

Spiritual Well-Being to the Quality of Life of Heart Failure Patients

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Abstract: Heart failure is caused by the heart's inability to maintain normal blood flow. Some patients with heart failure expressed that they needed nurses' help with their physical, psychological, and spiritual problems. Spiritual Well-Being and its components play an essential role in a person's declining quality of life and have been linked to various other health factors. This research aims to determine the relationship between spiritual well-being and the quality of life of heart failure patients. The sample for this research was 100 respondents taken using the accidental sampling technique. Data analysis uses the chi-square correlation test if the test conditions are met. If the test requirements are not met, use the alternative Fisher exact test. The instruments used in this research were the Spiritual Needs Questionnaire (SpNQ) and the Minnesota Living with Heart Failure Questionnaire (MLHFQ). The results of this study illustrate that there is no relationship between quality-of-life scores and all aspects of the spiritual needs of heart failure patients ($p > 0.05$). The analysis showed that NYHA functional status ($p = 0.044$) and ejection fraction ($r = -0.205$, $p = 0.041$) influenced the spiritual needs of heart failure patients. The results of this study indicate that the patient's spiritual needs are not related to the general quality of life score but have a significant relationship with the physiological dimensions of quality of life, ejection fraction, and NYHA functional status.

Keywords: Heart failure; psychological problem; quality of life; spirituality; well-being.

INTRODUCTION

Decreased cardiac output and/or increased intracardiac pressure at rest or during activity are some of the symptoms of heart failure. Heart failure is a clinical syndrome caused by abnormalities in the heart's anatomy and/or function (Okviasanti et al., 2021). Heart failure is when the heart cannot maintain regular blood flow. The weakening of the heart muscle walls is the leading cause of congestive heart failure, which results in the heart being unable to pump enough blood to meet the body's needs. According to Park & Lee (2020), common symptoms include edema of the lower extremities, general weakness and fatigue, fluid retention, difficulty breathing, and pain even at rest.

Heart failure is a prevalent chronic disease in the United States, affecting an estimated 6.5 million people (Park & Lee, 2020). It is also a global issue due to its rising incidence and cost of health loss, particularly among the elderly and those in low- to middle-income sociodemographic groups. According to Rahmat et al. (2022), there are 64.34 million heart failure cases globally, costing 346.17 billion dollars. Based on medical diagnoses, heart failure affects 1.5% of Indonesians, with women accounting for the majority of cases at 1.6% (Kemenkes RI, 2019).

Heart failure is a condition with an unpredictable prognosis that can cause physical discomfort, anxiety, worry, despondency, social disruption, severe symptoms, and a general lack of quality of life (Clark & Hunter, 2019). According to Okviasanti et al. (2021), heart failure patients require assistance

from nurses to address their mental, emotional, and physical issues. Qualitative interviews suggest that patients with heart failure experience a cyclical pattern of physical decline in their spiritual well-being, in contrast to cancer patients whose spiritual well-being declines monotonously.

A person's quality of life can be significantly affected by their spiritual well-being and its various components. Studies have linked spiritual well-being to several health-related factors, including pain, mental health, and functional difficulties. A better understanding of spirituality and its relationship with other health factors may have implications for patients' overall care. Previous research suggests that individuals with heart failure may experience different levels of spiritual well-being compared to those with other chronic conditions. This difference may be due to the prognosis of heart failure. Studies have shown a correlation between the state of spiritual well-being and the deterioration in physical function experienced by people with heart failure. This contrasts with cancer patients, who experience a gradual decline in well-being over time (Deng et al., 2021). Depression is commonly observed in individuals with heart failure, and it is associated with an elevated risk of mortality and other adverse outcomes. Putri & Anganthi, (2023) conducted studies that revealed that individuals with chronic illnesses are less worried about death when they are spiritually sound. Prognostic and personal factors may also influence positive well-being characteristics. For example, in patients with heart failure, positive affect was associated with enhanced spiritual well-being (Park & Lee, 2020). Previous studies by Cilona et al. (2023) have shown that spirituality and religiosity are often neglected factors affecting a patient's condition, particularly their quality of life. Understanding the relationship between the quality of life of heart failure patients and their spiritual well-being is crucial, as stated in the preceding description.

METHOD

This type of research is quantitative descriptive research using an analytical observational design with a cross-sectional approach. This research was conducted at the Cardiac Polyclinic of Dr. Moewardi Surakarta in February 2023. The respondents of this study were Heart Failure patients undergoing examinations at the Cardiac Polyclinic at RSUD Dr. Moewardi Surakarta. The sampling technique used was accidental sampling, with a total sample of 100 respondents. The predetermined inclusion criteria for respondents include Heart Failure patients in the cardiac clinic of RSUD Dr. Moewardi Surakarta, aged >18 years, suffering from heart failure for more than one year NYHA functional class I-III, and willing to be a respondent.

The data used in this research is primary data obtained directly from respondents through a questionnaire. Data collection in this study used the Spiritual Needs Questionnaire (SpNQ) and Minnesota Living with Heart Failure Questionnaire (MLHFQ) instruments in the form of questionnaires filled out by respondents. SpNQ consists of 27 questions about spiritual health. There are four domains of SpNQ: religiosity, inner peace, existential, and active giving. The SpNQ assessment is divided into 3 categories, namely low (0-27), medium spiritual (28-54), and high spiritual (55-81).

The modified MLHFQ questionnaire consists of 20 questions covering two physical and psychological domains. This questionnaire uses a Likert scale with a score of 0 = never, score 1 = rarely, score 2 = often, and score 3 = always with analysis of the results of a poor quality of life score > 40, a moderate quality of life score of 20-40 and a good quality of life score < 20. A lower MLHFQ score indicates a better quality of life.

The validity test for the two questionnaires, both SpNQ and MLHFQ, was carried out at Moewardi Hospital on 30 respondents, with the respondents for the validity test being different from the research respondents. The results of the validity and reliability tests showed that the value of all question items in both questionnaires had an r value > 0.44 with a Cronbach alpha value of 0.84. So, the two questionnaires are valid and reliable as measuring tools.

Data analysis in this study used univariate and bivariate analysis. Univariate analysis aims to describe the respondent's gender, age, level of education, length of illness, degree of NYHA, marital status, and presence or absence of comorbidities. The bivariate analysis aims to determine the relationship between spiritual well-being and the quality of life of heart failure patients using the chi-

square correlation test if the test conditions are met. If the test requirements are not met, use the alternative Fisher exact test.

RESULT

This research was conducted on 100 patients with congestive heart failure undergoing routine examinations at the Cardiac Outpatients at the regional hospital Dr. Moewardi Surakarta, with an average age (years) of 61.63 ± 0.93 . The majority of respondents were male (60%), married (76%), did not have an academic degree (79%), had symptoms of NYHA I-II mild heart failure (84%), and had an ejection fraction of less than 50% (84%). The average length of patient suffering was 2.29 ± 0.189 (years). The proportion of patients who work and do not work is almost the same. Table 1 presents demographic information of patients who participated in this study.

Table 1. Description of Demographic Characteristics of Patients With Congestive Heart Failure (CHF)

Variable	Mean± SD	f	%	Total (%)
Age (years)	61.63 ±0.93			100
41-50		14	14	
51-60		31	31	
61-70		39	39	
71-80		16	16	
Gender				100
Man		40	40	
Woman		60	60	
Marital Status				100
Marry		76	76	
Widow/widower/divorce dies		24	24	
Job Status				100
Work		44	44	
Doesn't Work		56	56	
Level of Education				100
Elementary school		10	10	
Junior High School		22	22	
Senior High School		47	47	
Diploma/Bachelor		21	21	

Ranking spiritual needs concerning their importance shows that religious needs (relationship with God) received the highest score, followed by existence needs (*release*) and the need for peace, while existential needs (reflection), religious needs (worship), and giving needs scored higher. low, but still high (Table 2).

Table 2. Description of Health Conditions, Spiritual Needs, and Quality of Life of Patients With Congestive Heart Failure (CHF)

Variable	Mean± SD	f	%	Total (%)
NYHA				100
I		37	37	
II		47	47	
III		16	16	
Ejection Fraction	(36.12 ±12.06)			100
<50%		86	86	
>50%		14	14	
Length of illness (years)	(2.29± 0.19)			100
SpNQ (total score)	(72.36 ±8.80)			
AG (min 0, max 3)	2.73 ±0.144			
RN_Praying (min 0, max 3)	2.61 ±0.267			
IP (min 0, max 3)	2.75 ±0.140			
EN_reflection (min 0, max 3)	2.44 ±0.198			
EN_release (min 0, max 3)	2.77 ±0.148			
RN_Sources (min 0, max 3)	2.79 ±0.052			
MLHFQ (total score)	(20.52 ±3.33)			

At the single item level of the SpNQ measurement, the five highest needs (scored very strong or robust) are worship/prayer (98%), being able to overcome extraordinary problems in their life (96%), giving rewards to themselves (95 %), forgive (95%) and pray for yourself (94%). Specific existential or religious needs, such as talking to someone about one's worries (32%), talking to someone about the possibility of an afterlife (39%), and hoping someone will care for me (40%), have less relevance as than half of the respondents value these needs strong or very strong.

The results of the correlation test showed that the expression of spiritual needs showed no differences based on gender ($p=0.075$), age ($p=0.416$), education level ($p=0.652$), employment status ($p=0.093$), and marital status ($p=0.156$) (Table 3). Likewise, it can be seen that the length of illness has no relevance to the respondent's spiritual needs. However, the results of the analysis carried out showed that NYHA functional status ($p=0.044$) and ejection fraction ($r=-0.205$, $p=0.041$) influenced the spiritual needs of heart failure patients (Table 4).

Based on the patient quality of life questionnaire findings, the median total patient score was 20.50, the lowest was 14, and the highest was 30. Based on this questionnaire, the lower the quality of life score, the better the patient's quality of life.

Table 3. Correlation Coefficient of The Total Spiritual Need Score on The Qualitative Variables of Demographic Data and Disease conditions of Congestive Heart Failure (CHF) Patients

Variables	Spiritual Need (SpnQ)	
	Mean	P-value
Gender		
Man	70.83 ±8.82	0.075
Woman	73.38 ±8.71	
Age (years)		
41-50	72.79 ±8.51	0.416
51-60	70.19 ±9.49	
61-70	73.87 ±8.05	
71-80	72.50 ±9.38	
Level of Education		
Elementary School	73.40 ±8.63	0.652
Junior High School	70.36 ±10.03	
Senior High School	72.57 ±8.75	
Diploma/Bachelor	74.55 ±8.21	
Job Status		
Work	70.77 ±9.23	0.093
Doesn't Work	73.61 ±8.32	
NYHA		
NYHA I	72.27 ±8.64	0.044**
NYHA II	74.02 ±8.08	
NYHA III	67.69 ±9.98	
Marital Status		
Marry	73.16 ±8.47	0.156
Widow/widower/divorce dies	69.83 ±9.51	

Test used: ANOVA, Mann-Whitney, Kruskal-Wallis

**p-value: < 0.05

Table 4. Correlation Coefficient of The Total Spiritual Need Score on Quantitative Variables of The Disease Condition of Congestive Heart Failure (CHF) Patients

Variables	Spiritual Need (SpnQ)	
	r*	P-value
Ejection Fraction	-0.205	0.041**
Long Illness	0.176	0.081

*Spearman correlation coefficient

**p-value: < 0.05

The results of this study illustrate that there is no relationship between quality of life scores and all aspects of the spiritual needs of heart failure patients ($p > 0.05$). This is also reflected in the psychological dimension which does not correlate with the respondent's spiritual needs. On the other hand, the physiological dimension score appears to have a weak negative correlation with spiritual needs, namely the need for peace ($r = -0.205$, $p = 0.041$), existential (reflection) needs ($r = -0.208$, $p = 0.038$), and religious needs related to God ($r = -0.109$, $p = 0.002$) (Table 5).

Table 5. Relationship Between Spiritual Need and Quality of Life in Congestive Heart Failure Patients

MLHFQ	Physiological Dimensions		Psychological Dimensions		Total MLHFQ score	
	<i>r</i> ^{* *}	<i>P-value</i>	<i>r</i> ^{* *}	<i>P-value</i>	<i>r</i> ^{* *}	<i>P-value</i>
AG	- 0.162	0.108	- 0.017	0.869	- 0.138	0.170
RN_Praying	0.019	0.851	0.018	0.856	- 0.045	0.658
IP	- 0.205	0.041*	0.048	0.635	- 0.149	0.140
EN_reflection	- 0.208	0.038*	0.028	0.780	- 0.150	0.136
EN_release	- 0.153	0.129	0.067	0.507	- 0.004	0.966
RN_Sources	- 0.301	0.002*	0.105	0.297	- 0.145	0.151
Total Score	- 0.109	0.280	0.021	0.839	- 0.101	0.317

**p-value*: < 0.05

***Spearman correlation coefficient*

DISCUSSION

The current study aims to determine the relationship between spiritual needs and quality of life in heart failure patients. The study findings showed that the average age of patients was 61.63 years. Most respondents are female, married, and have no academic education. Based on employment status and disease conditions, 56% were unemployed, and most had mild symptoms (NYHA I-II) with an ejection fraction of less than 50%. The patient's spiritual needs were unrelated to the general quality of life score. Still, they had a significant relationship with the physiological dimensions of quality of life, ejection fraction, and NYHA functional status.

In general, it was shown that heart failure patients in this study had high spiritual needs in all domains. These results align with another cross-sectional study, which described that 87.4% of heart failure patients in their study had a high level of spirituality (Park et al., 2014). Qualitative research shows that spirituality is the key for chronic heart failure patients to overcome their disease and overcome their various problems (Shahrbabaki et al., 2017). Another study also reported that the majority of respondents had spiritual needs that were not addressed (Lum et al., 2016). It shows that the spiritual level of heart failure patients is increasing, so their spiritual needs are also increasing. However, due to physiological limitations caused by the disease, the patient has limitations in fulfilling these spiritual needs. It started in the research of Okviasanti et al. (2021) that heart failure patients face many obstacles in meeting their spiritual needs, mainly because physical conditions make it impossible. Qualitative research reports that obstacles that arise in heart failure patients in fulfilling spiritual needs include physical conditions that make it impossible (Okviasanti et al., 2021). Therefore, nurses as health service providers must have the competence and ability to care for patients spiritually in all care settings. Meanwhile, in Indonesia, spiritual needs are still limited to praying for patients by religious leaders whom hospitals provide.

The highest spiritual needs identified in the current research are religious needs, especially the need to worship. In this case, it can be interpreted as the need to pray five times daily. It can be related because all respondents are Muslims. In line with current research, Sastra et al. (2021) also stated that the need for religiosity to pray five times a day is the highest in cancer patients because praying five times a day helps patients to follow the basic principles of Islam and make them closer to God. Qualitative studies report that optimal healing requires not only treatment but also the role of spirituality (Okviasanti et al., 2021).

Nejat et al. (2023) found that patients with chronic illnesses need inner peace and giving or generativity more than existential and religious needs. Additionally, the study revealed that Polish Catholic patients had higher religious requirements compared to German or Chinese patients. Due to the diverse cultural origins of the participants, including varying religious views and value systems,

there may be differences in the emphasis placed on spiritual requirements. It is important to note that individuals not practicing any particular religion may still have a solid spiritual need for community, giving, and inner serenity. In other words, individuals may seek inner peace and pursue giving or earning to fulfill their spiritual needs rather than engaging in religious practices.

Islam is often associated with religiosity, which guides how to live and cope with illness (Gustafson & Lazenby, 2019). Patients often draw strength from their religious beliefs when facing sickness (Alaloul et al., 2016). A recent ethnographic study conducted in Indonesian palliative care units found that religion plays a significant role in the daily lives of patients. All patients reported satisfaction with their ability to practice their religion regularly and affiliation with a specific religious organization (Rochmawati, Wiechula, & Cameron, 2018).

Apart from praying five times daily, a Muslim has a regular prayer habit where prayers are recited several times daily (Alaloul et al., 2016). Previous research conducted in the West has demonstrated the significance of prayer in the fight against cancer and illness. Therefore, prayer is considered a behavioral and cognitive method for overcoming sickness by pursuing serenity (Leong et al., 2016).

In the past two decades, spirituality has gained more attention in discussions about quality of life. Previous research has shown a connection between spirituality, improved psychological and physical health, and a greater capacity to recover from disease (Giovagnoli et al., 2019). Taghavi et al. (2020) conducted a study that found an association between spiritual well-being and life quality, particularly in physical and mental aspects. It demonstrates how a patient's physical and mental health can be improved, and eventually their quality of life, by spiritual intervention, counseling, and attending to their spiritual needs. The results of research conducted by Abdi et al. (2022) found that patients with heart failure experience a higher quality of life when they have good spiritual health, particularly existential spiritual health. Their quality of life influences the patient's rate of recovery. Nursita & Pratiwi (2020) discovered that heart failure patients with a poor quality of life may experience a delayed functional recovery.

Compared to other illnesses, heart failure uniquely impacts spiritual well-being and concerns, as demonstrated by Clark & Hunter (2019) study. The terminal and vulnerable state of heart failure can have a positive effect on coping mechanisms and spiritual health. According to Metin & Helvacı (2020) study, heart failure patients' spiritual health often mirrors changes in their physical symptoms and is influenced by the disease prognosis and unpredictable acute decline cycle.

The results of this study indicate that NYHA functional status and ejection fraction influence the spiritual needs of heart failure patients. Nearly half of the patient population with NYHA III/IV in the study of Tobin et al. (2022) reported that unmet spiritual needs and a limited sense of peace were associated with poorer well-being and the degree of heart failure is related to meeting the spiritual needs of heart failure patients. The idea put forward by Shahrabaki et al. (2017) is that in most heart failure patients, the strength of inner belief is the supporting force to overcome their illness. Strength and strong beliefs help patients not to give up easily and find appropriate health care.

Spirituality and religiosity have been found to be important for enhancing the quality of life, reducing depression, and improving health in heart failure patients (Cilona et al., 2023). Cross-sectional studies have shown that positive spiritual characteristics are associated with lower levels of depression and better quality of life in heart failure patients (Park et al., 2014). Additionally, Kusumawardani & Asih (2019) found that spiritual well-being strongly predicts life satisfaction. Previous studies have shown that certain disease-related parameters, such as the NYHA functional status and physical symptoms, affect the quality of life of heart failure patients. Higher NYHA classes are associated with an increased risk of hospitalization and mortality (Okviasanti et al., 2021). Therefore, it is recommended that medical practitioners develop comprehensive and supportive treatment plans to improve the spiritual well-being of heart failure patients.

The findings in this study are similar to studies in other disease populations. A study on patients in the ICU reported that patients faced many obstacles in carrying out religious rituals, including difficulties in praying (Kurniawati, Suharto, & Nursalam, 2017). One of the patients' hopes is that nurses can help them meet their physical, psychosocial, and spiritual needs (Park & Sacco, 2017). To support

patients and their families in dealing with illness and death, nurses are expected to provide spiritual care that is culturally appropriate (Marion et al., 2016). It is recommended that spiritual intervention using a religious approach be used to meet the patient's spiritual needs best. Spiritual intervention is typically delivered in phases, with nurses and clergy participating in multiple sessions (Ardiansyah, Rizanti, & Azwar, 2021). This intervention has been carried out in Iran and significantly reduces stress and depression and improves the quality of life in patients with chronic diseases (Kusumawardani & Asih, 2019).

CONCLUSION

The study's findings suggest that the patient's spiritual needs strongly correlate with physiological aspects of quality of life, such as ejection fraction and NYHA functional status. However, they do not appear to be related to the overall quality of life score. Individuals with heart failure report feeling more isolated and despondent than those with other chronic illnesses. This condition can negatively impact both the quantity and quality of spiritual processes, ultimately reducing the quality of life for those with heart failure. Suggestions for further research include repeating the research with different research designs.

REFERENCES

- Abdi, A., Doulatyari, P. K., Mahmodi, M., & Torabi, Y. (2022). Relationship of spiritual well-being with life expectancy and quality of life for patients living with heart failure. *International Journal of Palliative Nursing*, 28(6), 262–269. <https://doi.org/10.12968/ijpn.2022.28.6.262>
- Alaloul, F., Schreiber, J. A., Al Nusairat, T. S., & Andrykowski, M. A. (2016). Spirituality in Arab Muslim Hematopoietic Stem Cell Transplantation Survivors. *Cancer Nursing*, 39(5), E39–E47. <https://doi.org/10.1097/NCC.0000000000000312>
- Ardiansyah, A., Rizanti, A. P., & Azwar, A. (2021). Intervensi Pemenuhan Kebutuhan Spiritual Pasien Di Rumah Sakit: Literature Review. *Jurnal Berita Ilmu Keperawatan*, 14(2), 92–101. <https://doi.org/https://doi.org/10.23917/bik.v14i2.13550>
- Cilona, L., Veronese, N., Lalicata, D., Tantillo, F., Naro, L., Dominguez, L. J., & Barbagallo, M. (2023). Spirituality and heart failure: a systematic review. *Aging Clinical and Experimental Research*, 35(11), 2355–2361. <https://doi.org/10.1007/s40520-023-02557-x>
- Clark, C. C., & Hunter, J. (2019). Spirituality, Spiritual Well-Being, and Spiritual Coping in Advanced Heart Failure: Review of the Literature. *Journal of Holistic Nursing*, 37(1), 56–73. <https://doi.org/10.1177/0898010118761401>
- Deng, L., Doyon, K., Langner, P., Masters, K., Siler, S., & Bekelman, D. (2021). How Does Spiritual Well-Being Change Over Time in Patients with Heart Failure, and What Predicts Change? (SCI919). *Journal of Pain and Symptom Management*, 61(3), 679–680. <https://doi.org/10.1016/j.jpainsymman.2021.01.082>
- Giovagnoli, A. R., Paterlini, C., Meneses, R. F., & Martins da Silva, A. (2019). Spirituality and quality of life in epilepsy and other chronic neurological disorders. *Epilepsy & Behavior*, 93, 94–101. <https://doi.org/10.1016/j.yebeh.2019.01.035>
- Gustafson, C., & Lazenby, M. (2019). Assessing the Unique Experiences and Needs of Muslim Oncology Patients Receiving Palliative and End-of-Life Care: An Integrative Review. *Journal of Palliative Care*, 34(1), 52–61. <https://doi.org/10.1177/0825859718800496>
- Kemkes RI. (2019). Laporan Nasional RISKESDAS 2018. In *Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan (LPB)*. Retrieved from https://repository.badankebijakan.kemkes.go.id/id/eprint/3514/1/Laporan_Riskesdas_2018_Nasional.pdf
- Kurniawati, N. D., Suharto, S., & Nursalam, N. (2017). Mind-Body-Spiritual Nursing Care in Intensive Care Unit. *Proceedings of the 8th International Nursing Conference on Education, Practice and Research*

- Development in Nursing (INC 2017)*. <https://doi.org/10.2991/inc-17.2017.59>
- Kusumawardani, D. N., & Asih, S. R. (2019). My Heart, My Mind, My Life: A Study on the Relation between Spiritual Well-being and Quality of Life in Heart Disease Patients. *Proceedings of the 2nd International Conference on Intervention and Applied Psychology (ICIAP 2018)*, 229(Iciap 2018), 264–270. <https://doi.org/10.2991/iciap-18.2019.22>
- Leong, M., Olnick, S., Akmal, T., Copenhaver, A., & Razzak, R. (2016). How Islam Influences End-of-Life Care: Education for Palliative Care Clinicians. *Journal of Pain and Symptom Management*, 52(6), 771-774.e3. <https://doi.org/10.1016/j.jpainsymman.2016.05.034>
- Lum, H. D., Carey, E. P., Fairclough, D., Plomondon, M. E., Hutt, E., Rumsfeld, J. S., & Bekelman, D. B. (2016). Burdensome Physical and Depressive Symptoms Predict Heart Failure–Specific Health Status Over One Year. *Journal of Pain and Symptom Management*, 51(6), 963–970. <https://doi.org/10.1016/j.jpainsymman.2015.12.328>
- Marion, L., Douglas, M., Lavin, M., Barr, N., Gazaway, S., Thomas, E., & Bickford, C. (2016). Implementing the New ANA Standard 8: Culturally Congruent Practice. *OJIN: The Online Journal of Issues in Nursing*, 22(1). <https://doi.org/10.3912/OJIN.Vol22No01PPT20>
- Metin, G. Z., & Helvacı, A. (2020). The Correlation Between Quality of Life, Depression, Anxiety, Stress, and Spiritual Well-Being in Patients with Heart Failure and Family Caregivers. *Journal of Cardiovascular Nursing*, 11(25), 60–70. <https://doi.org/10.5543/khd.2020.93898>
- Nejat, N., Rahbarian, A., Shykhan, R., Ebrahimpour, S., Moslemi, A., & Khosravani, M. (2023). Assessment of spiritual needs in cancer patients: A cross-sectional study. *Journal of Family Medicine and Primary Care*, 12(5), 894–901. https://doi.org/10.4103/jfmprc.jfmprc_989_22
- Nursita, H., & Pratiwi, A. (2020). Peningkatan Kualitas Hidup Pada Pasien Gagal Jantung: A Narrative Review Article. *Jurnal Berita Ilmu Keperawatan*, 13(1), 11. <https://doi.org/https://doi.org/10.23917/bik.v13i1.11916>
- Okviasanti, F., Yusuf, A., Kurniawati, N. D., Anggraini, D. A., & Anif, A. S. (2021). Experience of heart failure patients in meeting spiritual needs during hospitalization: a Muslim perspective. *Bali Medical Journal*, 10(3), 1186–1191. <https://doi.org/10.15562/bmj.v10i3.2880>
- Park, C. L., & Lee, S. Y. (2020). Unique effects of religiousness/spirituality and social support on mental and physical well-being in people living with congestive heart failure. *Journal of Behavioral Medicine*, 43(4), 630–637. <https://doi.org/10.1007/s10865-019-00101-9>
- Park, C. L., Lim, H., Newlon, M., Suresh, D. P., & Bliss, D. E. (2014). Dimensions of Religiousness and Spirituality as Predictors of Well-Being in Advanced Chronic Heart Failure Patients. *Journal of Religion and Health*, 53(2), 579–590. <https://doi.org/10.1007/s10943-013-9714-1>
- Park, C. L., & Sacco, S. J. (2017). Heart failure patients' desires for spiritual care, perceived constraints, and unmet spiritual needs: relations with well-being and health-related quality of life. *Psychology, Health & Medicine*, 22(9), 1011–1020. <https://doi.org/10.1080/13548506.2016.1257813>
- Putri, O. H., & Anganthi, N. R. N. (2023). Spiritual Well-Being and Death Anxiety in Chronic Diseases : A Meta-Analysis Study. *Indigenous: Jurnal Ilmiah Psikologi*, 8(2), 123–139. <https://doi.org/https://doi.org/10.23917/indigenus.v8i2.21150>
- Rahmat, H. K., Basri, A. S. H., Putra, R. M., Mulkiyan, M., Wahyuni, S. W., & Casmini, C. (2022). the Influenced Factors of Spiritual Well-Being: a Systematic Review. *Sociocouns: Journal of Islamic Guidance and Counseling*, 2(1), 43–58. <https://doi.org/10.35719/sjigc.v2i1.23>
- Rochmawati, E., Wiechula, R., & Cameron, K. (2018). Centrality of spirituality/religion in the culture of palliative care service in Indonesia: An ethnographic study. *Nursing & Health Sciences*, 20(2), 231–237. <https://doi.org/10.1111/nhs.12407>
- Sastra, L., Büssing, A., Chen, C.-H., Yen, M., Lin, E. C.-L., & Sastra, L. (2021). Spiritual Needs and Influencing Factors of Indonesian Muslims With Cancer During Hospitalization. *Journal of Transcultural Nursing*, 32(3), 212–220. <https://doi.org/10.1177/1043659620908926>
- Shahrbabaki, P. M., Nouhi, E., Kazemi, M., & Ahmadi, F. (2017). Spirituality: A panacea for patients coping with heart failure. *International Journal of Community Based Nursing and Midwifery*, 5(1), 38–48. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5219564/>

- Taghavi, S., Afshar, P. F., Bagheri, T., Naderi, N., Amin, A., & Khalili, Y. (2020). The Relationship Between Spiritual Health and Quality of Life of Heart Transplant Candidates. *Journal of Religion and Health*, 59(3), 1652–1665. <https://doi.org/10.1007/s10943-019-00950-3>
- Tobin, R. S., Cosiano, M. F., O'Connor, C. M., Fiuzat, M., Granger, B. B., Rogers, J. G., ... Mentz, R. J. (2022). Spirituality in Patients With Heart Failure. *JACC: Heart Failure*, 10(4), 217–226. <https://doi.org/10.1016/j.jchf.2022.01.014>