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The Influence of Spiritual Peer Support Groups on Self-Management and Self-Compassion in Type 2 Diabetes Mellitus Patients with Gangrenous Wounds

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ABSTRACT: The challenge of self-management in Diabetes Mellitus with gangrene wounds, often triggers feelings of frustration and failure in patients. When self-management goals are not achieved, patients tend to blame themselves, feel incompetent, and over-criticize themselves. This negative reaction to self-compassion reflects a low level of self-compassion, which in turn can decrease motivation to keep working and increase the risk of burnout in self-management decreases. The purpose of this study is to analyze the influence of Spiritual Peer Group Support on self-management and self-compassion in Type 2 Diabetes Mellitus patients with Gangrene Wounds. The design of this study uses Quasy Experimental with the untreated control group design with dependent pre-test and post test samples. The population in this study is all patients with type 2 Diabetes Mellitus who have gangrene lesions, which is 146 respondents. Sampling was carried out by purposive sampling. The total number of respondents in this study was 106 with the division of 53 intervention groups and 53 control groups. The independent variables in this study are Spiritual Peer Group support and the dependent variables in this study are Self-Compassion and self-management. The instruments used in this study were the Self-Compassion Scale (SCS) questionnaire and the Diabetes Self-management Questionnaire (DSMQ). Data analysis using paired t-test and independent t-test. Based on the t-independent test, the average self-management before the intervention was 21.13 in the treatment group and the control group was 21.25 with a p value of 0.942 which showed that there was no difference in the level of self-management before the intervention was given. The average level of self-management after the intervention was 34.42 and in the treatment group and the control group was 20.96 with a p value of 0.000 indicating that there was a difference in the level of self-management after the intervention. The mean self-compassion before the intervention was 77.96 in the treatment group and the control group was 78.96 with a p value of 0.741 which showed that there was no difference in the level of self-compassion before the intervention was given. The average level of self-compassion after the intervention was 93.75 and in the treatment group and the control group was 75.30 with a p value of 0.000 which indicates that there was a difference in the level of self-compassion after the intervention. Spiritual Peer Group Support is an effective intervention method in improving self-management and self-compassion in patients with type 2 diabetes mellitus with gangrene wounds. Therefore, this intervention can be recommended as part of a holistic approach in the management and rehabilitation of patients with these chronic conditions.

1. INTRODUCTION

The increasing prevalence and cost of health care for Diabetes Mellitus, is essential for health services to improve the efficiency and effectiveness of diabetes mellitus treatment. There are barriers in care for patients and the health care system. As a result, many people with diabetes do not get the necessary nursing services and support, so the success rate of diabetes management decreases. Self-management of diabetes such as maintaining diet and drinking, regular physical activity, regular medication and monitoring of blood sugar levels is essential to reduce the risk of complications (Onyishi et al., 2021). However, in reality optimal self-management often does not last long. This is not optimally shown by a worsening lifestyle, blood sugar levels are also not controlled, forgetting not to take medication, because due to a lack of health knowledge it is not immediately addressed, it will cause ongoing complications (Aung, T. T., et al., 2022). The challenges of self-management in Diabetes Mellitus, often trigger feelings of frustration and failure in patients. When self-management goals are not achieved, patients tend to blame themselves, feel incompetent, and over-criticize themselves. This negative reaction to oneself reflects a low level of self-compassion, which in turn can decrease motivation to keep working and increase the risk of burnout in self-management (Elshafei, M. A., et al. (2023)).

Various epidemiological studies show that there is an increasing trend in the incidence and prevalence of type 2 DM in various regions of the world. The WHO estimates that the number of people with type 2 diabetes will increase significantly in the coming years. The World Health Organization (WHO) estimates that the number of people with type 2 diabetes in Indonesia will increase from 8.4 million in 2000 to around 21.3 million in 2030 (PERKENI, 2015). Indonesia is the first country in Southeast Asia at the nomination, which is around 19.47 million in 2020, so in general the large percentage of people with diabetes mellitus in Indonesia dominates in Southeast Asia). The Southeast Asian region, where Indonesia is located, ranks third with a similarity of 11.3%. Considering that the assessment of the number of Diabetes Mellitus patients in Surabaya in 2020 who were dissected by specialists was around 3.3% (Pangribowo, 2020). One of the areas of Surabaya City that has DM incidents reaching 7246 people is Wonokromo District out of a total population of 93,581 people. In the Wonokromo District area, there are 6 Villages with an average of each Village having an incidence of DM cases. The highest incidence of DM is found in Jagir Village with 976 cases out of a total population of 10,4908 people (Profile of Jagir Health Center, 2017). The Jagir Surabaya Health Center serves the increasing number of Diabetes Mellitus patients, with a total of 1,632 cases recorded to date. (Medical Records of the Jagir Health Center, 2024).

Diabetes Mellitus if left unattended will cause several nursing problems, namely instability of blood glucose levels, disorders of tissue integrity, ineffective peripheral perfusion, acute pain, physical mobility disorders. Acute complications such as hyperglycemia, hypoglycemia to chronic (long-term) complications. Meanwhile, chronic complications are the occurrence of microangiopathy and macroangiopathy, neuropathy, diabetic ulcers and also diabetic ketoacidosis (Erlina, 2022). Complications that occur due to DM disease can be in the form of disorders in blood vessels, both macrovascular and microvascular, disorders of the nervous system or neuropathy, decreased intake of nutrients and oxygen in the vessels, diabetic polynecropathies, gangrene to debridement to amputation. Macrovascular complications generally affect the heart, brain and blood vessels, while microvascular disorders can occur in the eyes and kidneys. Complaints of neuropathy are also commonly experienced by DM patients, both motor, sensory and autonomic neuropathy (PERKENI, 2015). This condition will give rise to several nursing problems, including blood glucose instability characterized by hyperglycemia and hypoglycemia, frequent hunger, frequent thirst, and frequent urination, especially at night. Patients will experience ineffective tissue perfusion because hyperglycemia results in the transport of O₂ to capillary tissue not being fulfilled with maximum CRT > 3 seconds, acrally feeling cold, body temperature drops (SDKI DPP PPNI Working Group Team 2017).

Type 2 diabetes mellitus is a chronic condition that requires ongoing management and significant lifestyle changes. Where a person with type 2 diabetes mellitus can be faced with possible changes in physical appearance, limitations and obstacles in carrying out daily activities, difficulties in dealing with medication and side effects, as well as readjustment to new circumstances that result in psychological disorders such as depression, stress and anxiety disorders (Dehghan, M., et al. 2024; Johnson, J. A., et al. 2024). Patients with Diabetes Mellitus often struggle with significant emotional burdens due to the demands of ongoing disease management. This burden can manifest in the form of feelings of guilt when there are fluctuations in blood sugar levels out of control, shame due to complications that may arise, or self-criticism due to difficulties in maintaining a healthy lifestyle. As a result, the level of self-compassion in this population tends to be lower compared to individuals without diabetes (Osborn, C. Y., et al. 2010) (Gilbert, 2014). This lack of self-compassion can worsen the patient's psychological state, triggering a negative

cycle that impacts self-management and overall quality of life. A lack of peer support or peer support groups can lead to social isolation, which is a risk factor for low self-compassion. When diabetic patients feel isolated and have no peers who can understand and support them, they feel alone in facing the challenges of their disease. This feeling of isolation can trigger self-criticism and decrease the ability to be kind to oneself. Low impact of self-compassion on mental health (depression, anxiety) and self-management behaviors (Han, H. R., et al. 2020; Li, J., et al. (2022).

One of the main factors contributing to less effective self-management in DMT2 patients with gangrene lesions is the lack of emotional support and adequate information. Support from family and health care workers is often insufficient or not in accordance with the patient's needs. In this context, peer groups can play an important role in providing emotional support, sharing experiences, and providing practical information about self-management (Sinclair et al., 2015). However, without access to a structured and supportive peer group, patients may feel isolated, lose motivation, and have difficulty coping with daily self-management challenges (Wang, Y., et al. 2023; Nguyen, H. T., et al. 2023).

The Spiritual Peer Support Group is present as a complementary intervention in the management of Type 2 Diabetes Mellitus (DMT2) with Gangrene Wounds. This approach aims to improve patient self-compassion and self-management through a well-structured and facilitated holistic support platform. In this group, DMT2 patients with gangrene lesions were able to interact, share experiences, and provide each other with emotional, informational, and spiritual support, while upholding inclusivity, safety, and diversity of spiritual beliefs. An important aspect of this solution is the integration of spiritual elements relevant to the DMT2 patient's experience with gangrene wounds. This can be done by incorporating spiritual values, religious beliefs, or life philosophies, as well as encouraging spiritual practices such as meditation, prayer, reflection, or social religious activities. Its main goal is to help patients find meaning, hope, and strength in the face of their illness.

In addition to the psychological aspect, the Spiritual Peer Support Group will also focus on improving patient self-management. This will be achieved through the provision of accurate and up-to-date information on various aspects of self-management, such as nutrition, physical activity, monitoring blood sugar levels, and the use of medications. Patients will also be assisted in developing practical skills to manage their illness effectively, as well as being empowered to take an active role in their care and make informed decisions to ensure successful implementation, healthcare workers, counsellors, or volunteers need to be trained as competent and empathetic group facilitators. This training will cover the principles of peer support, effective communication, group facilitation, and spiritual integration in Healthcare (Alshraifeen, A., et al. 2023). In addition, periodic evaluations of the effectiveness of the program need to be conducted to ensure that the Spiritual Peer Support Group truly provides the expected benefits and can continue to be developed according to the patient's needs (Smith, A. B., et al. 2024). By implementing this solution, it is hoped that DMT2 patients can receive holistic support, increase self-compassion, and manage their disease more effectively, thereby improving their overall quality of life. The results of this study may also provide practical implications for healthcare workers, patient organizations, and researchers to develop and test similar interventions in different populations of DMT2 patients (Neff & Germer, 2018).

2. MATERIALS AND METHODS

2.1 Materials

This study uses a quasi experiment research design with the untreated control group design with dependent pre-test and post test samples. This study involved two groups of subjects, namely the intervention group and the control group with the target population of all Diabetes Mellitus patients who experienced gangrene lesions at the Jagir Health Center. The sample size was 104 participants. Furthermore, the collected sample was divided into two with 52 respondents in the treatment group and 52 respondents in the control group. The sampling technique will be carried out using the purposive sampling technique with the determination of samples according to the inclusion and exclusion criteria. Inclusion criteria: DM patients diagnosed with Type 2 DM who are undergoing a treatment program and have gangrene lesions, can communicate well. Experiencing low self-compassion and self-management as for the exclusion criteria: DM patients who have physical limitations, mental and cognitive disabilities (blind, deaf, mentally disabled), DM patients who have complications of other diseases other than gangrene wounds, patients are undergoing other complementary therapies. The independent variables in this study are spiritual peer group support and the dependent variables in this study are self-compassion and self-management in patients with Type 2 Diabetes Mellitus (DM).

2.2 Data Collection Procedures

The instrument used in this study was for spiritual intervention peer group support which was carried out as many as 12 meeting sessions.

1. First session: fostering intimacy and talking to each other about the concepts of spirituality and religion and their impact on one's life
2. Second session: Self-awareness and communication with oneself and listening to one's inner voice
3. Third session: Understanding Self-Concept
4. Fourth session: Reading the Quran, communication with God or with any superior power the patient believes, prayer and conversation with God
5. Fifth session: Altruism (doing something spiritual collectively)
6. Sixth session: Relationship with holy places (visiting mosques)
7. Seventh session: Lowering Hatred, Self-Forgiveness, and Guilt
8. Eighth session: Self-reflection/Forgiveness
9. Ninth session: Acceptance of death
10. Tenth session: Faith and belief in God
11. Eleventh Session: Feelings of Gratitude
12. Twelfth session: Gratitude to yourself

The intervention will be carried out with 12 meeting sessions with a duration of ± 60 minutes per meeting. The self-compassion research instrument using *the Self-Compassion Scale* (SCS) consists of 26 statements divided into six aspects, namely self-kindness, *self-judgment*, *common humanity*, isolation, *mindfulness*, and *over-identification* (too late in the problem). Each statement is answered using a Likert scale from 1 to 5, where 1 means "almost never" and 5 means "almost always". For negative statements, such as in the aspects of self-judgment, isolation, and over-identification, the answer score is reversed before being summed up. The score for each aspect is obtained by adding up the scores of the corresponding statements, then dividing by the number of statements on that aspect, so that the average score is obtained. The total score of self-compassion was obtained from the average of the six aspects. The higher the score obtained, the higher the level of self-compassion of the respondents. Each aspect measures a specific dimension of self-compassion. The aspect of self-kindness measures the extent to which an individual is able to be kind to himself when facing difficulties. The self-judgment aspect measures an individual's tendency to judge oneself negatively. Common humanity measures the recognition that suffering is part of the human experience. Isolation measures feelings of isolation when experiencing failure. Mindfulness measures an individual's ability to be aware of experiences in a balanced manner without neglecting or exaggerating. Over-identification measures a tendency to overindulge in negative feelings (Neff Et Al., 2003). Self-Compassion Scale (SCS) assessment indicators are Low = (≤ 76), Medium = (77–103), High = (≥ 104) (Neff et al., 2003)

The Self-management data collection instrument using the Diabetes Self-Management Questionnaire (DSMQ) consists of 16 statements that measure four main aspects of self-management behavior in diabetic patients, namely glucose management (monitoring and control of blood sugar), diet control (adherence to recommended diet), physical activity (involvement in sports or physical activity), and cooperation with health workers (ability to communicate and working with health professionals). Each statement is answered on a Likert scale from 0 to 3, where 0 means "not true at all" and 3 means "very true". Some negative statements must be reversed before they are summed up. The score for each aspect is obtained by adding the score to the statement that corresponds to that aspect. The total DSMQ score is the sum of the entire statement score, which can then be converted to a scale of 0 to 10 for easier interpretation. Higher scores indicate better diabetes self-management behaviors. Each aspect of the DSMQ measures specific behavior. The glucose management aspect measures how often a patient monitors and controls their blood sugar levels. The diet control aspect assesses the patient's adherence to recommended eating rules. The physical activity aspect assesses the patient's involvement in sports or physical activity on a regular basis. The aspect of

cooperation with health workers assesses the patient's ability to communicate and cooperate with health workers in diabetes management. The indicators of self-management assessment are divided into: (Schmitt and al., 2013) Poor (≤ 28), Moderate (29–37), and Good (≥ 38).

2.3 Data Analysis

Data analysis in this study used a paired t test and an independent t test, the hypothesis is accepted if the value of $p < 0.05$. The intervention will be carried out with 12 meeting sessions with a duration of ± 60 minutes per meeting. This research has been ethically approved by the research ethics committee of the Brahmanda Lantern Chakra Institute with No. 004/04/III/EC/KEP/LCBL/2025.

3. RESULTS AND DISCUSSION

3.1 Results

a. Characteristics of Respondents

Table 1: (a) Subjects' Characteristics

	Intervention Group (N=53)	Control Group (N=53)
Age (N, %)		
Early adults (26-35 years)	1 (1.9%)	3 (5.7%)
Late adults (36-45 years)	9 (17%)	6 (11.3%)
Early Elderly (46-55 years)	12 (22.6%)	11 (20.8%)
Late elderly (56-65 years old)	31 (58.5%)	33 (62.3%)
Gender (n, %)		
Female	33 (62.3%)	34 (64.2%)
Male	20 (37.7%)	19 (35.8%)
Education (N, %)		
Basis	29 (54.7%)	12 (22.6%)
Intermediate	21 (39.6%)	36 (67.9%)
Tall	3 (5.7%)	5 (9.4%)
Professional (N, %)		
Civil Servants	3 (5.7%)	1 (1.9%)
Private Employees	14 (26.4%)	19 (35.8%)
Self employed	16 (30.2%)	17 (32.1%)
Other Jobs	2 (3.8%)	1 (1.9%)

Table 1: (b) Subjects' Characteristics

	Intervention Group (N=53)	Control Group (N=53)
Not Working	18 (34.0%)	15 (28.3%)
Long Suffering		
<2 Years	43 (81.1%)	41 (77.4%)
>2 Years	10 (18.9%)	12 (22.6%)

Based on table 1, the results of the study were obtained that the characteristics of respondents based on age were mostly in the intervention group as many as 31 (58.5%) and the control group as many as 33 (62.3%) in the age of the late elderly (56-65 years). The characteristics of respondents based on gender were mostly in the intervention group as many as 33 (62.3%) and the control group as many as 34 (64.2%) in the female gender. The characteristics of the respondents based on the level of education were mostly in the intervention group as many as 21 (39.6%) and the control group as many as 36 (67.9%) at the secondary education level, namely high school or vocational high school. Respondent characteristics based on the type of work are almost half of the intervention group as many as 18 (34.0%) are not employed and the control group as many as 19 (35.8%) with the type of self-employed work. Characteristics of respondents based on length of suffering Most of the intervention group as many as 43 (81.1%) and control group as many as 41 (77.4%) with a duration of suffering < 2 years.

Table 2: The Value of Differences in Pre and Post Self-Management and Self-Compassion in the Intervention Group and the Control Group.

Variable	Group	Mean	SD	N	T	P-Value
Self-Management Pre	Intervention	21.13	7.89	53	-0.73	0.942
	Control	21.25	8.04	53		
Self-Management Post	Intervention	34.42	6.74	53	9.457	0.000
	Control	20.96	7.85	53		
Self-Compassion Pre	Intervention	77.96	16.15	53	-0.331	0.741
	Control	78.96	14.88	53		
Self-Compassion Post	Intervention	93.75	12.60	53	7.022	0.000
	Control	75.30	14.39	53		

Based on Table 2. that the results of the t-independent test showed that the average self-management before the intervention was 21.13 (poor self-management) in the treatment group and the control group was 21.25 (poor self-management) with a p value of 0.942 which showed that there was no difference in the level of self-management before the intervention was given. The average level of self-management after being given the intervention was 34.42 (self-management is moderate) and in the treatment group and the control group was 20.96 (self-management is poor) with a p value of 0.000 which indicates that there is a difference in the level of self-management after being given the intervention. The average self-compassion before the intervention was 77.96 (medium self-compassion) in the treatment group and the control group was 78.96 (medium self-compassion) with a p value of 0.741 which indicates no difference in the level of self-compassion before the intervention was given. The average level of self-compassion after being given the intervention was 93.75 (medium self-compassion) and in the treatment group and the control group was 75.30 (low self-compassion) with a p value of 0.000 which indicates that there was a difference in the level of self-compassion after being given the intervention.

Table 3: Self-Management and Self-Compassion Pre and Post in Intervention Group and Control Group.

Variable	Group	Pre		Post		T	N	P-Value
		Mean	SD	Mean	SD			
Self-Management	Intervention	21.13	7.89	34.42	6.74	-9.249	53	0.000
	Control	21.25	8.04	20.96	7.85			
Self-Compassion	Intervention	77.96	16.1	93.75	12.6	-7.141	53	0.000
	Control	78.96	14.8	75.30	14.3			

Based on table 3. It shows the results of the Paired T-Test statistical test that self-management obtained a p value of 0.000 in

the intervention group which means there is a significant difference in self-management before and after the intervention Spiritual Peer Group Support intervention in the intervention group and a p value of 0.495 was obtained in the control group which means there is no significant difference in self-management before and after the intervention is given Spiritual Peer Group Support. Self-Compassion obtained a p value of 0.000 in the intervention group which means there is a significant difference in Self-Compassion before and after the intervention Spiritual Group Therapy intervention in the intervention group and a p value of 0.000 is obtained in the control group which means there is a significant difference in self-compassion before and after the intervention of Spiritual Group Therapy but the difference is due to decrease in the average value of self-compassion in the control group.

3.2 Discussion

The characteristics of the respondents in this study showed the dominance of the age of the late elderly (56-65 years) in both intervention and control groups, namely 58.5% and 62.3%, respectively. Old age is a period of vulnerability to decline in physical and mental abilities which can affect self-management skills in patients with type 2 Diabetes Mellitus (DM) with complications of gangrene lesions (Shrivastava et al., 2013). At this age, declining cognitive function and the presence of comorbidities are often obstacles to optimal self-management. Nevertheless, appropriate interventions, especially those that strengthen the spiritual and psychosocial aspects, can help improve patients' motivation and ability to take care of themselves, which correlates with increased self-management and self-compassion (Duke, 2021).

The dominance of the female sex in both groups (62.3% and 64.2%) is in line with the epidemiological data of DM which shows a higher prevalence in elderly women (Kemenkes, 2019). Women tend to have higher emotional sensitivity, so self-compassion can be an important factor in coping with stress and psychological challenges related to chronic diseases such as DM with gangrene lesions (Sandham & Deacon, 2023). Spiritual and peer group support in interventions has been shown to increase a sense of empathy and self-acceptance, which is especially beneficial for female patients who may face more complex emotional burdens (Neff & Germer, 2018).

Secondary education as the education level of the majority of respondents (39.6% intervention and 67.9% control) can provide an overview of differences in health literacy skills that affect the understanding and implementation of self-management (Chowdhury et al., 2024). Patients with secondary education generally have sufficient knowledge to attend health education, but may require additional support to be able to apply self-care behaviors consistently. Structured group therapy spiritual interventions can fill this gap through a holistic and culturally acceptable approach, thus strengthening self-management and self-compassion beyond the formal educational aspects.

The diverse types of work, with nearly one-third of respondents in the intervention group not working (34%) and in the control group 35.8% self-employed, reflect a diversity of socioeconomic statuses that can affect access to and ability to self-care (Atak & Gurkan, 2016). Patients who are not working may experience limited economic and social support, which can create additional stress and hinder the practice of self-management. In contrast, self-employed people may be more socially active but also face work pressures that affect the consistency of self-care. Interventions based on group and spiritual support can provide a sense of social cohesion and strengthen self-compassion thereby helping patients manage psychosocial distress to improve self-care.

A length of less than two years of diabetes in the majority of respondents (81.1% intervention and 77.4% control) indicates that patients are relatively new to the disease and its complications. In this phase, self-management and self-compassion tend to be still developing and are greatly influenced by the support and education obtained. Spiritual interventions that emphasize acceptance, forgiveness, and the meaning of life can accelerate the process of self-adjustment to these new conditions, strengthening patients' motivation to manage the disease independently.

The average self-management before the intervention was 21.13 (less self-management) in the treatment group and the control group was 21.25 (less self-management) with a p value of 0.942 which indicates no difference in the level of self-management before being given the intervention. This condition reflects the uniformity of the baseline where the self-management ability of type 2 DM patients, especially those with gangrene lesions, is still low. This state of lack of self-management is similar to the findings of a number of studies that reveal that patients with diabetes complications often face psychosocial barriers, low knowledge, and limitations in the application of self-care behaviors (Duke, 2021; Shrivastava et al., 2013).

The average level of self-management after being given the intervention was 34.42 (self-management is sufficient) and in the

treatment group and the control group was 20.96 (self-management is lacking) with a p value of 0.000 which indicates that there is a difference in the level of self-management after being given the intervention. The interventions provided, allegedly in the form of spiritual peer group support or spiritual-based group therapy, provide a series of benefits that not only improve knowledge, but also the psychosocial aspects of the patient. According to Duke (Duke, 2021), spiritual support is able to strengthen patients' motivation and responsibility in self-management, as well as facilitate positive coping against disease challenges. This approach combines educational aspects with self-empowerment and social support that play an important role in long-term behavior change. In addition, a recent meta-analysis by Chowdhury et al. (Chowdhury et al., 2024) confirms that self-management educational interventions accompanied by spiritual group therapy can consistently improve self-care behaviors, blood sugar control, and overall quality of life in diabetic patients in developing countries. This intervention specifically helps in overcoming psychological barriers such as stress and depression that are often factors that inhibit self-management (Sandham & Deacon, 2023).

Diabetes Mellitus treatment must be carried out for a lifetime so that people with diabetes mellitus need good self-management. There are many factors that cause *self-management* to decrease, namely the lack of health knowledge, communication factors, self-efficacy factors, and support factors. Thus, it shows that one of the factors related to self-management is peer support or it can be called *peer group support*. Because peer support is a factor that has a massive contribution and as a strengthening factor that greatly affects *self-management* in people with diabetes mellitus. Self-management of diabetes such as maintaining diet and drinking, regular physical activity, taking medication regularly and monitoring blood sugar levels is very important to reduce the risk of complications. However, in reality, optimal *self-management* often does not last long. This is not optimally shown by a worsening lifestyle, blood sugar levels are also not controlled, forgetting not to take medicine, because it is also caused by a lack of health knowledge.

The results showed that before the intervention, the average self-compassion score in the treatment group was 77.96 and, in the control, group was 78.96, both of which were included in the category of moderate self-compassion. A p-value of 0.741 indicates that there was no statistically significant difference between the two groups at the beginning of the measurement, which means that the baseline of the two groups was balanced. This is important as a basis that the initial condition of the respondents before the intervention is indeed relatively equal in terms of the ability to be compassionate towards oneself in the midst of the challenges of chronic diseases such as Diabetes Mellitus. The results showed that before the intervention, the average self-compassion score in the treatment group was 77.96 and, in the control, group was 78.96, both of which were included in the category of moderate self-compassion. A p-value of 0.741 indicates that there was no statistically significant difference between the two groups at the beginning of the measurement, which means that the baseline of the two groups was balanced. This is important as a basis that the initial condition of the respondents before the intervention is indeed relatively equal in terms of the ability to be compassionate towards oneself in the midst of the challenges of chronic diseases such as Diabetes Mellitus. The success of type II DM treatment depends a lot on motivation or encouragement or support from other parties and the self-awareness of the sufferer himself in order to have self-compassion (Jon Hafandkk., 2020). Self-compassion can be one of the good ways, especially for people with type II DM to get a more positive and happy life, an open attitude and a move by the suffering experienced, a sense of care and affection for oneself, understanding without judging one's shortcomings and failures, accepting advantages and shortcomings and realizing that more or less the same experiences are also experienced by others (Dschaaket al., 2021).

Social and spiritual support in the group provides a sense of attachment and acceptance that greatly helps patients cope with the emotional burden of chronic illness. A study by Sari and Ismail (2025) found that interventions that blend spiritual aspects significantly reduced feelings of anxiety and increased motivation to follow treatment regimens and wound management. Self-compassion also plays an important role here, as it increases self-acceptance and reduces self-criticism which can lower the spirit of self-care (Neff & Germer, 2018; Sandham & Deacon, 2023). Spiritual group therapy interventions are effective in educating patients about diabetes and gangrene wound management, so that patients gain a better understanding of the importance of adhering to medication, nutrition, and wound care. This increase in knowledge is reinforced by a process of reflection and sharing experiences in groups, which has been shown to increase self-efficacy—confidence in one's own ability to overcome health challenges (Chowdhury et al., 2024).

The spiritual approach in the group provides a safe space for patients to share experiences, self-reflection, and find new meaning in dealing with chronic illnesses. The study of Chowdhury et al. (Chowdhury et al., 2024) confirms that group education,

combined with psychosocial and spiritual support, plays an important role in increasing self-care adherence, reducing stress, and improving the quality of life of Type 2 DM patients with complications. Interventions that include self-reflection sessions, spiritual practices, forgiveness, accepting death, and being grateful for life, have been scientifically proven to be able to reduce psychological stress and strengthen self-compassion. Spiritual practices such as prayer, meditation, and reading the Qur'an in a group setting lower cortisol levels, increase oxytocin, and stimulate the work of the parasympathetic nervous system that creates a sense of calm, connection, and self-acceptance. Self-compassion itself is the main predictor of the success of self-care and reducing distress in chronic patients.

The role of spiritual group therapy with 12 meeting sessions in improving self-management in patients with type 2 Diabetes Mellitus, especially with gangrene wounds, is very essential and multifaceted. Each session in this therapy is designed to build self-awareness, spiritual strengthening, emotional management, and self-compassion, all of which contribute to the patient's ability to manage their illness independently. The following is a description of the specific roles of the 12 sessions based on the literature and the results of recent studies: The role of spiritual group therapy with 12 meeting sessions in improving *self-management* in patients with type 2 Diabetes Mellitus, especially with gangrene wounds, is very essential and multifaceted. Each session in this therapy is designed to build self-awareness, spiritual strengthening, emotional management, and self-compassion, all of which contribute to the patient's ability to manage their illness independently. Initial Session (1-3): Building Familiarity, Self-Awareness, and Understanding of Self-Concept The first to third sessions aimed to create emotional bonds between group members and foster awareness of self-condition through spiritual reflection. This focus on internal communication and self-understanding increases self-awareness which is an important foundation in self-management (Neff & Sands, 2011). Practice Spiritual Session (4-6): Strengthening Relationships with God and Holy Places Practices such as reading the Quran, prayer, and visits to holy places activate a sense of peace and spiritual connectedness that lowers stress and anxiety levels (Koenig, 2012). This calm psychological state improves the patient's focus and motivation in carrying out self-care (Duke, 2021). Forgiveness and Acceptance Session (7-9): Letting Go of Emotional Burdens and Facing Death. This session emphasizes self-forgiveness, letting go of hatred, and accepting death, processes that reduce inner conflict and increase self-compassion. Strengthening empathy and self-acceptance is the key to overcoming psychological barriers in self-management (Germer & Neff, 2013; Sandham & Deacon, 2023). Closing Session (10-12): Cultivating Faith, Gratitude, and Self-Appreciation This last stage in stills gratitude and gratitude in oneself which improves overall psychological well-being. This positive attitude triggers a sustained internal motivation to proactively manage health (Wood et al., 2010).

Spiritual practices and group support in the form of spiritual group therapy activate the relaxation response through the parasympathetic nervous system, reducing the stress hormone cortisol, which often interferes with the consistency of self-care behaviors (Kirby et al., 2017; Koenig, 2012). Social and spiritual interactions in the group trigger the release of oxytocin which increases a sense of security and social attachment, so that patients feel supported and motivated to adhere to the treatment regimen (Neff & Germer, 2018). Self-compassion gained through the process of spiritual therapy is closely related to increased stress management ability and motivation for consistent self-care (Sandham & Deacon, 2023).

This increase in self-compassion can be explained through psychological mechanisms activated by spiritual and peer group-based interventions. According to Germer and Neff (Germer & Neff, 2013), self-compassion consists of three components, namely: self-kindness, awareness that suffering is a common human experience, and mindfulness. In Spiritual Peer Group Support, participants are invited to share experiences, provide emotional and spiritual support, and conduct deep self-reflection related to self-acceptance and forgiveness. This process facilitates the reduction of harmful self-criticism while strengthening warm and supportive interpersonal relationships.

In addition to the psychological aspect, from a physiological perspective, the practice of a structured spiritual support cycle can lower the stress hormone cortisol and increase the hormone oxytocin related to a sense of security and positive social relationships (Koenig, 2012). This more balanced neuroendocrine state favours good emotional regulation as well as increased capacity for self-compassion, which in turn strengthens psychological resilience to the stress of chronic diseases such as gangrene lesions in patients with Diabetes Mellitus. Furthermore, increased self-compassion plays an important role in encouraging self-management behaviors. Sandham and Deacon. (Sandham & Deacon, 2023) emphasized in their study that higher self-compassion is associated with better levels of adherence in diabetes management, lowering psychological distress, and improving patients' quality of life. Therefore, a peer group spiritual intervention that is able to significantly increase self-compassion will have a broad positive impact both psychologically and clinically.

4. CONCLUSION

Spiritual Peer Group Support is an effective intervention method in improving self-management and self-compassion in patients with type 2 diabetes mellitus with gangrene wounds. Therefore, this intervention can be recommended as part of a holistic approach in the management and rehabilitation of patients with these chronic conditions.

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