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Research Article

The Relationship of Spirituality with Coping Mechanism in Patients with Type 2 Diabetes Mellitus in Sukabumi Regency, Indonesia

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Abstract

Aim: Apart from the obvious health consequences, diabetes mellitus leads in unfavorable psychological responses that can lead to emotional problems. Individual coping techniques for lowering stress and making treatment decisions in which spirituality plays a significant role. The study aimed was to determine the relationship between spirituality and the coping mechanisms of type 2 diabetes mellitus patients.

Methods: This is correlational study with cross-sectional approach. Total sampling was used to collect data from 54 people diagnosed with type 2 diabetes. The spirituality instrument uses the Daily Spiritual Experience Scale (DSES) and the coping mechanism uses The Brief Coping. Statistical analysis using chi-square.

Results: The results showed that most respondents had moderate spirituality (59,3%) and adaptive coping mechanisms (55.6%). The chi-square test results obtained a P-value of 0.008, so there is a relationship between spirituality and coping mechanisms in type 2 DM patients.

Conclusion: The results showed that most of the respondents had moderate spirituality and adaptive coping mechanisms. Spirituality and adaptive coping skills are predicted to be enhanced by nurses, particularly in populations at risk for chronic disease.

Keywords:

Coping mechanisms, diabetes mellitus type 2, spirituality

INTRODUCTION

Epidemiological transitions result in changes in disease patterns from communicable diseases to non-communicable diseases. Non-communicable diseases are ranked 7th among the world's top 10 causes of death (1). Non-communicable diseases, often known as Non-communicable Diseases (NCD), are responsible for up to 70% of all fatalities

worldwide, with the majority occurring in low- and middle-income nations (2). Type 2 diabetes is one of the noncommunicable illnesses with a significant prevalence. Diabetes mellitus, or diabetes, is a disorder in which blood sugar levels are elevated (hyperglycemia) as a result of abnormal insulin action (3).

The occurrence of diabetes, particularly type 2 if untreated, might result in

complications. In addition to its effects on health, diabetes mellitus leads to unfavorable psychological responses that can lead to emotional problems such as tension, worry, and even depression. The disease is a source of stress that can result in numerous changes to a patient's lifestyle, including behavioral and psychological alterations (4).

Type 2 DM patients require coping mechanisms to channel the stressors they experience. Coping mechanisms are changes that a person can make in attitudes, thoughts, and feelings in response to the stressor they are facing (5). The factors that influence coping mechanisms include personal abilities or beliefs, social support, and material assets, where spirituality has a positive effect on health and well-being and encourages individuals with chronic illnesses to take personal responsibility for their health and well-being. Patients utilize their beliefs and religion to embrace the reality of their sickness in order to manage it with patience, tolerance, and confidence for a prosperous future (6).

Spirituality is viewed as an adaptive job and the selection of coping mechanisms for adjusting to chronic disease-induced changes. Individual coping techniques for lowering stress and making treatment decisions in which spirituality plays a significant role. According to a study, a person's ability to deal with a situation increases proportionally to the significance of spirituality in their life (7). The purpose of this study was to determine the relationship between spirituality and coping mechanisms in type 2 diabetes mellitus patients.

METHODS

Study design

This study used a correlational methodology. Correlational research studies the relationship between variables and tries to expose the correlative relationship between one variable and another, allowing researchers to identify, explain, quantify, and evaluate the relationship between variables. This study has a cross-sectional design that highlights the time of independent and dependent variable measurement or observation (8)(9).

Sample

The population in this study were all patients with type 2 diabetes mellitus in Bojongsari Village, Sukabumi Regency. Six respondents were taken for the preliminary survey, resulting in a total population of 54 using total sampling.

Instrument

The data collection method used a questionnaire with spirituality instruments using the Daily Spiritual Experience Scale (DSES) and the reliability test had a Cronbach's Alpha value of 0.95. Coping mechanisms using The Brief Coping and the reliability test had a Cronbach's Alpha value of 0.868.

Data analysis

The technique of analyzing data on univariate uses the quartile and median formulas, and bivariate analysis uses Chi-squared analysis.

RESULTS

1. Characteristics of Respondents

Table 1.
Characteristics of Respondents_(n = 54)

	Characteristics	n	%
Age	17-25	2	3,7
	26-35	11	20,4
	36-45	12	22,2
	46-59	28	51,2
	≥60	1	1,8
Gender	Male	37	68,5
	Female	17	31,5
Education	Primary School	28	51,9
	Junior High School	14	25,8
	Senior High School	9	16,7
	College	3	5,6
Job	Work	34	63,0
	Doesn't work	20	37,0
Marital Status	Doesn't Married	42	77,8
	Married	8	14,8
	Divorce	4	7,4
Religion	Islam	54	100
Long Suffered	<1 year	40	74,1
	≥1 year	14	25,9

According to table 1, the respondents in this study were mostly aged 46-59 years, namely 28 people (51.9%), male sex as many as 37 people (68.5%), education respondents, namely elementary school as many as 28 people (51.9%), respondents worked as many as 34 people (63.3%), and married status, namely 42 people (77.8%). All respondents were Muslim, with a total of 54 people (100%). Most of the respondents had long suffered from DM <1 year (74.1%).

2. An Overview of Spirituality and Coping Mechanisms in the Village Bojongsari

Table 2.
An Overview of Spirituality and Coping Mechanisms in the Village Bojongsari

Variabel	Frequnces	%
Spirituality :		
High	10	18,5
Midle	32	56,3
Low	12	22,2
Coping Mechanism:		
Adaptive	30	55,6
Maladaptive	24	44,4

According to Table 2, the results of the univariate analysis showed that most of the respondents had moderate spirituality, as many as 32 people (59.3%) and a small proportion had high spirituality, as many as 10 people (18.5%). Most of the respondents have adaptive coping mechanisms, as many as 30 people (55.6%), and a small proportion have maladaptive coping mechanisms, as many as 24 people (44.4%)

3. Analysis of the Relationship between Spirituality and Coping Mechanisms Patients with Type 2 Diabetes Mellitus in Bojongsari Village, Working Area of the Jampangkulon Health Center, Sukabumi Regency

Table 3.

Analysis of the Relationship between Spirituality and Coping Mechanisms Patients with Type 2 Diabetes Mellitus in Bojongsari Village, Working Area of the Jampangkulon Health Center, Sukabumi Regency

Spirituality	Coping Mechanisms				Total		P-value	Chi-square
	Adaptive		Maladaptive		F	%		
	F	%	F	%				
High	2	16,7	10	83,3	12	100	0.008	9,686
Midle	22	68,8	10	31,2	32	100		
Low	6	60,0	40	40,0	10	100		
Total					54	100		

According to Table 3. The bivariate analysis results show that respondents with moderate spirituality mostly have adaptive coping mechanisms, namely 22 people (68.8%), and a small proportion have low spirituality, namely 2 people (16.7%). Respondents who have maladaptive coping mechanisms mostly have low spirituality of 10 people (83.3%) and moderate, namely 10 people (31.2%) and a small proportion have high spirituality, namely 4 people (40%). The results of the analysis using the chi square obtained a p-value = 0.008, which shows that there is a relationship between spirituality and coping mechanisms for diabetes mellitus patients in Bojongsari Village, Jampangkulon Public Health Center, Sukabumi Regency.

DISCUSSION

An Overview of Spirituality

Spirituality is a sense of connection with God, other people, and the natural world. Spirituality can refer to something inherently connected to life (10). One of the factors that influence spirituality is religion. Based on the research, it was concluded that 54 people (100%) were Muslim (table 1). One can detect the influence of religion on a person by observing their behavior,

activities, emotions, and sentiments. Spirituality is an integral aspect of health that regulates chronic disease and setting life goals. Patients utilize their beliefs and religion to embrace the reality of their sickness in order to manage it with patience, tolerance, and confidence for a bright future (11).

In line with Mangolian (2017) research shows a strong relationship between spirituality in overcoming illness and argues that spiritual and religious beliefs can reduce pain, social isolation, depression and hopelessness.(12)

Type 2 DM respondents have faith in God so that they leave all affairs only to God for every test that God gives. Some of those who answered always go to the recitation or ta'lim in Bojongsari Village at least once a week, especially the women.

Female respondents in Bojongsari Village showed a higher level of interest in spirituality at the time of data collection by admitting to having had spiritual experiences, seeking answers to spirituality, and believing in positive changes in religion, where religion is one of the fundamental human needs for dealing with issues like stress, fear, anxiety, death, etc. Spiritual

demands manifested as a search for life's meaning, optimism, dignity, self-respect, and an understanding of and peace with one's own mortality.

An Overview of Coping Mechanisms

According to the investigation results, coping mechanisms are tactics individuals employ to deal with life changes and hazards or dangers that cause physical and psychological harm. Anxiety is a pleasurable sensation of insecurity generated by fear, tension, and thoughts of insecurity that encompass the mind (8).

One of the factors that influences the coping mechanism is gender. Table 1 shows that most of the respondents with diabetes mellitus are male and a small proportion are female.

Gender is a difference that is not biological and not God's nature. (13). This is consistent with studies undertaken by (14), It has been discovered that women tend to employ coping mechanisms targeted at altering their emotional responses to stressful situations, hence enhancing their ability to manage stressful conditions.

Even though there are fewer female respondents with type 2 DM in Bojongsari Village than male respondents, female respondents are better able to control the situation with adaptive coping mechanisms.

Education is another component that influences the coping technique. According to table 1, the majority of diabetic patients have an elementary education.

According to Law No. 20 of 2003, education is the conscious and deliberate effort to create a learning environment and learning process so that students actively develop their potential to have religious and spiritual strength, self-control, personality, intelligence, noble character, and skills required by themselves, society, nation, and country (15). The majority of Type 2 DM respondents in Bojongsari Village have elementary school education, which is insufficient to know how to implement adaptive coping mechanisms, despite the

fact that enthusiasm and direction from families and the environment can help respondents implement adaptive coping mechanisms.

A Relationship between Spirituality and Coping Mechanisms

Statistical testing utilizing the chi-square value yielded a p-value of 0.008, which is less than 0.05. H_0 is rejected based on the rejection of the hypothesis, indicating that there is a relationship between spirituality and the coping mechanism of type 2 diabetes mellitus patients in Sukabumi Regency.

People with Type 2 DM become more spiritually oriented, they view spirituality as a potent tool for overcoming the disease. Spirituality improves a patient's concentration, strength, and vitality, allowing them to conquer their sickness (16,17)

In line with Rohmin's research (2018), it shows a significant relationship between spirituality and coping mechanisms, where the higher the level of spirituality, the better the coping mechanism and is supported by research Dewi et al, (2020) showed that there was a relationship between spirituality and self-efficacy with coping mechanisms in type 2 diabetes mellitus patients (5).

Individuals suffering from chronic ailments benefit from spirituality. where persons who have a good level of spirituality may utilize their beliefs to overcome disease, pain and events that generate stress due to the illness they face. Individuals also have a better time coping with disease, feel less discomfort, and are more pleased and cheerful(18).

According to the preceding idea, there is a correlation between spirituality and coping mechanisms in patients with chronic diseases; if the spiritual quality is good, the coping mechanisms will be adaptive. The spiritual nature of a person's behavior plays a significant impact in enhancing adaptive coping mechanisms. Despite the fact that

some responders have superior spiritual quality, their coping mechanisms are dysfunctional. The more your spiritual quality, the more effective your coping mechanisms.

CONCLUSION

The majority of respondents have moderate spirituality and adaptive coping mechanisms. Spirituality and adaptive coping skills are two areas in which nurses are expected to improve, particularly when working with populations at risk for chronic disease.

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