

Spiritual Experience of Type 2 Diabetes Mellitus Patients: Phenomenological Study

Adi Antoni¹, Eva Decroli², Afriwardi², Irwan Prayitno³, Nur Indrawati Lipoeto², Nursyirwan Efendi⁴, Mudjiran⁵, Hardisman², Zuriati Muhamad⁶
adiantoni100@gmail.com

¹Doctoral Program, Public Health Sciences, Faculty of Medicine, University of Andalas, Indonesia

²Faculty of Medicine, Andalas University, Indonesia

³Universitas Muhammadiyah Jakarta, Indonesia

⁴Department of Anthropology, Andalas University, Indonesia

⁵Guidance and Counselling Department, Universitas Negeri Padang, Indonesia

⁶Faculty of Health, Universitas Muhammadiyah Gorontalo, Indonesia

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Abstract

Diabetes mellitus is a chronic disease that every sufferer must undergo this condition for life. Spirituality is an aspect that cannot be separated from diabetics in living their lives. This study aims to explore the spiritual aspects of diabetes mellitus patients in living their lives. This research using This qualitative research uses a phenomenological study design conducted in the city of Padangsidempuan. This research design is a phenomenological study involving 10 patients with type 2 diabetes mellitus and was conducted for 3 months (November 2021 to January 2022). The sample criteria in this study are; people with type 2 diabetes mellitus; diabetic patients who are not cognitively impaired; diagnosed with diabetes for at least 5 years; have a minimum education degree, can communicate verbally and nonverbally. Data analysis using Collaizi method. The results of this study obtained 4 themes and 12 sub-themes. The themes obtained are: 1) effects of diabetes on life; 2) motivation for self-management of diabetes; 3) the role of the spiritual in self-care; 4) a source of strength and hope. Spirituality cannot be separated from the life of diabetic patients. The findings and implicit research that can improve coping and support in self-care of diabetics at home.

Keywords: Type 2 Diabetes Mellitus, Spiritual, Diabetes Self-Management

Introduction

Diabetes mellitus type 2 (DMT2) is a non-communicable disease whose number is increasing worldwide (Saeedi et al., 2019). Diabetics must live this condition for life (IDF, 2020).

The International Diabetes Federation estimates that 415 million people have diabetes at the age of 29-79 years and is predicted to increase to 641 by 2040 (Ogurtsova et al., 2017). Approximately 537 million adults (20-79 years) live with diabetes. The total number of people living with diabetes is projected to increase to 643 million by 2030 and 783 million by 2045. 3 out of 4 adults with diabetes live in low- and middle-income countries (ADA, 2018).

The standard management for diabetes mellitus is management of diet, medication and exercise (ADA, 2018). There is a lack of studies discussing spiritually based diabetes management (Onyishi et al., 2021). Meanwhile, self-management of diabetes mellitus cannot be separated from the spiritual aspect (Darvyri et al., 2018).

Spiritual and religious aspects play an important role in self-care behavior of diabetic patients (Fincham et al., 2018). In addition, spirituality can provide support, trust and hope (Watkins, Quinn, Ruggiero, Quinn, 2016). Spirituality is also effective in helping to change one's negative habits (Muhammad Nubli & Salam, 2013).

Spirituality is an important element for diabetics (Antoni et al., 2022). Spirituality can be a powerful coping strategy for people with weak health conditions such as diabetes (Choi & Hastings, 2019).

Spirituality produces a positive attitude towards life and life experiences, makes the patient dominant towards unfavorable life events including disease conditions (such as diabetes) and enhances life with motivation and energy (de Wit et al., 2020).

Based on the description above, the researcher investigated the spiritual experience of type 2 diabetes mellitus patients. Because there are still few studies that explore the spiritual aspect as a component in the management of diabetes mellitus.

Method

This qualitative research uses a phenomenological study design conducted in the city of Padangsidempuan. The number of participants involved was 10 people. The sampling technique used purposive sampling with the following criteria: type 2 diabetes mellitus patients, diabetic patients who did not experience cognitive impairment, had suffered from diabetes mellitus for at least 5 years since being diagnosed, had a minimum education of bachelor degree, and could communicate verbally and nonverbally. This research was conducted for 3 months (November 2021 to January 2022). The instrument used is an interview guide (table 1). Data analysis using Collaizi method.

Table 1. Interview guide

No	Question
1	How does diabetes affect your daily life?
2	What motivates you to take diabetes care independently?
3	What keeps you going on your diabetes?
4	Describe the source of strength and hope in your diabetes?
5	Does spirituality serve as a source and hope for you? Try to explain!
6	How does Spirituality motivate you to manage your diabetes?

Results and Discussion

Table 2. Characteristics of participants

Participants (P)	Age (Years)	Gender	Education	Religion
P1	52	Male	Bachelor	Islam
P2	75	Male	Bachelor	Islam
P3	63	Male	Bachelor	Islam
P4	56	Male	Bachelor	Islam
P5	48	Female	Bachelor	Islam
P6	65	Female	Bachelor	Christian
P7	63	Female	Bachelor	Christian
P8	58	Female	Bachelor	Christian
P9	69	Female	Bachelor	Islam
P10	68	Female	Bachelor	Islam

P=participant

Table 3. Theme 1: effects of diabetes on life

Sub-themes	Category	Representative quotations
diet	reduce the amount of food keep the diet eat on schedule restricted food diet 3 (amount, type, hour)	"for food is limited to drink more, to eat 3 times"(P2) "... so I continue to maintain my diet, don't eat carelessly," (P7)
Lifestyle modification	examination drug consumption keep the body healthy regular exercise adjust sleep pattern	"It has been recommended by doctors to take medication for life"(P5) "Secondly regulate sleep patterns" (P2) "every month at the community health center, once every 3 months" (P3)
life changing	avoid sweet foods heal right there is no possibility often feel weak stress sore body weak urate continuously	"maintain a diet avoid food" sweet one" (P3) "I often feel weak" (P4) "I'm also afraid to check sugar levels again" High blood pressure makes me more stressed, "so sometimes I don't want to" (P5) "All body aches, from there I" can feel that usually blood sugar rises" (P6)

Table 4. Theme 2: motivation for independent diabetes management

Sub-themes	Category	Representative quotations
Family role	wife and children who remind family experience	"Too many wives remind, sometimes wives ask how the disease is, so we can control it, right?" (P1) "Wife, children, they also recommend following the doctor's advice" (P3) "no, because it's only family experience, my mother has always been diabetic, so of course it's passed down to children" (P6)
Self DM monitoring	wear footwear wherever you go much rest routine control take medicine	"wear mats/slippers everywhere you go" (P9) "...so I routinely check my blood sugar level. Since 2012 I have kept it under control until now" (P6)

		"consuming sugar medicine. Now I have been taking medicine for 3 years until now continuously"(7)
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Table 5. Theme 3: the role of spirituality in self-care

Sub-themes	Category	Representative quotations
strength/hope	may you always be healthy now pray more Thank God Assume there is no disease Refusing to be lazy	"...now pray more..." (P1) "I am also a gift from Allah SWT" (P2) "Hopefully in the future, hopefully you will always be healthy, because if you are healthy, anything can be done" (P3) "I assume I don't have a disease, like a wrong lifestyle that we regret is useless" (P4) "I feel positive energy in my body" (P5) "I can feel, for example, rejecting laziness because laziness must be resisted" (P8)
important variables for individuals	Worship Confidence Fast Surrender to God Effort and prayer	"For me now fasting Monday Thursday is a necessity for me" (P2) "... able to carry out worship asked for a second time, thank God, the pleasure of being healthy has been granted, I" (P3) "I leave it to the almighty, everything must have a measure" (P4) "I pray so my soul rests" (P8)
Acceptance of disease	Make peace with thoughts Friends with diabetes Resigned	"I'm sick of sugar, just take it easy, if you think it's going up, just keep going" (P1) "Just make this diabetes a friend, so that it stays" healthy, don't fight it because fighting it is also useless" (P2) "Illness is a trial of God, just give it up" (P6)

Table 6. Theme 4: sources of strength and hope

Sub-themes	Category	Representative quotations
relationship with nature	sport take a shower at 3 am drink water	"I always take a shower at 3 am, after my shower" (P2) "walking twice a week for about half an hour" (P6) "drink lots of water to stabilize blood sugar"(10)
relationship with self	Self awareness make me more excited my responsibility	"If for motivation I use only self-awareness" (P2)

		"implant in myself I want to be healthy" (P3) "until I get married because it is my responsibility" (P6)
relationship with other people	follow doctor's advice get along with religious leaders the recommendation of the midwife/nurse at the puskesmas give charity	"Prof Harun recommended my diet for my diet" (P2) "God willing, I really take care, I follow the doctor's advice" (P3) "If I have received instructions, Alhamdulillah, it's a blessing, I often hang out with the cleric." (P3) "Well, I was recommended by the midwife at the health center to take medicine regularly" (P7) "if sugar rises, then I give charity so that sugar is stable" (P9)
relationship with transcendent (God)	communicate with god routine worship activities ask God for healing reading the holy bible pray Fast Worship	"Prof Harun recommended my diet for my diet" (P2) "God willing, I really take care, I follow the doctor's advice" (P3) "If I have received instructions, Alhamdulillah, it's a blessing, I often hang out with the cleric." (P3) "Well, I was recommended by the midwife at the health center to take medicine regularly" (P7) "if sugar rises, then I give charity so that sugar is stable" (P9)

This study involved 10 participants with 4 themes related to the spirituality of diabetes mellitus patients. The first theme is the effect of diabetes on life with sub themes: diet, lifestyle modification, changing lifestyle. Living a healthy lifestyle, including following a healthy diet, achieving modest weight loss, and engaging in regular physical activity can maintain healthy blood glucose levels and reduce the risk of type 2 diabetes complications (Chong et al., 2017).

Type 2 diabetes is a lifelong disease and can cause severe complications in multiple organs and an increased risk of death (ADA, 2018). Acceptance of a diabetes diagnosis from a healthcare professional can increase a person's awareness of the need for lifestyle changes (Schneider et al., 2014).

Handling diabetes mellitus is very important in preventing the dangers of complications as well as suppressing the number of diabetics and suppressing expensive treatment costs (Schinckus et al., 2014). People with diabetes have lifestyle changes, there are 50 (55%) respondents who have a good lifestyle and 41 (45%) respondents have a bad lifestyle (Irwansyah et al., 2021).

Energy balance plays an important role in the development of diabetes. The key elements in the energy balance equation are energy intake and energy expenditure, the former being directly related to diet and the latter to physical activity (Galaviz et al., 2018).

The second theme obtained from this study is the motivation for self-management of diabetes. (sub-theme: the role of the family and self-monitoring of diabetes). Self-motivation is the main variable in diabetes self-care (Shigaki et al., 2010). Self-management behavior (SMB) plays a significant role in glycemic control. This study aimed to explore the factors related to SMB

among patients with type 2 diabetes and how these factors interacted with each other (Chen et al., 2022).

Diabetes self-care is an important aspect of disease management for adults with diabetes (Choi & Hastings, 2019). Families can play an important role in patients' disease management, involving them in self-care interventions can positively influence patients' diabetes outcomes (Grabowski et al., 2017). The role of the family can increase the patient's self-efficacy, perceived social support, diabetes knowledge, and diabetes self-care (Baig et al., 2016).

Diabetes self-management education (DSME) has been considered a key component in diabetes management since the 1930s (Haas et al., 2014). Adam's research results found that there were significant differences between knowledge, attitudes and actions before and after the administration of DSME. In addition, there was a decrease in HbA1C levels by 1.29% ($p < 0.05$) in the intervention group and 0.76% in the control group ($p < 0.05$) (Adam et al., 2018). Chai stated that of 118 respondents (63 intervention groups, 55 control groups) DSME could significantly reduce anxiety scores in the intervention group, reduce depression and HbA1C levels (before 7.2%, after 6.2%, $p < 0.001$). blood sugar 2 hours after oral glucose tolerance test (before 13.29 and after 7.90, $p < 0.05$) and fasting blood sugar (before 8.00 and after 67.80, $p < 0.05$) (Chai et al., 2018).

Spiritual care is needed in a clinical setting to improve the patients' quality of life. Deep connection with another person and delight with the beauty of nature or art and (in some cases) with God are all transcendental experiences. The third theme is the role of spirituality in self-care of diabetics (Klimasiński et al., 2022). Chronic disease management cannot be separated from the spiritual aspect (Sonsona, 2014). Aspects of spirituality can help in overcoming chronic illness by providing support, trust and hope (Watkins, Quinn, Ruggiero, Quinn, 2016). Spirituality is also effective in helping to change one's negative habits (Muhammad Nubli & Salam, 2013).

Spirituality has an important role in self-management in patients with type 2 diabetes mellitus (Syarifah et al., 2020). Research in African American populations shows that there is a positive relationship between spiritual well-being and overcoming diabetes, as well as glycemic control (Jafari et al., 2014). Illness often creates emotional problems and more and more people believe that spirituality is a key contributor to health itself (Antoni et al., 2022).

Spirituality is a concept that shows meaning, hope, belief, a sense of belonging, and dependence, as well as driving a person to move and integrate other aspects (Ramenzani, A; Ahmadi, F; Mohammadi, E; Kazemnejad, 2014). Increased spirituality will help a person to overcome conflict and increase life satisfaction (Movahed et al., 2020). Spiritual well-being has a positive correlation with levels of physical, emotional and functional well-being and a better quality of life (Rego et al., 2020).

Diabetes management with an emphasis on spiritual aspects can be a force that can improve the state of mind, emotions and behavior of people with diabetes mellitus so that blood glucose levels are better regulated (Kusnanto, 2011).

The fourth theme obtained is the source of strength and hope (sub-theme: relationship with oneself, others, environment and God). Fisher explains the spiritual dimension into four spiritual domains where humans live in harmony through relationships with oneself (personal), others (communal), nature/environment (environmental), and God (transcendental) (Fisher, 2011).

The successful achievement of spiritual health is the harmony between human relationships with oneself, the environment, the environment and God (Ghaderi et al., 2018). Spiritual health

can be improved by developing positive relationships in each of these components (Fisher, 2011).

Spiritual health can be improved by developing positive relationships in each of these components (Gupta & Anandarajah, 2014). Diabetics believe that God is the center of health control (Albargawi et al., 2016). Spiritual is used as a support to overcome the crisis that occurs in diabetics (Movahed et al., 2020). Spirituality is the main source of strength and support for individuals in dealing with chronic illness (DeLaune & Ladner, 2002). Spirituality can provide support and hope, improve coping, reduce depression and support feelings of calm in patients with chronic diseases, including diabetes mellitus (Darvyri et al., 2018); (Watkins, Quinn, Ruggiero, Quinn, 2016). Spirituality has been identified as the essence of being human and is recognized, by many health care professionals, as a central component in health and healing. Scholars have identified spiritual nursing care as essential to nursing practice and include caring for the human spirit through the development of relationships and interconnectedness between the nurse and the patient (Hawthorne & Gordon, 2020).

Conclusion

There are four themes related to the spirituality of diabetes mellitus patients, namely the effect of diabetes on life, motivation for independent diabetes management, the role of spirituality in self-care, and the strengths and hopes of diabetes mellitus patients. Spirituality is the most important aspect of diabetics that should not be forgotten because spirituality is a basic need for diabetics. The study sample size was relatively small, with only 10 participants. A larger sample size increases the generalizability and reliability of the findings.

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