




## The Relationship Between Complementary Medicine and Quality of Life in Diabetes Mellitus Patients in 2023

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p>Received Sep 05, 2023 Revised Sep 10, 2023 Accepted Sep 30, 2023</p> <hr/> <p><b>Keywords:</b></p> <p>Diabetes mellitus, Complementary Medicine, Quality of Life.</p>	<p>Diabetes Mellitus is a chronic metabolic disease that requires long-term treatment. This study aims to determine the relationship between the use of complementary medicine and the quality of life of Diabetes Mellitus patients in the Parambunan Community Health Center Working Area. This study uses an analytical method with a correlation design using a cross-sectional approach. The population in this study were patients diagnosed with Diabetes Mellitus in the Parambunan Community Health Center working area with a sample of 66 respondents. Data collection used a questionnaire about the use of complementary therapy and quality of life. Data analysis used the Spearman-rank test with an error rate of <math>\alpha = 0.05</math>. The results showed a relationship between complementary medicine and the quality of life of patients. The correlation value obtained <math>r = 0.568</math>, the level of strength of the relationship between the two variables is moderate because it is in the range of <math>0.40 - 0.599</math>, and the value (<math>p = 0.001 \leq \alpha = 0.05</math>) so that statistically <math>H_1</math> is accepted. Thus, it is hoped that the use of appropriate complementary therapy can be balanced with routine medical check-ups to improve the patient's quality of life.</p> <p style="text-align: right;"><i>This is an open access article under the <a href="https://creativecommons.org/licenses/by-nc/4.0/">CC BY-NC</a> license.</i></p> 

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### 1. Introduction

The family is the leading health service unit in improving the health of family members who suffer from chronic diseases. (Oktowaty, Setiawati, & Arisanti, 2018), (Rohimah & Sastraprawira, 2019) Diabetes mellitus is a major health problem in Indonesia, a developing country. Health problems experienced by one family member can affect other family members. (Rohimah & Sastraprawira, 2019), (Ismiriyam, 2024).

Diabetes mellitus management requires high levels of compliance, but patients often become bored with medical treatment. This leads patients to seek alternatives through complementary medicine. (Pera, 2025), (Dewi, Novikasari, Widowati, & Ani, 2025) Health behaviors in choosing therapies must be based on sound knowledge to positively impact the patient's quality of life. Lack of knowledge regarding the integration of medical and complementary therapies can risk worsening health conditions. (Yani Maidelwita, Utami, Sholihah, KM, & Burdah, 2025), (Milwati et al., 2024).

**Problem Formulation:** Based on the background above, the problem formulation in this study is whether there is a relationship between complementary medicine and quality of life in diabetes mellitus patients?

**Research objectives:** To identify the types of complementary treatments used by DM patients. To identify the level of physical and psychological quality of life of DM patients.

## 2. Methods

This research uses a quantitative research type with the Correlation Analytical method. This research will be carried out in the Parombunan Health Center area. (Sihite, 2024), (Situmorang, 2020) The population in this study was all patients diagnosed with Diabetes Mellitus (Type 2) recorded in the Parombunan Community Health Center register in the past year, with an estimated population of 198 people. (Malanua, Van Gobel, & Pariono, 2025), (Hasibuan, 2020). The sample in this study was taken using the Purposive Sampling technique, which is a sampling technique with certain considerations that are in accordance with the research criteria. The sample size was determined using the Slovin formula: Based on the calculation, a sample of 66 respondents was obtained.

## 3. Results and Discussion

**Table 1.** Frequency Distribution of Respondent Characteristics at Parombunan Community Health Center (n=66)

	Characteristics Category		Frequency (f)	Percentage (%)
1	Age	40 - 50 Years	18	27.3
		51 - 60 Years	36	54.5
		> 60 Years	12	18.2
2	Gender	Man	24	36.4
		Woman	42	63.6
3	Education	Elementary (Elementary/Middle School)	25	37.9
		Middle School (SMA)	32	48.5
		Height (PT)	9	13.6
4	Long Suffering	< 5 Years	40	60.6
		> 5 Years	26	39.4
<b>Total</b>			<b>66</b>	<b>100</b>

The majority of respondents were in the 51-60 age group (54.5%) and female (63.6%). In terms of education, the majority were high school graduates (48.5%), and the average person had suffered from diabetes for less than 5 years (60.6%). A trend was observed in respondents who regularly used complementary medicine to report a higher percentage of good quality of life (84.6%) compared to respondents who never used it (10%).

The Spearman Rank statistical test results showed a significance value of  $p = 0.001$ , indicating a significant relationship between complementary medicine and quality of life. The correlation value of 0.568 indicates a moderate level of relationship strength with a positive relationship direction, meaning that the more routine and appropriate use of complementary therapy, the better the patient's quality of life tends to be.

### 3.1 Discussion

The study results showed that the majority of respondents regularly use complementary therapies. Researchers believe this is driven by cultural factors and easy access to herbal ingredients in the Sibolga region. Patients tend to seek additional treatment because diabetes is a chronic disease that requires significant costs if relying solely on medical care. (Bleler, Nayoan, Takaeb, & Marni, 2025), (Susyadi, 2018) By using herbal or physical therapy, patients feel they receive "additional support" that helps reduce complaints such as tingling or feeling weak. Most respondents have a good quality of

life. There is a significant relationship between the two variables. Complementary therapies such as relaxation or meditation can reduce stress hormone levels (cortisol). The moderate strength of the relationship (0.568) indicates that quality of life is influenced not only by the type of treatment, but also by other unexamined factors such as family support, economic stability, and the patient's level of knowledge in selecting safe complementary therapies. (Widyastuti, 2021), (Aridamayanti, Septiany, Agianto, & Chrisnawati, nd).

#### 4. Conclusions

Use of Complementary Medicine: The majority of respondents in the Parambunan Community Health Center (Puskesmas) area exhibited positive attitudes toward utilizing complementary medicine as an adjunct to routine medical treatment. Thirty-nine respondents (59.1%) were considered routine users, with the most common therapies being phytotherapy (herbs) and reflexology. This demonstrates a high level of public trust in the integration of natural medicine.

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