

EARLY DETECTION OF MENTAL EMOTIONAL DISORDERS (DEPRESSION, ANXIETY, AND STRESS) IN PATIENTS WITH DIABETES MELLITUS

Ika Juita Giyaningtyas¹, Beatrix Elizabeth², Aprilina Sartika³)

Bachelor of Nursing and Professional Nursing Education Program, Faculty of Health Sciences,
Universitas Medika Suherman, Bekasi Regency, Jawa Barat, Indonesia

^{1*} ikajuitaa@gmail.com

Abstract

Chronic diseases such as diabetes mellitus can affect the psychological state of the patient. Negative emotional responses to the diagnosis that one has the disease can include denial or unwillingness to acknowledge reality, anxiety, anger, guilt, and depression. These conditions are mental emotional disorders that often occur in patients with chronic diseases. Diabetes mellitus patients who come to the doctor or to other health services are not known to have mental emotional disorders, so they do not get further treatment. This will certainly have an impact on the failure of monitoring therapy which further affects the prognosis. Based on the analysis of the situation and existing problems, it is necessary to conduct early detection related to mental emotional disorders or psychosocial mental health problems that accompany diabetes mellitus patients in the Cibarusah Health Center area. Early detection is carried out with the Self Reporting Questionnaire 20 (SRQ-20) instrument. Based on the results of early detection that has been carried out, it is concluded that the majority of patients with diabetes mellitus experience mental emotional disorders, as many as 56%. Patients must realize the importance of early detection and actively participate in treatment. Prevention efforts are important by involving diabetes management, promotion of a healthy lifestyle, social support, and constant monitoring of changes in mental symptoms.

Keywords: Diabetes Mellitus, Early Detection, Mental Health, Psychological.

INTRODUCTION

Diabetes mellitus (DM) is a group of metabolic diseases classified as chronic diseases with hyperglycemia characteristics that occur due to abnormalities in insulin secretion, insulin action, or both (Guyton & Hall, 2016). A report from the International Diabetes Federation (IDF), predicts an increase in the number of people with diabetes mellitus in the world from 425 million in 2017, to 629 million in 2045. While in Southeast Asia, from 82 million in 2017, to 151 million in 2045. The prevalence and incidence of diabetes mellitus is increasing drastically all over the world including Indonesia. Indonesia is the 7th of the top 10 countries estimated to have 5.4 million people with DM by 2045 and has a low blood sugar control rate (Carracher et al., 2018).

It is important to realize that living with a chronic disease such as diabetes mellitus can affect the psychological state for patients. Negative emotional responses to the diagnosis that one has the disease can include denial or unwillingness to acknowledge reality, anxiety, anger, guilt, and depression (Novitasari, 2012). These conditions are mental emotional disorders that often occur in patients with chronic diseases.

Mental emotional disorders are health conditions characterized by changes in mood (emotional), thinking, and behavior that contribute to decreased quality of life, illness, and premature death (Momen et al., 2020). Mental emotional disorders, especially depression, anxiety or anxiety, and stress can reduce patient adherence to treatment, reduce quality of life so that it will increase the risk of mortality. Thus, detecting diabetes mellitus patients who experience mental health problems plays an important role in increasing patient adherence to treatment so as to improve their quality of life (Fisher et al., 2014). In reality, diabetes mellitus patients who come to the doctor or to other health services are not known to have mental emotional disorders, so they do not get further treatment. This will certainly have an impact on the failure of monitoring therapy which further affects prognosis.

In 2020 in Bekasi Regency, the percentage of diabetes mellitus patients who received health services according to standards amounted to 22,573 with a percentage of 9.32%, and the number of sufferers was 242,169 (Bekasi Regency Health Profile, 2020). The number of people with diabetes mellitus is spread throughout Bekasi Regency, including the Cibarusah Health Center area. At the Cibarusah Health Center, there is no special section that focuses on mental health problems, both psychosocial health problems / mental emotional disorders and mental disorders in general. Based on this, of course mental emotional disorders in patients with chronic diseases, especially diabetes mellitus, have not been detected, let alone treated.

Based on the analysis of the situation and existing problems, it is necessary to conduct early detection related to mental emotional disorders or psychosocial mental health problems that accompany diabetes mellitus patients in the Cibarusah Health Center area, because in reality diabetes mellitus patients who come to the health center are not known to have mental emotional disorders, so they do not get further treatment.

IMPLEMENTATION METHOD

This Community Service Program was carried out in January - February 2023 in the Cibarusah Health Center area, Bekasi Regency, with the following steps:

1. Coordination with the health center
2. Puskesmas prepares a team to conduct early detection, namely Health cadres
3. Briefing on how to conduct early detection by the community service team
4. Implementation of early detection

Early detection is done with the Self Reporting Questionnaire 20 (SRQ-20) instrument. SRQ-20 consists of 20 questions regarding symptoms that lead to neurosis disorders. Cognitive symptoms are found in question numbers 8, 12; Depressive symptoms in question numbers 6, 9, 10, 14, 15, 16, 17; Anxious symptoms in numbers 3, 4, 5; Somatic symptoms in numbers 1, 2, 7, 19; and Symptoms of decreased energy in numbers 11, 13, 18, 20. The results of this questionnaire describe mental emotional disorders that occur in people with

diabetes mellitus.

RESULTS AND DISCUSSION

Early detection is an attempt to determine whether there are abnormalities or disorders of mental or behavioral development that accompany patients with a chronic disease, especially diabetes mellitus. The purpose of early detection is to provide knowledge and understanding and attention to the condition of people with diabetes mellitus (Forouzanfar et al., 2016). Early detection is also a form of prevention from the beginning of indications of a disorder.

Early detection of mental emotional disorders in patients with diabetes mellitus is very important. Patients with diabetes mellitus often face high stress and pressure due to complex and ongoing health conditions (Forouzanfar et al., 2016). Mental emotional disorders such as depression and anxiety can affect patients' quality of life, worsen diabetes management, and even slow down the healing process (Gonzalez et al., 2011). Therefore, it is important to conduct early detection of mental emotional disorders in patients with diabetes mellitus.

Table 1. Frequency Distribution of Mental Emotional Disorders of Diabetes Mellitus Patients in the Cibarusah Health Center Area in 2023

No.	Category	Frequency	Percentage
1	No Mental Disorder Emotional	22	44 %
2	Mental Disorder Emotional	28	56 %
Total		50	100 %

Based on Table 1, it can be seen that 28 patients with diabetes mellitus experienced mental emotional disorders (56%). While those who did not experience mental emotional disorders were 22 people (44%).

The results of this early detection indicate that most patients with diabetes mellitus experience mental emotional disorders. Mental emotional disorders that commonly appear in patients include symptoms of depression, anxiety, lack of enthusiasm for life, fatigue, and difficulty thinking. These results are in line with the theory that patients with diabetes mellitus have a higher risk of experiencing mental emotional disorders compared to physically healthy individuals (Gonzalez et al., 2011). Factors such as chronic pain, restrictive lifestyle changes and uncertainty about prognosis may increase this risk.

Early detection of mental emotional disorders in patients with diabetes mellitus in the Cibarusah Health Center area is focused on the problems of depression, anxiety, and stress. Research conducted by Jean Marie Ekoe, Marian Kewers, Rhys Wiliam (2008) stated that out of 5000 patients with diabetes mellitus 350 patients experienced depression of approximately 70%. These results illustrate that this disease can pose a threat to diabetes mellitus patients to become depressed. Various common symptoms that can be recognized in patients with diabetes mellitus who experience depression are 1) non-compliance with taking medication 2) decreased

appetite 3) complaining of sleeplessness 4) feeling ignored by the family (Taluta & Hamel, 2014). The symptoms that arise from the disease will trigger feelings of depression that are getting heavier, which in turn leads the patient to commit suicide (Lin et al., 2010). This condition shows that a variety of mental emotional disorders that can occur in patients with diabetes mellitus. This certainly greatly affects the quality of life of these patients (Febriyani & Darliana, 2017).

Psychological conflicts, such as anxiety, depression, and stress can lead to worsening health conditions or diseases suffered by individuals. Individuals with diabetes mellitus are at 2 times greater risk of experiencing anxiety and depression than individuals without diabetes (Polikandrioti et al., 2020).

According to the International Classification of Disease - tenth edition (ICD -10) mental emotional disorders can be caused by factors such as the emergence of depressive feelings, loss of enthusiasm and interest, loss of energy, easy fatigue, decreased self-esteem, decreased concentration, pessimism about the future, frequent feelings of guilt, ideas of self harm, decreased libido, and sleep disturbances (World Health Organization, 2016). In addition, anxiety symptoms also appear as a sign of a person's mental emotional problems.

Anxiety symptoms are emotional responses without a clear object but the sufferer will have a feeling of dread as if something bad will happen. Psychological manifestations include: excessive worry, excessive fear, not feeling peaceful and uncertain anxiety. While physical manifestations can be in the form of: continuous hand shaking, abdominal pain, muscle tension and shortness of breath (Videbeck, 2008). All symptoms that appear in patients with diabetes mellitus can affect the healing process of the disease.

The impact of mental emotional disorders in patients with diabetes mellitus can affect the disease healing process because it affects health behavior patterns and reduces the quality of self-management of the disease, including the treatment program that is being carried out (Cezaretto et al., 2016). The patient's quality of life also decreases, especially in daily activities, such as difficulties in personal hygiene, dressing, and so on (Rosyid, 2017).

The author believes that early detection of mental-emotional disorders in patients with diabetes mellitus is important as it allows for timely treatment. Undetected disorders can worsen diabetes management and contribute to more serious complications. Diabetes mellitus, which is a disease that can only be controlled. So, to prevent the occurrence of complications a person with diabetes mellitus is required to be able to control blood sugar levels. Early detection of mental-emotional disorders in patients with diabetes mellitus is not only important for the patient's mental well-being, but also for the overall management of their diabetes mellitus. Self-care management is the most appropriate for someone who suffers from chronic diseases such as diabetes mellitus. With an integrated approach and special attention to the psychological aspects of patients, healthcare professionals, especially nurses, can help diabetes mellitus patients overcome the condition and improve their quality of life.

CONCLUSION

Based on the results of early detection that has been carried out, it is concluded that the majority of diabetes mellitus patients experience mental emotional disorders, as many as 56%. It is important to educate patients about the relationship between mental and physical health. Patients must realize the importance of early detection and actively participate in treatment. Prevention efforts are important by involving diabetes management, promotion of a healthy lifestyle, social support, and constant monitoring of changes in mental symptoms.

REFERENCES

- Carracher, A. M., Marathe, P. H., & Close, K. L. (2018). International Diabetes Federation 2017. *Journal of Diabetes*, 10(5), 353–356. <https://doi.org/10.1111/1753-0407.12644>
- Febriyani, F., & Darliana, D. (2017). Perasaan Ketidakberdayaan Dengan Kualitas Hidup Pasien Ulkus Diabetik. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*, 2(4).
- Fisher, L., Gonzalez, J. S., & Polonsky, W. H. (2014). The confusing tale of depression and distress in patients with diabetes: a call for greater clarity and precision. *Diabetic Medicine*, 31(7), 764–772. <https://doi.org/10.1111/dme.12428>
- Forouzanfar, M. H., Afshin, A., Alexander, L. T., Anderson, H. R., Bhutta, Z. A., Biryukov, S., Brauer, M., Burnett, R., Cercy, K., Charlson, F. J., Cohen, A. J., Dandona, L., Estep, K., Ferrari, A. J., Frostad, J. J., Fullman, N., Gething, P. W., Godwin, W. W., Griswold, M., ... Murray, C. J. L. (2016). Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet*, 388(10053), 1659–1724. [https://doi.org/10.1016/S0140-6736\(16\)31679-8](https://doi.org/10.1016/S0140-6736(16)31679-8)
- Gonzalez, J. S., Esbitt, S. A., Schneider, H. E., Osborne, P. J., & Kupperman, E. G. (2011). Psychological Issues in Adults with Type 2 Diabetes. In *Psychological Co-morbidities of Physical Illness* (pp. 73–121). Springer New York. https://doi.org/10.1007/978-1-4419-0029-6_2
- Guyton & Hall. (2016). *Buku Ajar Fisiologi Kedokteran*. Elsevier Singapore Pte Ltd.
- IDF. (2017). Eighth edition 2017. *International Diabetes Federation*. IDF Diabetes Atlas, 8th edn. Brussels, Belgium: International Diabetes Federation, 2017. <http://www.diabetesatlas.org>. [https://doi.org/http://dx.doi.org/10.1016/S0140-6736\(16\)31679-8](https://doi.org/http://dx.doi.org/10.1016/S0140-6736(16)31679-8).
- Kemendagri Kesehatan RI. (2018). Laporan Nasional RISKESDAS 2018.
- Lin, E. H., Rutter, C. M., Katon, W., Heckbert, S. R., Ciechanowski, P., Oliver, M. M., & Von Korff, M. (2010). Depression and advanced complications of diabetes: a prospective cohort study. *Diabetes Care*, 33(2), 264–269.
- Momen, N. C., Plana-Ripoll, O., Agerbo, E., Benros, M. E., Børghlum, A. D., Christensen, M. K., Dalsgaard, S., Degenhardt, L., de Jonge, P., Debost, J.-C. P. G., Fenger-Grøn, M., Gunn, J. M., Iburg, K. M., Kessing, L. V., Kessler, R. C., Laursen, T. M., Lim, C. C. W., Mors, O., Mortensen, P. B., ... McGrath, J. J. (2020). Association between Mental Disorders and Subsequent Medical Conditions. *New England Journal of Medicine*, 382(18), 1721–1731. <https://doi.org/10.1056/NEJMoa1915784>
- Novitasari, Retno. (2012). *Diabetes Mellitus*. Yogyakarta : Nuha Medika.

- Polikandrioti, M., Vasilopoulos, G., Koutelekos, I., Panoutsopoulos, G., Gerogianni, G., Babatsikou, F., & Toulia, G. (2020). Quality of life in diabetic foot ulcer: associated factors and the impact of anxiety/depression and adherence to self-care. *The International Journal of Lower Extremity Wounds*, 19(2), 165–179. <https://doi.org/https://doi.org/10.1177/1534734619900415>
- Profil Kesehatan Kabupaten Bekasi. (2020). *Profil Kesehatan Kabupaten Bekasi*.
- Taluta, Y. P., & Hamel, R. S. (2014). Hubungan tingkat kecemasan dengan mekanisme koping pada penderita diabetes mellitus type II di poliklinik penyakit dalam rumah sakit daerah Tobelo Halmahera Utara. *Ejournal Keperawatan*, 1(2), 1–9.
- Videbeck, S. L. (2008). *Mental health nursing*. Williams and Wilkins.
- World Health Organization. (2016). *Global report on diabetes: executive summary (No. WHO/NMH/NVI/16.3)*.