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**THE RELATIONSHIP OF SPIRITUALITY WITH COPING MECHANISM OF TYPE  
2 DIABETES MELLITUS PATIENTS IN BOJONGSARI VILLAGE, SUKABUMI  
REGENCY, INDONESIA**

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**ABSTRACT**

*Objective: To determine the relationship between spirituality and the coping mechanisms of type 2 diabetes mellitus patients. Method: This type of research is correlational with a cross-sectional approach. The population is type 2 DM patients with a sample of 54 patients with a total sampling. The spirituality instrument uses the Daily Spiritual Experience Scale (DSES) and the coping mechanism uses The Brief Copie. Statistical analysis using chi-square. Results: The results showed that most of the respondents had moderate spirituality and adaptive coping mechanisms. The results of the chi-square test obtained a P-value of 0.008, which means that H<sub>0</sub> is rejected, so there is a relationship between spirituality and coping mechanisms in type 2 DM patients. Conclusion: There is a relationship between spirituality and coping mechanisms. It is expected to maintain good spirituality in order to improve coping mechanisms in solving problems.*

*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 top 10 causes of death in the world (WHO 2019). 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 (WHO 2016).

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 (American Diabetes Association, 2017).

The occurrence of diabetes, particularly type 2 if untreated, might result in complications. In addition to its effects on health, diabetes mellitus leads in unfavorable psychological responses that can lead to emotional problems such as tension, worry, and even depression. Disease is a source of stress that can result in numerous changes to a patient's lifestyle, including behavioral and psychological alterations (Karlina et al. 2021).

Type 2 DM patients require coping mechanisms to channel the stressors they experience. Coping mechanisms are changes that can be made by a person in attitudes, thoughts, and feelings in response to the stressor they are facing (Dewi, et al 2020).

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 (Khotimah, et al 2021).

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 (Al-Mira, 2021).

## MATERIALS AND METHODS

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 (Notoatmodjo 2018; Putri 2019).

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. The data collection method used a questionnaire with spirituality instruments using the Daily Spiritual Experience Scale (DSES) and coping mechanisms using The Brief Cope. The technique of analyzing data on univariate uses the quartile and median formulas, and bivariate analysis uses Chi-squared analysis.

## RESULTS

Table 1 Characteristics of respondent in Bojongsari Village

| Characteristics | F            | %  |      |
|-----------------|--------------|----|------|
| 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          | Men          | 37 | 68,5 |
|                 | Women        | 17 | 31,5 |
| Education       | SD           | 28 | 51,9 |
|                 | SMP          | 14 | 25,8 |
|                 | SMA          | 9  | 16,7 |
|                 | PT           | 3  | 5,6  |
| Profession      | Work         | 34 | 63,0 |
|                 | Doesn't work | 20 | 37,0 |

|                |              |    |      |
|----------------|--------------|----|------|
| Merried Status | Married      | 42 | 77,8 |
|                | No merried   | 8  | 14,8 |
|                | Divorce      | 4  | 7,4  |
| Religion       | Islam        | 54 | 100  |
| Long suffered  | <1 years old | 40 | 74,1 |
|                | ≥1 years old | 14 | 25,9 |

The characteristics of 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%) (Table 1).

Table 2 An Overview of Spirituality and coping mechanism in the village Bojongsari

| Variable           | F  | %    |
|--------------------|----|------|
| Spirituality :     |    |      |
| Tall               | 10 | 18,5 |
| Currently          | 32 | 56,3 |
| Low                | 12 | 22,2 |
| Coping Mechanism : |    |      |
| Adaptive           | 30 | 55,6 |
| Maladaptive        | 24 | 44,4 |

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%) (Table 2).

Tabel 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 Mechanism |      |             |      | Total | <i>P-value</i> | Chi-square |       |
|--------------|------------------|------|-------------|------|-------|----------------|------------|-------|
|              | Adaptive         |      | Maladaptive |      |       |                |            |       |
|              | F                | %    | F           | %    |       |                |            |       |
| Low          | 2                | 16,7 | 10          | 83,3 | 12    | 100            | 0.008      | 9,686 |
| Currently    | 22               | 68,8 | 10          | 31,2 | 32    | 100            |            |       |
| Tall         | 6                | 60,0 | 40          | 40,0 | 10    | 100            |            |       |
| Amount       |                  |      |             |      | 54    | 100            |            |       |

The results of the bivariate analysis show that respondents who have 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 (Table 3).

## **DISCUSSION**

### **An Overview of Spirituality in Bojongsari Village**

Spirituality is a sense of connection with God, other people, and the natural world. Spirituality can refer to something inherently connected to life (Potter & Perry, 2015 dalam Rohman, 2022).

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 plays a role in regulating 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 (Adyatma et al, 2019).

Type 2 DM respondents in Bojongsari Village 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.

Gender is another aspect that influences spirituality. According to table 1, the survey reveals that there are more men than women. Gender is a social construct or trait imposed by human civilization on individuals (Astuti, 2017).

At the time of data collection, however, female respondents in Bojongsari Village demonstrated a greater interest in spirituality by acknowledging spiritual experiences, seeking answers to spirituality, and believing in positive changes in religion, where religion is one of the fundamental human needs for coping with a variety of life issues such as stress, fear, anxiety, death, etc. Indicators of self-spiritual needs, such as the desire for life's meaning, hope, dignity, self-respect, and preparation for and acceptance of death.

### **An Overview of Coping Mechanisms in Bojongsari Village**

According to the results of the investigation, coping mechanisms are tactics employed by individuals 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 (Notoatmodjo 2018).

One of the factors that influences the coping mechanism is gender. Based on table 1, it 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. (Astuti 2017). This is consistent with studies undertaken by (Widiyawati and Aripin 2017), 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 (Mirnawati 2017). 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 in Bojongsari Village

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 Bojongsari Village, Jampangkulon Community Health Center, Sukabumi Regency. They think that, like other difficulties in life, illness is a test from God. They feel they must be patient in the face of this divinely ordained difficulty. Spirituality brings meaning to sickness and facilitates coping with the stress produced by a diagnosis of diabetes. When 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 (Heidarzadeh and Aghamohammadi 2017; R Dewi et al. 2022).

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. 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**

According to the findings of a study of patients with type 2 diabetes mellitus in the village of Bojongsari, the service area of the Jampangkulon Health Center in the Sukabumi Regency, the majority of respondents have moderate spirituality and adaptive coping mechanisms.

There is a relationship between spirituality and coping mechanisms in the village of Bojongsari, the working area of the Jampangkulon Public Health Center in Sukabumi Regency. With the chi-square test of spirituality, the p-value is 0.008.

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## REFERENCE

- [1] Adyatma, muhamad alfan, Murtaqib, and Baskoro Setioputro. 2019. "Hubungan Spiritualitas Dengan Stres Pada Penderita Hipertensi Di Poli Jantung RSUD Dr. H. Koesnadi-Bondowoso." *E-Journal Pustaka Kesehatan* 7 (2).
- [2] Al-mira, Rafida. 2021. "Hubungan Antara Tingkat Stres Dan Spiritualitas Dengan Manajemen Diri Pasien Diabetes Mellitus." *Program Studi Ilmu Keperawatan Fakultas Kedokteran Universitas Sriwijaya Indralaya*.
- [3] American Diabetes Association, and (ADA). 2017. "Standards Of Medical Care In Diabetes."
- [4] Astuti, Indah. 2017. "Relasi Gender Pada Keluarga Perempuan Pedagang."
- [5] Dewi, R, S. L Panduragan, N. S Umar, F Melinda, and J Budhiana. 2022. "The Effect of Religion, Self-Care, and Coping Mechanisms on Quality of Life in Diabetes Mellitus Patients." *Jurnal Keperawatan Padjadjaran* 10 (1): 58–65.
- [6] Dewi, Rosliana, Inten Herlianti Anugrah, and Iwan Permana. 2020. "Hubungan Mekanisme Koping Dengan Kualitas Hidup Pada Penderita Diabetes Melitus Tipe 2 Relationship of the Koping Mechanism With the Quality of Life in Type 2 Diabetes Mellitus Patients." *Jurnal Kesehatan Indra Husada* 1 (Vol 9 No 1 (2021): Januari-Juni 2021): 1–8. <https://ojs.stikesindramayu.ac.id/index.php/JKIH/article/view/276>.
- [7] Heidarzadeh, Mahdi, and Masoumeh Aghamohammadi. 2017. "Spiritual Growth in Patients with Type II Diabetes Mellitus: A Qualitative Study." *Journal of Research Development in Nursing and Midwifery* 14 (2): 34–44. <https://doi.org/10.29252/jgbfnm.14.2.34>.
- [8] Karlina, Nonok, Ahmad Syaripudin, Program Studi, Ilmu Keperawatan, Stikes Mahardika Cirebon, Nonok Karlina, Ahmad Syaripudin, *Jurnal Kesehatan, and Mahardikavol* No. 2021. "Hubungan Efikasi Diri Dengan Strategi Koping Pada Pasien Diabetes Mellitus Type 2 Yang Menggunakan Insulin Di Poliklinik RSUD Waled Kabupaten Cirebon The Correlation Of Self Efficacy With Coping Strategies On Patients Diabetes Mellitus Type 2 Which Use In." *Jurnal Kesehatan Mahardika*.
- [9] Khotimah, Khusnul Siwi, Adiratna Sekar, and Refa Teja Muti. 2021. "Hubungan Spiritualitas Dan Efikasi Diri Dengan Strategi Koping Pada Penderita Diabetes Mellitus Tipe II Di Desa Karanggedang Kecamatan Sidareja." *Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat (SNPPKM)*.
- [10] Mirnawati, Lilik Binti. 2017. "Pengaruh Model Pembelajaran Kooperatif Tipe Group Investigation Terhadap Kreativitas Mahasiswa Semester I PGSD UM Surabaya Pada Mata Kuliah Pengantar Manajemen Pendidikan." *PEDAGOGIA: Jurnal Pendidikan* 6 (1): 84–97. <https://doi.org/10.21070/pedagogia.v6i1.598>.
- [11] Notoatmodjo, Prof Dr Soekidjo. 2018. "Metodologi Penelitian Kesehatan."
- [12] Putri, Ni Luh Putu Kemala. 2019. "Hubungan Status Kontrol Asma Dengan Kualitas Hidup Pada Anak Dengan Asma Bronkial Di RSUD Klungkung." *Politeknik Kesehatan Denpasar*.
- [13] Rohman, Asri Aprilia. 2022. "Hubungan Penerapan Aspek Spiritualitas Perawat Dengan Pemenuhan Kebutuhan Spiritual Pada Pasien Di Ruang Rawat Inap Puskesmas Manonjaya Kabupaten Tasikmalaya Tahun 2021." *Jurnal Keperawatan Galuh*.
- [14] WHO. 2016. "No Title."
- [15] ———. 2019. "No Title."
- [16] Widiyawati, Wiwik, and Zainal Aripin. 2017. "Hubungan Koping Individu Dengan Tingkat Depresi Pada Penderita Diabetes Melitus ( DM ) Tipe 2 Di Klinik Prima Medika Gedangan Sidoarjo" 9 (1): 24–34.