

Research Article

Spirituality and Quality of Life of Type II DM Patients

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ABSTRACT

Type II diabetes mellitus (DM) is a chronic disease that changes the quality of life of sufferers. Good spirituality is needed to improve the quality of life. The purpose of the study was to determine the relationship between spirituality and the quality of life of patients with type II DM. This type of research is correlational. The population was type 2 DM patients at UPTD Puskesmas Sukabumi, with a sample of 104 respondents. The sampling technique was Proportional Random Sampling. Data collection techniques using questionnaires. The results of the spirituality questionnaire validity were test 0.36-0.83, and quality of life 0.428-0.857. The reliability test results of the spirituality questionnaire with a Cronbach's Alpha value of 0.97 and quality of life with a Cronbach's Alpha value of 0.969. Data analysis using the chi-square test. Most had high spirituality and high quality of life. The chi-square test result p-value is 0.000, indicating a relationship between spirituality and the quality of life of patients with type II DM. The study concluded that there is a relationship between spirituality and the quality of life of patients with type II DM. It is expected that UPTD Puskesmas Sukabumi conduct routine counselling to DM management.

INTRODUCTION

Urbanization, modernization, and globalization are part of the human lifestyle that has an impact on the increase in non-communicable diseases (NCDs). NCDs are the leading cause of death in Indonesia, including stroke, kidney disease, diabetes mellitus, hypertension, and cancer (Hariawan & Pefrianti, 2020).

Diabetes mellitus is one of four noncommunicable diseases and is a key focus for further action by global leaders (Latifah et al., 2020). According to data from the World Health Organization (WHO) in 2020, diabetes mellitus ranks sixth on the list of causes of death worldwide. The IDF predicts that by 2030, diabetes mellitus will drop to seventh place on the list of causes of death worldwide (Nasution et al., 2021). Indonesia has a high rate of type II diabetes mellitus (DM), ranking seventh in Southeast Asia. The number of diabetes patients has continued to rise from 10.7 million in 2019 to 19.5 million in 2021 (Syam, 2022). According to Risesdas (2018), West Java is one of the provinces with a significant number of diabetes mellitus cases, which continues to increase every year. The incidence of diabetes mellitus in West Java is 52.511 million, with a prevalence rate of 1.74% (Fauziyah et al., 2023).

According to Perkeni (2019), DM is a chronic disease that can change the lives of its sufferers. If not treated properly, patients with diabetes mellitus have a high risk of experiencing various complications such as ischemic heart disease, stroke, hypoglycemia, hyperglycemia, retinopathy, neuropathy, and nephropathy (Dharmayanti et al., 2022).

Perkeni (2019) states that DM can cause complications that affect macrovascular and microvascular blood vessels, as well as neurological disorders. Most patients with diabetes mellitus experience negative impacts on their psychological, physical, social, and environmental conditions, which

affect their quality of life. Anna et al (2021) state that diabetes is considered to have a significant negative impact on quality of life, such as freedom to eat, physical activity, and work life (Retaningsih, 2022).

Quality of life is how individuals view themselves in their daily lives, influenced by cultural systems and local values related to expectations, goals, and outlook on life. Measuring quality of life involves multidimensional aspects that encompass not only physical and psychological effects (Rahmi, 2022).

One factor that contributes to influencing the quality of life of DM patients is spirituality. According to Guslinda et al (2021) and Setiawan et al (2020), spirituality Guslinda et al (2021) and Setiawan et al (2020) spirituality can lead to an increase or decrease in quality of life. Spirituality is a factor that can influence quality of life. Spiritual well-being can act as a mediator to reduce the consequences of diabetes mellitus on quality of life. This is evident in maintaining patients' quality of life and reducing the urge to hasten the end of life, even when experiencing severe physical symptoms. Spiritual well-being is also beneficial in providing protection to patients. Spiritual health plays a role in helping patients cope with chronic illness as it relates to the bio-psychosocial and functional dimensions (Rifa & Gayatri, 2023).

Spirituality plays an important role as the center of a person's life in facing challenges and focusing on strength and hope. Spirituality is one of the stress coping mechanisms that can lower cortisol hormones, which helps reduce blood sugar levels (Hardianti et al., 2023). Fulfilling the highest need, which is spirituality, so that a person can enjoy a quality life (Anitasari & Fitriani, 2021).

The city of Sukabumi is one of the areas in West Java that has problems related to DM, one of which is in the working area of the

Sukabumi Community Health Center UPTD. The number of patient visits in 2023 was 675 patients spread across three sub-districts. There were 283 people in Cisarua Sub-district, 135 people in Subangjaya Sub-district, and 135 people in Kebonjati Sub-district (Puskesmas Kota Sukabumi, 2023). The measures and efforts taken by the Sukabumi Community Health Center to manage patients with type II diabetes mellitus include the Chronic Disease Management Program (PROLANIS). Although PROLANIS activities are in place, they cannot immediately change the quality of life of DM patients, as the spiritual condition of patients can still affect the quality of life of DM patients in the region. The reality in the field shows that some patients who actively practice their religion and have a strong spiritual life demonstrate a better ability to accept their illness, undergo treatment, and maintain their zest for life. This indicates the possibility of spirituality contributing to patients' quality of life. The purpose of this study was to determine the relationship between spirituality and the quality of life of patients with type II diabetes mellitus in the Cisarua subdistrict, which is part of the working area of the Sukabumi City Health Center in Sukabumi.

METHOD

The type of research used was correlational research with a cross-sectional approach. The population was all type II diabetes mellitus patients in the Cisarua sub-district, Sukabumi City Health Center Working Area, Sukabumi City, with a sample of 104 people. The sampling technique used was proportional random sampling. Data collection techniques use questionnaires. The spirituality variable instrument uses the DSES (Daily Spiritual Experience Scale) instrument with validity test results of 0.36–0.83, and a Cronbach's α value of 0.97 (Hardianti et al., 2023) and the quality of life

variable instrument used DQOL (Diabetes Quality Of Life) with validity test results obtained in the range of 0.428–0.857, Crombach's α value = 0.969 (Rohmawati, 2021). Univariate analysis used frequency distribution tables and percentages, while bivariate analysis used the Chi-square test. Ethical approval was obtained from the STIKes Sukabumi Research Ethics Committee prior to data collection (Nomor: 000547/KEP STIKES SUKABUMI/2024).

RESULT

Table 1. Respondent Characteristics

| Respondent Characteristics | f | (%) |
|---------------------------------------|-----|------|
| Age (Years) | | |
| 18 – 40 | 20 | 19,2 |
| 41 – 60 | 56 | 53,9 |
| >60 | 28 | 26,9 |
| Gender | | |
| Male | 28 | 26,9 |
| Female | 76 | 73,1 |
| Marital Status | | |
| Married | 75 | 72,1 |
| Widowed | 22 | 21,2 |
| Single | 7 | 6,7P |
| Education | | |
| Elementary School | 32 | 30,7 |
| Junior High School | 22 | 21,2 |
| Senior High School | 35 | 33,7 |
| College | 13 | 12,5 |
| No Schooling | 2 | 1,9 |
| Employment | | |
| Working | 60 | 57,7 |
| Not working | 44 | 42,3 |
| Duration of DM | | |
| <1 year | 18 | 17,3 |
| >1 year | 86 | 82,7 |
| Source of information about DM | | |
| From health workers | 104 | 100 |

Source: Primary Data (2024)

Based on Table 1, most respondents were aged 41–60 years old, totaling 56 people (53.9%), female, totaling 76 people (73.1%),

married, totaling 75 people (72.1%), with a high school education, totaling 35 people (33.7%), employed 60 people (57.7%), suffering from type II diabetes for more than 1 year 86 people (82.7%), and having health workers as their initial source of information 104 people (100%).

Table 2. Frequency Distribution of Spirituality in Patients with Type II Diabetes Mellitus

| Spirituality | f | (%) |
|--------------|-----|------|
| Low | 11 | 10,7 |
| Medium | 35 | 33,6 |
| High | 58 | 55,7 |
| Total | 104 | 100 |

Source: Primary Data (2024)

Table 4. The Relationship Between Spirituality and Quality of Life in Type II Diabetes Mellitus Patients in Cisarua Village, Sukabumi City Health Center Working Area, Sukabumi City

| Spirituality | Quality of Life | | | | Total | % | p-value |
|--------------|-----------------|------|------|------|-------|-----|---------|
| | Low | % | High | % | | | |
| Low | 7 | 63,5 | 4 | 36,5 | 11 | 100 | 0,000 |
| Medium | 24 | 68,6 | 11 | 31,4 | 35 | 100 | |
| High | 6 | 10,3 | 52 | 89,7 | 58 | 100 | |
| Total | 37 | 35,6 | 67 | 64,4 | 104 | 100 | |

Source: Primary Data (2024)

Table 4 shows the results of the statistical test using Chi Square, which obtained a p-value = 0.000, meaning $p < 0.05$. Based on the hypothesis, H_0 is rejected, indicating that there is a relationship between spirituality and quality of life in the Cisarua sub-district, Sukabumi City Health Center Working Area, Sukabumi City.

DISCUSSION

The results of the study indicate that most patients with type II diabetes mellitus have high spirituality. Respondents with high spirituality are evident in their desire to be closer to God, they always feel God's presence, they feel happy and not anxious about problems when they worship, they find comfort and feel guided by God, and

Table 2 shows that most respondents had high spirituality, with 58 people (55.7%).

Table 3. Frequency Distribution of Quality of Life in Type II Diabetes Mellitus Patients

| Quality of Life | f | (%) |
|-----------------|-----|------|
| Low | 37 | 35,6 |
| High | 67 | 64,4 |
| Jumlah | 104 | 100 |

Source: Primary Data (2024)

Table 3 shows that most respondents had a high quality of life, with 67 people (64.4%) reporting this.

they always ask for God's help in their daily activities. Spirituality is the belief that every human being has in the One True God, which is then demonstrated in daily activities through individual behavior in practicing religious teachings in accordance with the beliefs held by each individual (Junaidin & Purwanti, 2022).

Age affects a person's spirituality, because as a person gets older, their ability to achieve maturity in thinking and acting becomes more developed. Adults have a higher tolerance for stress and stressors, so they are better able to control stress. In society, older people are often considered more mature than younger people (Dewi et al., 2023). Research findings indicate that

the majority of patients with type II diabetes mellitus are aged 41–60 years.

Another factor that influences spirituality is gender. Women tend to show greater interest in spiritual experiences and are more active in various social and religious activities than men. They have a deeper awareness of the reality of life after death, which is often accompanied by a growing sense of fear as they age. This drives them to continue drawing closer to God, feeling a deeper connection with themselves, God, and nature, thereby creating a sense of peace and happiness in their lives (Fajar et al., 2022 dalam Syiffani et al., 2024). The results of the study show that most patients with type II diabetes mellitus are female.

Another factor that influences spirituality is the duration of type II diabetes. Patients who have had diabetes for less than a year have the highest level of spirituality, but as the duration of the disease increases, spirituality tends to decline. Respondents who have had diabetes for approximately 10 years tend to have the lowest level of spirituality (Hariani et al., 2020).

The longer a patient suffers from diabetes, the more likely they are to experience emotional instability, excessive anxiety, diminished patience, wavering sincerity, weakened faith, loss of hope, and a breakdown in trust. This can hinder participation in religious practices and traditions, as well as sever social ties with distant relatives, which can ultimately lead to severe stress and depression. This condition can weaken the immune system and worsen overall health (Handayani et al., 2022). Research findings indicate that the majority of patients with type II diabetes mellitus have had the condition for over one year.

Researchers assume that spirituality in DM patients in this condition is achieved when patients can find peace within themselves and feel grateful for what they are

experiencing. This is because the majority of respondents in Cisarua Village showed a desire to be closer to God by performing religious activities, and respondents always participated in religious activities such as recitation of the Quran, which was held once a week. When the spiritual aspect of diabetes mellitus patients is fulfilled, patients become optimistic, have a sense of purpose in life, and exhibit high optimism regarding their recovery from the disease.

The results of the study also indicate that the majority of patients with type II diabetes mellitus in the Cisarua subdistrict of the Sukabumi City Health Center (UPTD Puskesmas Sukabumi) have a high quality of life. Respondents with high quality of life are satisfied with their diabetes treatment, happy when achieving normal blood glucose levels, satisfied with the time spent on diabetes care, satisfied with the time allocated for exercise, and satisfied with diabetes follow-up examinations.

Improving quality of life is a key aspect of managing chronic diseases such as diabetes mellitus. If blood glucose levels can be well controlled, the physical symptoms caused by acute or chronic complications can be minimized or avoided (Manurung & Darungan, 2021).

One factor that affects quality of life is gender. Gender affects quality of life because women tend to pay more attention to their health care than men. Women are also more likely to undergo regular medical checkups and pay attention to their health and regularity in undergoing treatment (Sela, 2023).

Another factor that affects quality of life is education. The level of education has a significant impact on a person's quality of life. Although people with low levels of education may have extensive knowledge, they often experience a lower quality of life compared to those with higher levels of education. Patients with higher education often demonstrate good quality of life in

functional aspects such as physical well-being, energy levels, fatigue, social interaction, and limitations in functional performance related to emotional issues. Low education levels can also lead to poor health due to a lack of knowledge in preventing diseases related to health behavior (Dewi et al., 2022; Masliati et al., 2022).

Another factor that affects quality of life is marital status. Quality of life does not only depend on one's spouse, but can also be influenced by strong social support from family. This social support can reduce stress levels and help individuals develop effective coping strategies for stress, thereby helping them adapt to certain conditions. Even if a person does not live with their spouse, support from family members such as children or grandchildren can still be an important source of social support for patients with diabetes mellitus.

The results of the study indicate a correlation between spirituality and quality of life. The results also show that respondents with high spirituality mostly have a high quality of life, while those with low spirituality have a low quality of life.

These findings are consistent with the results of studies by Engkartini et al (2023) and Astutik (2019) which state that there is a correlation between the level of spirituality and the quality of life of patients with diabetes mellitus.

Spirituality is considered an important source of strength and hope. This concept has two main dimensions: the vertical dimension, which refers to an individual's relationship with God Almighty, and the lateral dimension, which encompasses relationships with oneself, fellow human beings, and the environment. In the context of patients with diabetes mellitus, spirituality plays an important role in improving their quality of life (Astutik, 2019).

Spirituality plays a major role in promoting health, especially in helping individuals with chronic illnesses to develop personal responsibility for their health. Spirituality is also considered a strategy for coping with and managing chronic illness. When a person has strong spirituality, it can be an adaptive way to cope with challenges, provide peace of mind, and calm the heart (Andrian & Purwanti, 2023; Dewi et al., 2023).

Spiritual care is used to help patients with diabetes mellitus reduce the production of hormones, especially cortisol, to keep glucose levels under control (Hardianti et al., 2023). Spiritual support can be provided to patients with diabetes mellitus to improve their comfort and acceptance of their condition. With this approach, it is hoped that the quality of life of patients can be significantly improved (Sahriana et al., 2023).

Spirituality plays a central role in a person's life in facing challenges by emphasizing hope and strength. Spirituality is one of the stress coping mechanisms that can reduce cortisol hormones, which helps lower glucose levels (Hardianti et al., 2023). When the highest need, namely spirituality, is fulfilled, a person will have a quality life (Anitasari et al, 2021).

CONCLUSION DAN RECOMMENDATIONS

The research results indicate a correlation between spirituality and quality of life in the Cisarua subdistrict, which is part of the working area of the Sukabumi City Health Center (UPTD Puskesmas Sukabumi). It is hoped that the Sukabumi Health Center can enhance its pro-active health promotion activities, blood sugar screenings, home visits, and health education sessions related to diabetes mellitus management. Additionally, it is expected that the center can provide a support system for diabetes mellitus patients on a regular basis, either once a month or when patients visit the

health facility, and offer health education on spirituality.

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