

Original Article

Associations of self-motivation and self-esteem with quality of life among patients with type 2 diabetes mellitus at a Community Health Center in South Jakarta

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Abstract

Background: Type 2 diabetes mellitus is a chronic condition that can adversely affect patients' physical, psychological, and social well-being. Beyond clinical management, psychological factors such as self-motivation and self-esteem may influence how patients manage their condition and perceive their quality of life. However, evidence regarding the relationship between these factors and quality of life among patients receiving care at community health centers remains limited.

Aims: To determine the associations of self-motivation and self-esteem with quality of life among patients with type 2 diabetes mellitus at Pasar Minggu Community Health Center, South Jakarta.

Methods: A quantitative analytical cross-sectional study was conducted among patients with type 2 diabetes mellitus at Pasar Minggu Community Health Center, South Jakarta. From a population of 159 patients, 114 respondents were selected using simple random sampling. Self-motivation, self-esteem, and quality of life were assessed using the Treatment Self-Regulation Questionnaire, Rosenberg Self-Esteem Scale, and Diabetes Quality of Life Questionnaire, respectively. Data were analyzed using the Chi-square test with a significance level of $p < 0.05$.

Results: Among the 114 respondents, 40 (35.1%) had low self-motivation, 59 (51.8%) had low self-esteem, and 61 (53.5%) reported low quality of life. Self-motivation was significantly associated with quality of life ($p = 0.022$). Self-esteem was also significantly associated with quality of life ($p = 0.002$), with an odds ratio of 3.409.

Conclusion: Self-motivation and self-esteem were significantly associated with quality of life among patients with type 2 diabetes mellitus. These findings highlight the importance of addressing psychological factors alongside clinical management to support quality of life among patients with type 2 diabetes mellitus in primary healthcare settings.

Keywords: type 2 diabetes mellitus; self-motivation; self-esteem; quality of life; primary health care

1. Introduction

Type 2 diabetes mellitus (T2DM) is a chronic metabolic condition that requires continuous self-management and may substantially affect patients' physical, psychological, and social well-being. The global burden of diabetes continues to increase, with Indonesia among the countries with a high number of people living with diabetes. In Indonesia, the 2023 Indonesian Health Survey reported a substantial burden of diabetes, with DKI Jakarta among the provinces reporting relatively high prevalence. This situation highlights the importance of effective long-term management not only to control blood glucose but also to maintain patients' overall well-being and quality of life (Munira & Trihono, 2023; Saputra & Sari, 2023).

Poorly controlled T2DM can result in acute and chronic complications, including cardiovascular and cerebrovascular disorders, nephropathy, retinopathy, neuropathy, and amputation. These complications may restrict physical functioning, increase psychological distress, and interfere with patients' daily activities and social roles, ultimately reducing quality of life (Nuraini Sesaria, 2023). Quality of life is therefore an important outcome in diabetes management because



successful care extends beyond glycemic control to patients' ability to maintain physical, psychological, social, and functional well-being (Rahmawati, 2024; Rahman & Ernawati, 2025).

In addition to clinical factors, psychological characteristics may influence how patients respond to the demands of long-term diabetes management. Self-motivation is particularly relevant because sustained diabetes self-care requires patients to maintain adherence to medication, dietary recommendations, physical activity, blood glucose monitoring, and other recommended behaviors. Patients with stronger motivation may be more likely to engage consistently in self-management, whereas inadequate motivation may contribute to suboptimal adherence and difficulty adapting to the demands of chronic illness (Basri & Dilla, 2021; Nurhayati & Cusmarih, 2025). Thus, self-motivation may represent an important psychological factor associated with patients perceived quality of life

Self-esteem is another potentially important psychological factor. Diabetes and its associated physical limitations, treatment demands, and changes in daily functioning may affect how patients perceive their competence, self-worth, and ability to fulfil personal and social roles. Low self-esteem may be accompanied by feelings of helplessness, reduced confidence, social withdrawal, and decreased engagement in self-care, which may adversely affect overall well-being (Putra & Sumirta, 2020; Fattah & Al Suryaningsih, 2025). Conversely, patients with more positive self-perceptions may have greater confidence in managing their condition and adapting to the challenges associated with chronic disease.

Previous studies have reported relationships between motivation and quality of life among patients with diabetes and between self-esteem and psychosocial outcomes in people living with chronic diseases (Nurhayati & Cusmarih, 2025; Ardiyanti & Nataliswati, 2025; Fattah & Al Suryaningsih, 2025). However, the available evidence identified in the present manuscript remains limited in examining self-motivation and self-esteem simultaneously in relation to quality of life among patients with T2DM in a primary healthcare setting. This is particularly relevant in community health centers, where long-term diabetes management involves not only clinical treatment but also patients' capacity to sustain self-care and psychological adaptation.

A preliminary assessment at Pasar Minggu Community Health Center, South Jakarta, identified 1,550 patients with diabetes mellitus, including 159 patients diagnosed during the preceding three months. The local burden and the need for sustained self-management provided the rationale for examining psychological factors associated with quality of life in this population. Therefore, this study aimed to determine the associations of self-motivation and self-esteem with quality of life among patients with type 2 diabetes mellitus at Pasar Minggu Community Health Center, South Jakarta.

2. Materials and Methods

2.1 Study Design

This study employed a quantitative analytical cross-sectional design to examine the associations of self-motivation and self-esteem with quality of life among patients with type 2 diabetes mellitus. The cross-sectional approach was used to assess the study variables simultaneously and determine their relationships within the study population.

2.2 Study Setting

The study was conducted at Pasar Minggu Community Health Center (Puskesmas Pasar Minggu), South Jakarta, Indonesia. The study population comprised patients with type 2 diabetes mellitus receiving care at the community health center. A preliminary assessment identified 1,550 patients with diabetes mellitus at the health center, including 159 patients diagnosed during the preceding three months.

2.3 Participants and Sampling

The study population consisted of 159 patients with type 2 diabetes mellitus. A sample of 114 respondents was selected using probability sampling with simple random sampling. The manuscript states that the sample size was determined using the Slovin formula. All 114 selected respondents were included in the study analysis.

2.4 Data Collection

Data were collected using three instruments. Self-motivation was assessed using the Treatment Self-Regulation Questionnaire (TSRQ), self-esteem was measured using the Rosenberg Self-Esteem Scale (RSES), and quality of life was assessed using the Diabetes Quality of Life (DQOL) Questionnaire. The study assessed self-motivation, self-esteem, and quality of life among patients with type 2 diabetes mellitus and subsequently examined the relationships between the variables.

2.5 Data Analysis

Data were analysed using descriptive and bivariate statistical procedures. Univariate analysis was used to describe the distributions of self-motivation, self-esteem, and quality of life. Bivariate analysis using the Chi-square test was performed to examine the associations between self-motivation and quality of life and between self-esteem and quality of life. Statistical significance was determined at $p < 0.05$. The analysis yielded p -values of 0.022 for the association between self-motivation and quality of life and 0.002 for the association between self-esteem and quality of life.

3. Results

3.1 Self-Motivation, Self-Esteem, and Quality of Life

A total of 114 patients with type 2 diabetes mellitus were included in the analysis. Most respondents had low self-motivation (40, 35.1%), followed by adequate self-motivation (38, 33.3%) and good self-motivation (36, 31.6%). Regarding self-esteem, 59 respondents (51.8%) had low self-esteem, while 55 (48.2%) had high self-esteem. More than half of the respondents reported low quality of life (61, 53.5%), while 53 (46.5%) reported high quality of life (Table 1).

Table 1. Distribution of Self-Motivation, Self-Esteem, and Quality of Life among Patients with Type 2 Diabetes Mellitus

Variable	Category	n	%
Self-motivation	Good	36	31.6
	Adequate	38	33.3
	Poor	40	35.1
Self-esteem	High	55	48.2
	Low	59	51.8
Quality of life	High	53	46.5
	Low	61	53.5
Total		114	100.0

3.2 Self-Motivation, Self-Esteem, and Quality of Life

The distribution of quality of life differed across self-motivation categories (Table 2). Among respondents with good self-motivation, 22 (61.1%) had high quality of life and 14 (38.9%) had low quality of life. Among those with adequate self-motivation, 19 (50.0%) had high quality of life and 19 (50.0%) had low quality of life. In contrast, among respondents with poor self-motivation, 12 (30.0%) had high quality of life and 28 (70.0%) had low quality of life.

The Chi-square test demonstrated a statistically significant association between self-motivation and quality of life ($p = 0.022$).

Table 2. Association Between Self-Motivation and Quality of Life

Self-motivation	High Quality of Life, n (%)	Low Quality of Life, n (%)	Total, n (%)	p-value
Good	22 (61.1)	14 (38.9)	36 (100.0)	0.022
Adequate	19 (50.0)	19 (50.0)	38 (100.0)	
Poor	12 (30.0)	28 (70.0)	40 (100.0)	
Total	53 (46.5)	61 (53.5)	114 (100.0)	

3.3 Self-Motivation, Self-Esteem, and Quality of Life

Respondents with high self-esteem were more frequently classified as having high quality of life, with 34 of 55 respondents (61.8%) reporting high quality of life. In contrast, among respondents with low self-esteem, 40 of 59 (67.8%) reported low quality of life (Table 3).

The Chi-square test demonstrated a statistically significant association between self-esteem and quality of life ($p = 0.002$). The reported odds ratio was 3.409, indicating a higher odd of low quality of life among respondents with low self-esteem.

Table 3. Association Between Self-Esteem and Quality of Life

Self-motivation	High Quality of Life, n (%)	Low Quality of Life, n (%)	Total, n (%)	p-value	OR
High	34 (61.8)	21 (38.2)	55 (100.0)		
Low	19 (32.2)	40 (67.8)	59 (100.0)		
Total	53 (46.5)	61 (53.5)	114 (100.0)	0.002	3.409

4. Discussion

4.1 Self-Motivation, Self-Esteem, and Quality of Life

The findings indicate that psychological factors remain relevant aspects of diabetes management in this primary healthcare population. More than one-third of respondents had poor self-motivation, while more than half had low self-esteem and low quality of life. This pattern suggests that living with type 2 diabetes mellitus involves challenges beyond glycaemic management, including maintaining motivation for long-term self-care and adapting psychologically to a chronic condition. Diabetes management requires sustained engagement with medication, dietary regulation, physical activity, monitoring, and other health behaviours; therefore, inadequate motivation may make consistent self-management more difficult (Basri & Dilla, 2021; Nurhayati & Cusmarih, 2025). Similarly, low self-esteem may reflect difficulties in self-acceptance, perceived competence, and adjustment to the limitations associated with chronic illness (Putra & Sumirta, 2020; Fattah & Al Suryaningsih, 2025).

The predominance of low quality of life in this study is also clinically relevant. Type 2 diabetes mellitus may affect physical functioning and daily activities through disease-related complications, while the continuing demands of treatment may create psychological and social burdens. Previous literature has similarly identified quality of life as an important multidimensional outcome in diabetes care, influenced by physical, psychological, social, and environmental conditions (Rahmawati, 2024; Rahman & Ernawati, 2025). From a nursing perspective, these findings support the importance of assessing psychological and psychosocial conditions alongside conventional clinical indicators when providing continuing care for patients with diabetes mellitus.

4.2 Association Between Self-Motivation and Quality of Life

This study found a significant association between self-motivation and quality of life. The distribution of respondents showed a consistent pattern in which the proportion reporting high quality of life was greatest among those with good self-motivation and lowest among those with poor self-motivation. This pattern is clinically plausible because diabetes self-management requires sustained personal engagement rather than a single treatment decision. Motivation may support patients in maintaining medication adherence, dietary practices, physical activity, health monitoring, and adaptation to long-term treatment demands. Conversely, inadequate motivation may reduce engagement in self-care and make it more difficult to sustain behaviours required for effective disease management (Basri & Dilla, 2021).

The finding is consistent with previous research reporting an association between motivation and quality of life among patients with diabetes mellitus. Ardiyanti and Nataliswati (2025), for example, reported a significant relationship between motivation and quality of life in patients with diabetes mellitus. Nurhayati and Cusmarih (2025) similarly identified motivation as an important factor associated with quality of life among patients with chronic conditions, including diabetes mellitus. Taken together, these findings suggest that motivation should not be viewed only as an individual psychological characteristic but also as a potentially modifiable component

of diabetes nursing care. Nurses and other health professionals may therefore incorporate motivational support, goal setting, reinforcement of self-care behaviours, and individualized education into routine diabetes management.

4.3 Association Between Self-Esteem and Quality of Life

A significant association was also identified between self-esteem and quality of life. Respondents with high self-esteem were more frequently classified as having high quality of life, whereas low self-esteem was more frequently observed among respondents with low quality of life. This relationship may be explained by the role of self-esteem in how individuals perceive their competence, self-worth, and ability to adapt to chronic illness. Patients who maintain a positive perception of themselves may be better positioned to engage in self-care and maintain social and functional roles despite the demands of diabetes. In contrast, negative self-evaluation may be accompanied by reduced confidence, helplessness, social withdrawal, and reduced engagement in health-related activities (Putra & Sumirta, 2020; Fattah & Al Suryaningsih, 2025).

The present finding is consistent with evidence from other chronic disease populations. Nasution (2025) reported a significant relationship between self-esteem and quality of life among patients undergoing haemodialysis, suggesting that self-acceptance and confidence may contribute to adaptation to long-term illness. Fattah and Al Suryaningsih (2025) also reported an association between family support and self-esteem among patients with type 2 diabetes mellitus, highlighting the importance of the psychosocial environment in maintaining positive self-perception. In the present study, the observed association indicates that attention to self-esteem may complement conventional diabetes management. Nursing interventions that provide supportive communication, strengthen patients' confidence in self-care, encourage realistic goal setting, and involve appropriate social or family support may help address the psychosocial dimensions of diabetes care.

4.4 Implications for Nursing Practice

The findings have practical implications for nursing care in primary healthcare settings. Assessment of patients with type 2 diabetes mellitus should extend beyond physical and metabolic indicators to include self-motivation, self-esteem, and perceived quality of life. Patients presenting with low motivation or low self-esteem may require more individualized education and psychosocial support to strengthen their engagement with long-term self-management. However, because this study used a cross-sectional design, the observed associations should not be interpreted as evidence that low self-motivation or low self-esteem directly causes poor quality of life. Longitudinal and intervention studies are needed to determine whether improving these psychological factors can produce sustained improvements in quality of life.

5. Conclusion

Self-motivation and self-esteem were significantly associated with quality of life among patients with type 2 diabetes mellitus at Pasar Minggu Community Health Center, South Jakarta. The findings indicate that psychological dimensions should be considered alongside clinical management in supporting the quality of life of patients with diabetes mellitus. Primary healthcare services, particularly nursing care, may benefit from incorporating assessment and support for patients' motivation and self-esteem into continuing diabetes management. Further longitudinal or intervention studies are needed to clarify the direction and potential causal pathways of these relationships.

Competing interests

All the authors declare that there are no conflicts of interest.

Underlying data

Derived data supporting the findings of this study are available from the corresponding author on request.

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