type 2 diabetes and 259 control subjects without diabetes. The outpatients were recruited from the Department of Endocrinology in a hospital in Shanghai, China. Patients with type 2 diabetes were diagnosed by the treating clinicians according to the criteria of the American Diabetes Association (18). The community controls without diabetes were recruited in the community through a neighborhood committee.

All participants underwent clinical evaluation and assessment by psychiatric instruments. The study involved 257 patients; 34 patients were excluded. Exclusion criteria for patients with type 2 diabetes included those with type 1 diabetes; those with secondary diabetes due to another disease; and those with other psychiatric disorders, including schizophrenia, bipolar disorder, etc. Nondiabetic community controls did not have current or past histories of psychiatric disorders or serious physical disorders. The Institutional Review Board of East China Normal University approved this study. All subjects volunteered to participate and gave their written informed consent after receiving an explanation

Download English Version:

<https://daneshyari.com/en/article/6086626>

Download Persian Version:

<https://daneshyari.com/article/6086626>

[Daneshyari.com](https://daneshyari.com)