

# Study on Life Quality of Diabetes Patients and its Influencing Factors

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**Abstract:** Objective: To investigate life quality of type II diabetes and its influencing factors of patients in Inner Mongolia area. Method: To compare life quality of patients with diabetes from community, together 161 cases taken by Affiliated Hospital of Inner Mongolia University for Nationalities' endocrine therapy area, with life quality of 150 cases of healthy people in the control group, so as to explore its influencing factors from June, 2014 to March, 2015. The general survey includes age, gender, severity of illness, education level and economic status, etc.; life quality of people can be scored by using Table SF-36, the investigation includes social function, mental health, body pain, emotional function and physiological function. Result: Score on life quality in social function, mental health, body pain and physiological function, scores in the study group are (59.6520.10), (53.5012.78), (70.0213.77), (74.1514.11) respectively, which is significantly lower than that in the control group, the difference is statistically significant ( $p < 0.05$ ); the main factors of influencing life quality of patients in community diabetes including age, gender, education level, course of disease and degree of understanding disease. Conclusion: Life quality of diabetes patients is obviously lower than health group, and they need some effective interventions measures on residential status, age, educational level, course of disease, blood sugar control level, and complications and other issues to improve their life qualities.

**Keywords:** Type II Diabetes, Influencing Factors, Inner Mongolia Area

## Introduction

Diabetes is caused by different etiology of metabolic disorders, symptoms of patients in I period mainly include clinical manifestations of chronic hyperglycemia, complicated with disorder or symptoms of insulin deficiency, which can cause metabolic disorder of carbohydrate, protein and fat, thus a variety of organs are easily got chronic injuries. Patients with severe renal failure, which can have severe threat to patient's health and life safety. With the continuous development of medical cause and health services as well as the continuous improvement of people's living standard, more and more attention has been paid to life quality of patients with diabetes. In this study, from June 2014 to March 2015, life quality of 161 patients with diabetes taken by Affiliated Hospital of Inner Mongolia University for Nationalities' endocrine therapy area and life quality of 150 cases of healthy people is compared and studied.

## Data and Method

General data: June 2014 to March 2015, 161 patients with diabetes in community taken by Affiliated Hospital of Inner Mongolia University and 150 cases of healthy people can be acted as study group. The average age is  $(49.6 \pm 8.5)$  years old. The patients are diagnosed by clinical

examination, so as to meet the diagnostic criteria of diabetes of patients in community, excluding patients with mental illness, communication disorder, malignant diseases, severe infection and severe organic disease, as well as patients, who are not cooperative with the investigation. Meanwhile, taking the same period of 150 cases of healthy people as the control group, the average age is  $(49.9 \pm 7.8)$  years old. There is no significant difference in age, gender and other basic data between these two groups of people, which is comparable.

Method: patients are compared through questionnaire, as for people with lower education level can complete the questionnaire by asking them face to face. The content of the survey mainly includes two aspects, one is the general investigation, the other is survey on life quality. The general survey can be including age, gender, severity, education level, economic status and so on; by using Table SF-36 to score on life quality of people, the investigation can include social function, mental health, body pain, emotional function and physiological function, etc.. By comparing life quality of two groups of people, the influencing factors of life quality of patients with diabetes in community can be discussed.

Statistical method: In addition to data, SPSS18.0 statistical software is used. Normal measurement data can use " $\bar{x} \pm s$ " to present, the comparison between groups can use  $t$  to test, comparison between groups of counting data can adopt test. When  $P < 0.05$ , the difference has statistical significance.

## Result

Scores on social function, mental health, body pain, emotional function, physiological function and other life qualities of patients in the study group are significantly lower than that in control group ( $P < 0.05$ ), see Table 1; the main factors that can affect life quality of patients with diabetes in community including age, gender, education level, the course of disease and the understanding degree to the disease, see Table 2; factors that can have psychological effect on diabetic patients are age of patients and knowledge of understanding the disease; factors that can cause physical pain are mainly age of patients and course of disease; factors that can have effect on social function of patients are mainly the course of disease and education level; factor that can have effect on emotional function of patient is age, See table 3.

Table 1 Comparison of Scores on Life Quality in Two Groups

Groups	The number of cases	Social function	Mental health	Somatic pain	Emotional function	Physiological function
Study Group	161	$59.65 \pm 20.10^a$	$53.50 \pm 12.78^a$	$70.02 \pm 13.77^a$	$53.31 \pm 13.30^a$	$74.15 \pm 14.11^a$
Control group	150	$90.42 \pm 9.70$	$88.31 \pm 12.75$	$89.46 \pm 12.34$	$87.34 \pm 14.14$	$97.11 \pm 9.32$

Table 2 Factors influence life quality of patients with diabetes in community

Life quality/ Influencing factors	Age	Education level	Course of disease	Gender	Disease knowledge
Social function	-0.362	0.342	-0.369	0.006	-0.286
Mental health	-0.235	0.169	-0.372	0.009	0.521
Somatic pain	-0.364	0.267	-0.308	-0.299	0.265
Emotional function	-0.453	0.294	-0.421	0.142	-0.057
Physiological function	-0.542	0.312	-0.378	-0.062	0.427

Table 3 Effect of Stepwise Regression Analysis on Life Quality of Patients with Diabetes

Life quality	Influencing factors	Regression coefficient	The value of P
Social function	Course of disease	-0.302	0.013
	education level	0.256	0.024
Mental health	Disease knowledge	0.453	<0.001
	Age	-0.306	0.006
Somatic pain	Course of disease	-0.248	0.012
	Age	-0.375	0.006
Emotional function	Age	-0.467	<0.001
	Disease knowledge	0.369	0.004

## Discussion

Nowadays, the health service cause in China has focused on the prevention and control of chronic diseases. Diabetes is one of the four major chronic diseases, the prevalence rate is being increased year by year. Once the blood glucose level of patients is in a high state for a long time, it will cause eye, heart, kidney, nerves and blood vessels and other functional disorders. In the past, the main reference to the patient's blood glucose level and glycosylated hemoglobin and other biochemical indicators to determine therapeutic targets, disease control and curative effect judgment. Due to the formation of modern medical model, the clinical objective of treating diabetes is not only in controlling blood glucose level, it is also including the prevention of complications, the relief of disease symptoms and the improvement of life quality. Life quality can play a very important role in evaluating patients' disease and treating mental health, physical function and social relations. Through the investigation of life quality of patients with diabetes in community, it can analyze the influencing factors and give targeted therapy, which can improve life quality of patients. There are many factors that can affect life quality of patients with diabetes in community.

## Conclusion

The result of this study showed that scores of life quality in study group on social function, mental health, body pain, emotional function and physiological function was significantly lower than that in the control group ( $P < 0.05$ ); factors that can affect life quality of patients with diabetes in community including age, education level, the course of disease, gender and the degree of understanding and so on; factors that can have psychological effect on diabetic patients mainly including age of patients and knowledge of understanding the disease; factors that can cause physical

pain including age of patients and course of disease; factors that can influence the social function of patients mainly including course of disease and education level; factors that can influence patient's emotional function mainly including age, which illustrated us that life quality of patients with diabetes in community was mainly related to age, education level, course of disease, gender and the understanding of the disease. People can help elderly patients with diabetes, so that disease can be early detection, early diagnosis and early treatment, preventing the occurrence of complications, relieving the clinical symptoms of patients, treating them with psychotherapy and giving health education guidance, which has significant meaning to improve life quality of patients with diabetes.

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