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The Effect of Education by Group Discussion Focused on the Quality of Life of Type 2 Diabetic Patients Referred to the Diabetes Clinic of Imam Khomeini Hospital In Zabol in 2018

Hamid Reza Sheikhi, Hadis Mastaelizadeh, Sajjad Sheykh, Hamed Khashi Ghale Now, Ali Reza Sheikhi, Benyamin Saadatifar*

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Abstract

Background and Purpose:Diabetes is a chronic disease, and one of the most important issues in the care of chronic patients is their quality of life. Diabetic patients face many problems, but the question is, how are patients' quality of life?Method:This study was a quasi-experimental study. The statistical population included patients with type 2 diabetes referred to Imam Khomeini Hospital clinic. The sample size was determined on the basis of the pilot study on 10 people and using the formula for comparing the means, with a confidence coefficient of 95% and a test power of 80, was determined to be 30. Random sampling method was used for sampling. Demographic information questionnaire including patient information and quality of life questionnaire (DQOL) were used to collect data. This questionnaire has 15 questions and aims to assess the quality of life of type 1 and type 2 diabetic patients. After collecting the data, the questionnaires will be encrypted and logged into the computer, and after ensuring the accuracy of the data entered, SPSS software (version 21) will be used to analyze the data. In this study, descriptive statistical methods will be used to examine the results. Descriptive statistics including mean, standard deviation, absolute and relative frequency distribution will be used. In statistical tests, 95% confidence interval ($p < 0.5$) is considered.Results:Based on the results of satisfaction, knowledge and knowledge about diabetes mellitus after intervention was significantly increased before the intervention and t-test also showed a significant difference ($p < 0.001$). Also, in other sections, marital satisfaction, satisfaction with sleep, satisfaction for measuring blood glucose and self-care after intervention were increased before intervention, and t test also showed a significant difference in this regard ($05 / 0 > p$). Also, the quality of life after intervention was significantly higher than before intervention, and t-test also showed a significant difference ($p < 0.001$).Conclusion:In fact, changes in the quality of life dimensions are affected by individual, social and economic factors, and it can be concluded that measuring quality of life along with social-demographic characteristics provides comprehensive information for chronic patients, which can ultimately be used for program information. The therapeutic treatment of chronic patients and the improvement of their quality of life.

Key words: Type 2 Diabetes, Quality of Care, Focused Group Discussion

Introduction

Infectious diseases and malnutrition have been the main focus of all health policies in the past, but nowadays promotion of health care has largely confronted pathogens. On the other hand, changes in lifestyle and lack of physical activity have changed to non-communicable diseases such as diabetes, osteoporosis, cardiovascular disease, obesity, etc. (Taheri et al., 2016). However, diabetes is the most common chronic disease the world, it is described by the World Health Organization as a latent epidemic (Shorida et al., 2017). According to the International Diabetes Federation in 2011, more than 366 million people, or 8.3% of adults worldwide, have diabetes (Razi et al., 2013). The prevalence of diabetes is expected to reach 50.7% in 2030. In Iran, the prevalence of type 2 diabetes is 7.7%, which according to the World Health Organization is expected to reach 8.6% by 2025 (Shorida et al., 2017).

Hamid Reza Sheikhi, Hadis Mastaelizadeh

Msc of Nursing, Faculty Member of Nursing and Midwifery, Zabol University of Medical Sciences, Zabol, Iran.

Sajjad sheykh, Hamed Khashi Ghale Now, Benyamin Saadatifar*

Bsc Student of Nursing, Student Research Committee, Faculty of Nursing and Midwifery, Zabol University of Medical Sciences, Zabol, Iran.

Ali Reza Sheikhi

Msc Student of Nursing, Faculty of Nursing and Midwifery, Zabol University of Medical Sciences, Zabol, Iran

Glucose intolerance or increased blood glucose is one of the most common symptoms of diabetes, which puts an individual at the risk of short-term and long-term complications of diabetes, while it can provide proper care and control of complications caused by It prevented it (Ebrahimi et al., 2016). But the inappropriate control of this condition results in an increase in blood glucose levels that can lead to cardiovascular disease, neuropathy, retinopathy, and nephropathy, as well as diabetic foot, amputation, and depression as other complications of diabetes (Razi et al., 2013).

These complications can cause worries, dissatisfaction with life, and poor quality of life. Quality of life is considered to be an important factor in having a good feeling in all aspects of physical, mental and social life, especially in chronic diseases. The organization of global health is the quality of life as a person's perception of his or her own life according to culture and system The value he lives in and the relevance of these receipts to his goals, expectations, and priorities (Ghiyoswandiyan et al., 2018). In recent years, quality of life has been recognized as a major health concern in medical treatment and a major issue in the care of diabetic patients. Diabetes can have negative effects on physical activity, mental status, and personal, family and social communication, and reduce the quality of life of patients in all areas of life (Lustman et al., 200). On the other hand, education is known as the basic rights of humans. The main purpose of educating patients is to help them maintain their autonomy in self-care (Khah et al., 2018). According to the World Health Organization, education is the basis for the treatment of diabetes. Patient education helps to stay healthy and reduce the complications of chronic illness, so that without education about diabetes, patients will be exposed to four times more complications (Taheri et al., 2016).

Traditional education in meeting the needs of patients with diabetes mellitus is not sufficient to change behavior, which has changed the teaching methods and approaches to patients (Shorida et al., 2017). The use of focused group training is a method for providing solutions and collecting information, a valuable method for qualitative researchers. The centralized group is a semi-structured group meeting conducted by the leader of the guided group and in an informal setting with the goal of providing guidance and gathering information about specific titles (Streubert Speziale & Carpenter, 2007). In this way, people are keen to describe their feelings and behaviors. The main feature that distinguishes the focused group is the awareness and information generated by the interaction of the participants. It is believed that the participants respond not only to questions posed by the interviewer but also to the opinions of other participants. In a group interview, the group's dynamics adds to the quantity and quality of information (Halcomb et al., 2007).

Accordingly, this study aims to determine the impact of education on group discussion focused on quality of life in diabetic patients type 2.

Methodology

This study was a quasi-experimental study. The statistical population included patients with type 2 diabetes referred to Imam Khomeini Hospital clinic. The sample size was determined on the basis of the pilot study on 10 people and using the formula for comparing the means, with a confidence coefficient of 95% and a test power of 80, was determined to be 30. The criteria for entering the study included not having a mental illness or any psychological problem, having type 2 diabetes, and having at least a degree of cycle education for attending the sessions. Exit criteria were also type 1 diabetes, illiteracy, absenteeism more than two sessions, patients with no speaking ability, having psychological disorder and other physical illness, absence from more than one focus group discussion, unavailability of patients in When completing the checklist and post-test questionnaire and filling in the checklist incompletely.

Random sampling method was used for sampling. Demographic information questionnaire including patient information and quality of life questionnaire (DQOL) were used to collect data. This questionnaire has 15 questions and aims to assess the quality of life of type 1 and type 2 diabetic patients. The content validity and validity of the internal consistency of this questionnaire were evaluated and confirmed in this research (2012). The questionnaire consists of 15 questions, which include two dimensions of patient care behaviors and satisfaction with disease control. In order to investigate the internal consistency of the questionnaire, Spearman's correlation coefficient between each question and the total score was used. Cronbach's alpha coefficient was used to test the reliability of the questionnaire, which was 0.77. This figure indicates a good reliability of this questionnaire. In one category, Cronbach's alpha higher than 0.9 showed excellent reliability, between 0.09 and 0.09 good, between moderate 0.57 and less than 0.5, unreliable reliability indicator It will be accepted (Nasyahtkon et al., 2012).

Educational intervention was performed in 6 sessions and based on the scheduled program. Then, 2 months after the sessions, quality of life of patients with type 2 diabetes was completed by the same questionnaire and the results were compared with the results before intervention. Weekly visits to the home once a day and each session for 45 to 60 minutes (about self-care behaviors, proper nutrition, exercise and physical activity, and its effects on different aspects of health and the importance of preventing and preventing it). After the end of each session, the summary of the material was presented as a training pamphlet prepared according to their needs.

After collecting the data, the questionnaires will be encrypted and logged into the computer, and after ensuring the accuracy of the data entered, SPSS software (version 21) will be used to analyze the data. In this study, descriptive statistical methods will be used to examine

the results. Descriptive statistics including mean, standard deviation, absolute and relative frequency distribution will be used. In statistical tests, 95% confidence interval ($p < 0.5$) is considered.

Findings

The findings showed that the majority of patients (67.5%) had less than 55% diploma education, over 35 years old (70%) and 3-4 children (58%). The mean age of the patients was 27.77 years with a standard deviation of 8.58 years.

According to Table 1, the level of satisfaction with knowledge and knowledge about diabetes mellitus after intervention was significantly increased before intervention, and t-test showed a significant difference ($p < 0.001$). Also, in other sections, marital satisfaction, satisfaction with sleep, satisfaction for measuring blood glucose and self-care after intervention were increased before intervention, and t test also showed a significant difference in this regard ($05 / 0 > p$). Also, quality of life after intervention was significantly increased before intervention, and t-test showed a statistically significant difference ($p < 0.001$). (Table 1).

Table 1. Comparison of quality of life and other dimensions before and after intervention

Variable	Before invention	After invention	Statistical test	P-value
	Mean ± SD	Mean ± SD		
Satisfaction level of knowledge and awareness	3.76 ± 8.60	2.21± 12.72	t-test	0.001 <
The amount of satisfaction with sleep	1.93 ± 4.50	0.98 ± 6.17	t-test	0.001 <
Satisfaction to measure blood glucose	1.38 ± 4.20	1.03 ± 4.45	t-test	0.01
Self-care satisfaction	1.75 ± 5.10	1.26 ± 7.27	t-test	0.001 <
The degree of satisfaction with the current state of diabetes treatment	1.62 ± 4.22	1.27 ± 5.15	t-test	0.001 <
Satisfaction with time for treatment	1.54±4.11	1.32±4.25	t-test	0.001 <
The degree of satisfaction with the current state of diabetes treatment	1.64 ± 5.22	1.27 ± 5.25	t-test	0.001 <
Diabetes malfunctions in the job	1.68 ± 4.22	1.27 ± 5.75	t-test	0.001 <
Treatment for diabetes causes pain	1.42 ± 3.87	1.17 ± 4.15	t-test	0.001 <
You are physically ill	152 ± 6.22	1.47 ± 6.35	t-test	0.001 <
Worried about your own intelligence	1.62 ± 4.22	1.27 ± 5.15	t-test	0.001 <
The amount of satisfaction from the time taken to assess diabetes	112 ± 6.82	1.10 ± 6.95	t-test	0.001 <
The degree of satisfaction with your status that imposed to your family	1.38 ± 4.20	1.27 ± 4.25	t-test	0.001 <
The degree of flexibility, you eat your food instead of telling "I have diabetes"	1.42 ± 4.52	1.27 ± 5.15	t-test	0.001 <
Quality of Life	8.09 ± 24.62	5.04 ± 36.55	t-test	0.001 <

Discussion and Conclusion

The findings of this study showed that the highest level of knowledge and knowledge about the knowledge and knowledge of diabetes causes pain, the lowest score. In a study by Thommasen et al. on the people of the three countries China, Malaysia and India, the highest scores were obtained in physical and mental health scores in China and Malaysia, respectively, and in India, the highest score was related to the physical pain of patients with diabetes It was inconsistent with the study. And the cause of the disagreement with the study may be due to obesity and not compliance with the nutrition.

The research findings are consistent with these studies:
In a study by Anahita Khodabashishi Kollai et al. (2015) entitled "The effectiveness of group supportive psychotherapy on quality of life in type II diabetic patients" (Khodabashchi et al., 2015). Mahboubeh Borhani et al. (2011) conducted a research entitled "The effect of educational program based on the preceding model in improving the quality of life of type 2 diabetic patients" (Taqdeisi et al., 2011).
Asghar Salimi et al. (2016) conducted a study entitled "The Impact of self-management education on quality of life in type 2 diabetic patients". This study is consistent with the quality of life of diabetic patients (Ghiyasvandian et al., 2017). In a study conducted by Ghanbari (2002) on diabetic patients, it was found that the quality of life of diabetic patients under the influence of education can be

reached from a low level to a higher and desirable level. Providing care and education to patients with diabetes causes a feeling of vitality, better communication and more satisfaction with therapies (Ghanbari, 2002).

References

Ali Asghar Nasyahtkon, Alireza Pishva, Farrokh Habibzadeh, Mozhgan Tabatabaei, Mitra Taher Ghashgayi Zadeh, Fatemeh Hojjat, Iman Hafizi. (2012). Determining the Reliability and Validity of the Clinical Questionnaire Summary Quality of Life in Diabetic Patients (DQOL), Iran's Diabetes and Metabolism 5. 483

Anahita Khodabashchi Koolai, Ali Navidian, Zahra Bayati, Masoumeh Rahmati Zadeh. 2015. Effectiveness of group supportive psychotherapy on the quality of life of type II diabetic patients. Diabetes Nursing 3. 31-41

Chrvala CA, Sherr D, Lipman RD. Diabetes self-management education for adults with type 2 diabetes mellitus: a systematic review of the effect on glycemic control. Patient education and counseling. 2016;99(6):926-43.

Ebrahimi, Sadeghi, Vahedi, Pooya K Comparison of the effect of two patient-centered and family-centered teaching methods (based on empowerment model) on laboratory indices of type II diabetic patients. Nursing and Midwifery Clinical Journal. 2016; 5 (1): 87-97.

Ghanbari, Atefeh. Determining the Pattern of Effective Factors on Quality of Life Dimensions in Diabetic Patients Journal of Medical Sciences University of Medical Sciences 88, Summer 2002 - Gilan, p. 82

Ghiyasvandian S, Salimi A, Navidhamidi M, Ebrahimi H. Effect of self-management education on the quality of life of type II diabetic patients. Journal of Knowledge and Wellbeing in Basic Medical Science. 2017; 12 (1): page: 50-6.

Ghiyoswandiyan, Tabarsei, Beheshti, Mahni M, Thesciy, Zarnaqs. Evaluating the Effectiveness of Participatory Care Model on Quality of Life and Metabolic Indicators of Patients with Type 2 Diabetes. Journal of Education and Community Health. 2018; 5: 0-.

Gorgan University of Medical Sciences 1. 29.

Halcomb EJ, Gholizadeh L, DiGiacomo M, Phillips J, Davidson PM. Literature review: considerations in undertaking focus group research with culturally and linguistically diverse groups. Journal of clinical nursing. 2007;16(6):1000-11.

Khah, Ismaili, Zadeh, Jahanshir, Charisma, Jaras, et al. The effect of peer education on the quality of life of middle-aged people with type 2 diabetes. Horizon Scientific Research Journal. 2018; 24 (1): 17-22.

Lustman PJ, Anderson RJ, Freedland KE, De Groot M, Carney RM, Clouse RE. Depression and poor glycemic control: a meta-analytic review of the literature. Diabetes care. 2000; 23 (7): 934-42.

Maryam M., Mohammad A, Neda M. The effect of empowerment program on quality of life in patients with type 2 diabetes.

Mohammad Hossein Taqdeisi, Mahboobeh Borhani. Mahnaz Solhi, Mohammad Asghak Akkari, Fatemeh Hosseini. (2011). The effect of educational program based on pre-model in improving the quality of life of diabetics in type 2 patients.

Mohammad Kh. The effect of peer education on diabetic self-efficacy in type 2 diabetic patients: a clinical trial study.

Razi SP, Sadeghi M, Nasrabadi ARN, Ebrahimi H, Kazemnejad A. The Effect of Family-Based Empowerment Pattern on Knowledge and Metabolic Control of Patients with Type II Diabetes. Journal of Science and Health. 2013; 9 (1): Page: 48-54.

Samira D, Ali Kh, Zeynab GH, Ali M. Quality of life in diabetic patients: a comparative study.

Shorida Az, Homira, Arshi, Shannam, Sharideh Az, Forozan. Effect of family-centered empowerment model on lifestyle, self-efficacy and HbA1C in patients with diabetes. Iranian Journal of Endocrinology and Metabolism, Two-month Journal of Endocrine and Metabolism Research Center, Iranian Journal of Endocrinology and Metabolism. 2017; 19 (4): 244-51.

Streubert Speziale H. J. & Carpenter DR (2007) Qualitative research in nursing. Advancing the Humanistic Imperative.

Taheri, Khorsandi, Taheri, Ghaffari, Mahin, Amiri. Empowerment-based interventions in patients with diabetes: a review study. Journal of Rafsenjan University of Medical Sciences. 2016; 15 (5): 453-68.