Depression Literacy Among Type 2 Diabetes Mellitus Patients at Kabila Health Center: A Descriptive Study

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A B S T R A C T

Depression literacy is the ability to recognize, understand, and manage depression, especially in individuals with chronic illnesses such as type 2 diabetes mellitus (T2DM). Low depression literacy may influence how patients deal with psychological symptoms. This study aims to describe the level of depression literacy among T2DM patients at Kabila Health Center. A quantitative descriptive survey design was used. A total of 74 respondents were selected from 292 patients using accidental sampling. The research instrument used was the D-Lit questionnaire. Data were analyzed descriptively to determine the distribution of literacy levels. The results showed that most respondents had a moderate level of depression literacy. These findings highlight the need for ongoing education to help patients better understand their psychological condition and manage their health independently. This study may serve as a reference for the Kabila Health Center in developing more effective educational programs for patients with T2DM.

1. INTRODUCTION

Diabetes mellitus (DM) is a growing global health issue. Recent data from the World Health Organization (WHO, 2024) report that more than 422 million people worldwide are living with DM, with Type 2 Diabetes Mellitus (T2DM) being the most common form, caused by insulin resistance or insufficient insulin production. Indonesia is among the countries with the highest burden of DM in Southeast Asia, with projected cases reaching 28.6 million by 2045 (SKI, 2023).

At the regional level, Gorontalo Province has experienced a significant surge in DM cases. Data from the Health Office indicate that the number of DM patients rose from 2,384 cases in 2022 to 23,950 cases in 2023, with Bone Bolango Regency recording the highest number of patients (5,684 cases). Specifically, Kabila Public Health Center (Puskesmas Kabila) recorded 644 DM patients, 292 of whom were diagnosed with T2DM. The rising number of T2DM cases not only causes physical complications but also increases the risk of psychological disorders such as stress, anxiety, and depression (Isnaina & Nur, 2023). Depression in T2DM patients is of particular concern as it may hinder treatment adherence and the overall management of the disease (Tareke et al., 2022). This condition is influenced by several factors, one of which is the patient's literacy regarding their psychological condition.

Depression literacy refers to an individual's knowledge about the symptoms, causes, and treatment of depression (Tehrani et al., 2022; Shan et al., 2023). Low levels of literacy can impede proper decision-making, delay help-seeking behaviors, and worsen a patient's mental health status (Zulfa & Salim, 2021). Therefore, depression literacy plays a crucial role in supporting the psychological well-being of patients with T2DM. A preliminary survey conducted by the researcher on September 13, 2024, involving five T2DM patients at Puskesmas Kabila revealed that most patients experienced psychological symptoms after diagnosis but had little understanding of depression and its management. These findings indicate a knowledge gap that warrants further investigation. Based on this background, the present study aims to explore the level of depression literacy among patients with Type 2 Diabetes Mellitus at Kabila Public Health Center.

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2. METHOD

This study was conducted at Kabila Health Center from January 14 to 26, 2025. This research used a quantitative method with a descriptive survey design. The sampling technique applied was accidental sampling, with a population of 292 respondents, from which 74 were selected as the sample. The research instrument used was the D-Lit questionnaire.

3. RESULT AND DISCUSSION

Table 1. Characteristics of Respondents

Category	Frequency (N)	Percentage (%)
Age		
36–45 years	5	6,8
46–55 years	18	24,3
56–65 years	32	43,2
66 years	19	25,7
Gender		
Male	8	10,8
Female	66	89,2
Education		
Elementary School	34	45,9
Junior High School	15	20,3
Senior High School	20	27,0
University	5	6,8
Marital Status		
Married	45	60,8
Widowed/Divorced	29	39,2
Occupation		
Unemployed	57	77,0
Civil Servant	1	1,4
Farmer	5	6,8
Trader	3	4,1
Entrepreneur	5	6,8
Others	3	4,1
Living Arrangement		
Living alone	6	8,1
Living with family	68	91,9
Duration of T2DM Diagnosis		
<1 year	5	6,8
1–5 years	48	64,9
6–10 years	17	23,0
10 years	4	5,4
Other Diseases Diagnosed		
No other diseases	33	44,6
Hypertension	12	16,2
High cholesterol	6	8,1
Uric acid	4	5,4
Heart disease	1	1,4
Hypertension and high cholesterol	4	5,4
Hypertension and uric acid	1	6,8
High cholesterol and uric acid	3	4,1
Hypertension, uric acid, and high cholesterol	6	8,1

Based on Table 1, the majority of respondents in this study were aged 56–65 years, totaling 32 respondents (43.2%). In addition, most respondents were female, comprising 66 individuals (89.2%). In terms of education, the majority had completed elementary school as their highest level of education, with 34 respondents (45.9%). Regarding marital status, most respondents were married, totaling 45 individuals (60.8%). In terms of employment, the majority

were unemployed, amounting to 57 respondents (77.0%). Furthermore, most respondents lived with their families, accounting for 68 individuals (91.9%). Concerning the duration of living with T2DM, the majority had been diagnosed for 1–5 years, totaling 48 respondents (64.9%). Meanwhile, 33 respondents (44.6%) reported having no other comorbid conditions associated with their T2DM.

Table 2. Depression Literacy Among Type 2 Diabetes Mellitus Patients at Kabila Health Center

Research Variable	Total	
	(N)	**(%)**
Depression Literacy		
Low depression literacy	12	16,2
Moderate depression literacy	50	67,6
High depression literacy	12	16,2

Based on Table 2, the majority of respondents in this study had a moderate level of depression literacy, totaling 50 respondents (67.2%). Meanwhile, low and high levels of depression literacy were each found in 12 respondents (16.2%).

1. Low Depression Literacy

A total of 16.2% of respondents were categorized as having low depression literacy. This is concerning, as low literacy may prevent patients from recognizing symptoms of depression, understanding its causes, and knowing how to manage it appropriately (Zulfa & Salim, 2021). This low literacy level is likely influenced by the respondents' educational background, as the majority had only completed elementary school (45.9%). Research by Ramadhani & Khotami (2023) shows that low education is associated with limited access to mental health information, including information about depression. As a result, patients struggle to make appropriate health decisions and are less likely to seek professional help.

Moreover, most respondents were aged 56–65 years (43.2%), a group considered to be older adults. Advanced age is often linked with declining cognitive function, including memory and information processing ability (Akbariza & Handayani, 2023). This factor contributes to low depression literacy, as older adults may find it more difficult to absorb and understand complex information such as psychological symptoms.

External factors, such as limited access to mental health information in primary care settings, also worsen this condition. The lack of education from healthcare providers on psychological issues causes patients to remain unaware of the importance of understanding and managing disorders like depression (Santosa & Pratomo, 2021). The researcher's preliminary survey supports this finding, revealing that five T2DM patients reported experiencing psychological symptoms but had no understanding of what depression is.

2. Moderate Depression Literacy

This category includes the majority of respondents (67.6%). A moderate level of literacy indicates that patients possess basic knowledge of depression, such as recognizing some common symptoms, but do not fully understand its causes, treatment options, or potential consequences. In practice, this may mean that patients are aware of emotional changes but lack the confidence or ability to seek professional help or access mental health services.

This level reflects a potential opportunity for targeted educational interventions. Community-based education and family-centered approaches can help strengthen their understanding, especially among older adults who live with family members (91.9%).

3. High Depression Literacy

A total of 16.2% of respondents were classified as having high depression literacy. Respondents in this group demonstrated a strong understanding of depression symptoms, causes, and treatment methods. This finding aligns with Jafari et al. (2024), who noted that high levels of depression literacy remain relatively rare in the general population. Although small in number,

this group can serve as change agents or health cadres who disseminate mental health information within their communities.

Implications for Health Services Practice

These findings suggest a significant gap in depression literacy among T2DM patients, especially those who are older and have low educational backgrounds. Therefore, healthcare professionals at primary care facilities such as Puskesmas should enhance systematic education on depression. Educational efforts should target not only patients but also their families, who play a crucial role in supporting elderly patients.

The Prolanis program, which has traditionally focused on the physical aspects of DM care, could be integrated with regular psychological education or screening. This would lead to a more comprehensive approach to patient care, addressing both physical and mental health.

Reflection on Preliminary Survey

The initial survey indicated a disconnect between patients' psychological experiences and their understanding of depression. This observation is supported by the study's main findings, particularly in the low and moderate literacy categories. Hence, there is continuity between the quantitative data and field observations, reinforcing the urgency of improving depression literacy as part of the holistic management of T2DM patients.

4. CONCLUSION

Based on the study on depression literacy among T2DM patients at Kabila Health Center, it was found that most respondents had a moderate level of depression literacy, with 50 respondents (67.6%). Additionally, 12 respondents (16.2%) had a low level, and another 12 respondents (16.2%) had a high level of depression literacy.

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