Original Research

Evaluation of Spiritual Management Approach on Stress in Palliative Patients

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ABSTRACT

Background: A palliative condition refers to a progressive and incurable state, where the focus of healthcare transitions from curative measures to comprehensive support addressing physical, psychological, social, and spiritual aspects, aiming to enhance the quality of life for both patients and their families. The objectives of this study were to evaluate the effect of a Groups 'Peer Support' (GPS)-based spiritual management approach on reducing stress among palliative patients in a hospital setting.

Methods: This study employed a quantitative quasi-experimental design with a pre- and post-test approach without a control group, involving 50 respondents selected through simple random sampling. The research instruments consisted of observation sheets, the Spiritual Care Competence Scale (SCCS), and the Depression Anxiety and Stress Scales (DASS). Data were analyzed using descriptive statistics to determine respondent characteristics, the Wilcoxon Signed Rank Test to assess pre and post intervention differences, and Spearman Rank and simple linear regression tests to identify influencing factors.

Results: Most respondents were male (60.0%), aged 41–50 years (34.0%), with elementary education (28.0%), and commonly diagnosed with heart disease (26.0%). The mean stress score decreased from 3.06 to 2.74 after the intervention, with the Wilcoxon test confirming a significant reduction ($Z = -2.889$; $p = 0.004$). However, spiritual management ($r = 0.062$; $p = 0.670$) and nurse competence ($p = 0.601$) were not significantly associated with stress levels.

Conclusion: The intervention effectively reduced stress in palliative patients, although spiritual management and nurse competence were not significant predictors, suggesting that other factors contributed to stress reduction.

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INTRODUCTION

A palliative or terminal condition is a state when a person suffers from a progressive, irreversible, and incurable disease, which ultimately leads to death. In this phase, patients no longer respond to curative therapy, so the focus of health services shifts to supportive care and symptom control to increase the life quality of patients and their families. WHO (2020) describes palliative care as a method that seeks to enhance the well-being of patients and their families confronting life-threatening illnesses, by preventing and easing suffering through prompt identification, comprehensive evaluation, and management of pain and other physical, psychosocial, and spiritual challenges. This definition indicates that terminal conditions encompass not only physical aspects but also psychological, social, and spiritual decline (World Health Organization, 2020).

According to the Kemenkes RI (2022), patients in terminal conditions generally experience physical setbacks, psychological setbacks, social setbacks and spiritual setbacks. Palliativ or terminal conditions are often found in chronic diseases that cannot be cured, such as: Advanced cancer, End-stage congestive heart failure, Severe chronic obstructive pulmonary disease (COPD), Terminal kidney failure, Decompensated liver cirrhosis, Recurrent severe stroke, advanced Alzheimer's dementia, end-stage Parkinson's, as well as other degenerative neurological diseases (World Health Organization, 2020). This condition requires a comprehensive palliative care approach that focuses on improving the patient's quality of life and providing support for the family.

World Health Organization, (2020) states that each year, approximately 56.8 million people worldwide require palliative care, of whom 25.7 million are in the final year of life, while 31.1 million suffer from chronic or progressive conditions. Meanwhile, the Ministry of Health states that over 1 million people in Indonesia are in need of palliative care. Based on data from SKI and Riskesdas (2023), the prevalence of stroke in Indonesia is 10.9% per (per millet), chronic kidney disease is 3.8% (per mil), diabetes is 11.7% per per, cancer is 1.8%, and hypertension is 30.8%. North Sumatra has a high incidence of 7 palliative diseases per year, namely cancer: 3,206 cases, heart disorders: 9,228 cases, stroke: 45,972 cases, HIV/AIDS: 1,826 cases, DM: 10,347 cases, Parkinson's disease: 6,060 cases, and COPD: 52,666 cases (Dinas Kesehatan Sumatera Utara, 2022).

The diagnosis of palliative illness can cause feelings of fear, anxiety, depression, hopelessness, and can cause doubts in making future plans (Potter and Perry, 2017). In a recent study in Indonesia, cancer patients experienced psychological distress that included stress, feelings of inferiority, and spiritual well-being disorders (Komariah et al., 2024). In this situation, palliative care comes with spiritual needs as one of the strongest methods in its treatment. Tendencies towards religion, beliefs, and spiritual sources can be used as an adaptive psychosocial approach after diagnosis (Ministry of Health of the Republic of Indonesia, 2022).

World Health Organization, (2020) emphasizes that the main objective of palliative care is to relieve suffering through the management of pain, stress, and psychosocial-spiritual concerns, allowing patients to lead a meaningful life until the end of life. Palliative care, as defined by World Health Organization (2020), focuses on improving the quality of life experienced by patients and their families facing serious illnesses, through measures aimed at preventing and management aimed at reducing suffering through timely assessment and intervention for pain, alongside other physical,

psychosocial, and spiritual concerns. According to the nursing philosopher Florence Nightingale, spirituality is an indispensable part of the human being, the deepest and most powerful source for healing and acceptance of illness. Nightingale views spirituality as the deepest dimension of human beings that gives strength in dealing with illness. World Health Organization (2020) emphasizes that palliative care includes physical, psychological, social, and spiritual dimensions as an equally important part of health services.

Even though World Health Organization emphasizes spiritual dimension as a core aspect of palliative care, it remains the most overlooked element within global health systems. The medical and biological aspects still dominate, while spiritual care receives very little attention (Quinn, 2023). The survey results found that more than 90% of cancer patients or chronic patients stated that they experienced at least one form of spiritual distress, about 80% remained dissatisfied with the spiritual care they received (Fabiana, 2023). Furthermore, previous research has shown that nurses still have low insight into the concept and nurturing of spirituality, so they cannot respond optimally to the stress response of palliative patients (Uliya, 2023). Komariah et al. (2024) demonstrated that interventions grounded in spirituality can enhance the psychological state of people living with breast cancer.

Thus, the formulation of this research problem is how effective the application of spiritual management is in reducing the stress of the life of palliative patients in hospitals. The components of the GPS-based spiritual management method are DOA (direction, obedience, and acceptance) spiritual therapy and healthy psychospiritual therapy (Gratitude is always heart and body). Spiritual belief and health will be the basis for the application of maximum spiritual care so that it becomes the main source of spirit or energy for patients in accepting their illness (Tuti, 2018). The significance of this study is reflected in the application of spiritual management as an essential aspect of palliative care, aimed at helping patients reduce stress in the terminal stage. The purpose of this research is to assess how GPS-based spiritual management approaches can reduce stress in palliative care patients within hospital settings.

MATERIALS AND METHOD
Research Design

A quantitative quasi-experimental design that uses assessments before and after the intervention but does not incorporate a control group was utilized in this study. Nurses delivered a GPS-based spiritual management intervention, and its impact on alleviating stress in palliative care patients was measured. A quasi-experimental design with a one-group pretest–posttest approach was chosen because it allowed researchers to evaluate changes in palliative patients' stress levels before and after the implementation of the spiritual management approach. This design is appropriate for use in the context of palliative care, which has ethical and practical limitations in forming control groups, while still providing a clear picture of the effectiveness of the intervention provided.

Population and Sample Research

This research will be carried out in 2 (two) hospitals in North Sumatra, namely Advent Medan Hospital and Sari Mutiara Lubuk Pakam Hospital in June-August 2025. This study involved 50 palliative care patients from two selected hospitals, chosen using probability sampling with a simple random sampling technique. The sample size of 50

respondents was determined based on the feasibility of the study, the availability of palliative patients who met the criteria during the study period, and the minimum sample size required for quasi-experimental analysis with a pretest–posttest design to detect meaningful changes after the intervention.

Eligible patients were listed, numbered, and randomly selected using the excel random function. Inclusion criteria include patients aged ≥18 years, conscious, communicative, and willing to participate in the study. Exclusion criteria include patients with severe cognitive impairment, unstable clinical conditions, or refusal to participate.

Data Collection

Data collection begins by submitting an application letter for permission to conduct research, an ethics test letter, preparing workshop modules, research questionnaire measuring tools, and research stages. At the implementation stage, the researcher met with the head of nursing in 2 (two) hospitals to request demographic data on implementing nurses and palliative patients as well as identify research respondents based on the set criteria, meet and explain the research objectives and contract the respondents' time for various stages of research activities (informed concent), conducting workshops (pre and post tests), observing the implementation of interventions, and measuring the success of interventions (pre and post interventions). Furthermore, in the final stage, the evaluation of the implementation of the intervention is carried out, the data that has been collected is examined to be processed and analyzed using a computer program.

The intervention, called the Spiritual Management Approach, included spiritual assessment, counseling, therapeutic presence, facilitation of spiritual practices, and family education. Patients were encouraged to perform 15–20 minutes of daily independent spiritual practice. Sessions lasted 30–45 minutes, twice weekly for two weeks. Interventions were delivered by trained palliative care nurses at the bedside.

Instruments

Data were collected using the Spiritual Care Competence Scale (SCCS) (27 items) and the Depression, Anxiety, and Stress Scale (DASS-42) (42 items). Research is to test the reliability, construct validity, and concurrent validity of the Indonesian version of the DASS-42 with an emerging adulthood sample showed the reliability based on Cronbach alpha values for each dimension were above 0.9. Analysis Measurements were taken before, after, and two weeks following the intervention.

Data Analysis

The independent variable in this study is the spiritual management approach, while the dependent variable is the stress level in palliative patients. The data analysis process is preceded by the process of editing, coding, processing, and cleaning (Setiana, 2018). Data were analyzed using univariate, bivariate, and multivariate analyses. The univariate analysis was conducted to describe the respondents' characteristics, including gender, age, marital status, disease diagnosis, and duration of illness, which were presented in frequency distribution tables. The bivariate analysis was used to determine the relationship between the Spiritual Management Approach intervention and changes

in stress levels, depression, and anxiety using appropriate statistical tests (e.g., paired t-test or Wilcoxon test, depending on data distribution).

The multivariate analysis was performed to control for potential confounding variables and to identify the most influential factors affecting the effectiveness of the intervention. All statistical tests were conducted at a significant level of $\alpha = 0.05$ with a 95% confidence level. Results with $p < 0.05$ were considered statistically significant, indicating that the spiritual management approach effectively reduced stress among palliative care patients.

Ethical Clearance

The ethical considerations of the research have passed the ethical review with No. 1533/KEPK/FKUMSU/2025. All participants were informed about the study and provided written consent. Confidentiality was maintained through anonymized data handling, and participants were free to withdraw at any time without consequences.

RESULTS

Respondent characteristics include age, gender, last education, medical diagnosis, and length of diagnosis at Private Hospital.

Table 1. Sociodemographic and Clinical Characteristics of Participants (n = 50)

Category	Frequency (n)	Percentage (%)
Gender		
Male	30	60.0
Female	20	40.0
Total	**50**	**100.0**
Educational Level		
No formal education	10	20.0
Primary school	14	28.0
Junior high school	9	18.0
Senior high school	10	20.0
Bachelor's degree	6	12.0
Master's/Doctoral degree	1	2.0
Total	**50**	**100.0**
Age (years)		
< 30	5	10.0
30–40	6	12.0
41–50	17	34.0
51–60	14	28.0
> 60	8	16.0
Total	**50**	**100.0**
Medical Diagnosis		
Cancer	5	10.0
HIV/AIDS	5	10.0

Category	Frequency (n)	Percentage (%)
Chronic kidney disease	7	14.0
Heart disease	13	26.0
Chronic lung disease	10	20.0
Blood and bone marrow disorders	5	10.0
Diabetes mellitus	5	10.0
Total	**50**	**100.0**
Duration of Diagnosis (years)		
< 1	10	20.0
1–2	12	24.0
3–4	16	32.0
4–5	7	14.0
> 5	5	10.0
Total	**50**	**100.0**

Table 1 demonstrated that a large portion of the study sample consisted of male (60.0%), with elementary school as the highest level of formal education (28.0%). Most respondents were aged 41–50 years (34.0%), with the most medical diagnoses of respondents suffering from heart disease (26.0%) and the duration of enforcement of the most medical diagnoses being 3–4 years (32.0%).

Table 2. Distribution of Stress Levels Among Respondents (n = 50)

Variable	Mean ± SD	Min	Max
Pretest stress level	3.06 ± 0.79	1	5
Posttest stress level	2.74 ± 0.88	1	5

As presented in Table 2, respondents' average stress score prior to the intervention (pre-test) was 3.06 with a standard deviation of 0.793, which declined to 2.74 (SD = 0.876) following the intervention (post-test), demonstrating a reduction in patient stress levels.

Table 3. Results of the Wilcoxon Signed Rank Test on Respondents' Stress Level

Variable	With	p-value
Post Test Stress Level-Pre Test Stress Level	-2.889	0.004

The Wilcoxon Signed Rank Test revealed a Z value of -2.889 with a significance level of $p = 0.004$ ($p < 0.05$), demonstrating a statistically significant variation in stress levels before and following the intervention (Table 3).

Table 4. Spearman Rank Correlation Between Spiritual Management and Stress Level (Posttest)

Variables	Spiritual Management (Posttest)	Stress Level (Posttest)
Spiritual Management (Posttest)	r = 1.000	r = 0.062

Variables	Spiritual Management (Posttest)	Stress Level (Posttest)
Stress Level (Posttest)	p = - r = 0.062 p = 0.670	p = 0.670 r = 1.000 p = -

Note: r = Spearman rank correlation coefficient (ρ). Statistical significance was set at $p < 0.05$ (two-tailed).

Analysis using the Spearman Rank correlation showed that spiritual management was not significantly related to respondents' stress levels (r = 0.062; p = 0.670) (Table 4).

Table 5. Results of Simple Linear Regression Analysis

Variable	B	Std. Error	β	t	p-value
Constant	2.543	0.395	—	6.441	< 0.001
Nurse Competencies (X)	0.094	0.178	0.076	0.526	0.601

Model Summary

R	R²	F	p-value (F)
0.076	0.006	0.277	0.601

Note: B = unstandardized coefficient; β = standardized coefficient. Statistical significance was set at $p < 0.05$.

Results from the simple linear regression analysis revealed that nurse competence had a regression coefficient of 0.094 with a p-value of 0.601 ($p > 0.05$), the results suggest no significant impact of the intervention on patients' stress levels. The correlation coefficient (R = 0.076) points to a very weak association, and R² = 0.006 shows that only 0.6% of the variability in stress can be attributed to nurse competence, while other factors account for the remainder. Additionally, the F-test result with a significant value of 0.601 (> 0.05) confirms that the model is not statistically significant (Table 5).

DISCUSSION

The findings of this study indicate that the majority of respondents were men, generally in middle adulthood, with relatively low educational levels and long-standing chronic illnesses. These characteristics are meaningful in understanding the psychological profile of palliative patients. Men often show different patterns of health behavior compared to women, which can influence disease progression and psychological responses to illness.

This aligns with the findings of Nirwan (2023), who reported that men have a higher risk of developing non-communicable diseases due to lifestyle factors such as smoking, alcohol consumption, and unhealthy dietary habits. In addition, reports from World Health Organization highlight that men typically have lower participation in routine health examinations, which may contribute to delayed detection and more advanced complications. Low educational attainment may further limit understanding of illness and coping strategies, making patients more vulnerable to stress and reduced adaptability. Taken together, these characteristics can influence how patients respond to therapeutic interventions and the overall effectiveness of palliative care.

In terms of educational background, most respondents had completed only elementary school, reflecting that the majority belonged to a low-education group. Research by Firmanda (2025) states that low education levels are related to limited understanding of health information and adherence to treatment. This limited knowledge may also affect the ability to engage in stress management strategies, including spiritual and relaxation interventions.

Age characteristics showed that most respondents were aged between 41 and 50 years, followed by 51–60 years old. These results are in line with research by Gianfredi (2025) who found that middle to advanced productive age is the most vulnerable group to degenerative diseases. Physiologically, there is a decrease in the function of organs and metabolic systems at that age which increases susceptibility to hypertension, diabetes, and cardiovascular disease. This age range also leads to experiencing psychological burdens due to decreased physical function and increased dependence, contributing to higher stress levels.

Judging from the medical diagnosis, the respondents suffered the most from heart disease, followed by chronic lung disease and kidney failure. This finding aligns with Riskesdas (2018), which reports that the prevalence of cardiovascular diseases in Indonesia continues to rise annually, with key risk factors including smoking, obesity, hypertension, and high-fat dietary intake. Research by Narsa (2022) also confirms that chronic lung disease and kidney failure often appear as complications of an unhealthy lifestyle as well as other chronic diseases such as hypertension and diabetes mellitus. Based on the length of time of medical diagnosis, most respondents had been diagnosed for 3–4 years.

These results are in accordance with research by Istiaringsih (2023) which states that patients with a diagnosis of more than 3 years show a significant decrease in quality of life due to chronic disease burden. The long duration of illness can lead to psychological exhaustion, decreased coping ability, and higher stress levels if not supported by strong social and spiritual factors. Overall, the description of the characteristics of participants involved in this research shows that the majority of patients come from the middle to advanced productive age group, are poorly educated, and suffer from chronic diseases with a long duration of diagnosis. These characteristics represent a vulnerable population with higher risk of stress and lower capacity to manage psychological challenges. This situation highlights the need for health professionals to enhance health education, address psychosocial factors, and optimize the management of chronic diseases to improve patients' quality of life (Kemenkes RI, 2022).

The results showed that the average stress level of respondents before intervention (pre-test) was 3.06 and decreased to 2.74 post intervention. This reduction indicates a positive change following the intervention, suggesting improved psychological adaptation and coping. This decrease suggests that the intervention is effective in reducing stress in palliative patients. These findings are in line with research by Wulandari and Nurachmah (2022), which proves that guided imagination relaxation can reduce anxiety and pain in palliative patients, while improving psychological well-being.

This approach is also in line with the concept of holistic palliative care which emphasizes the integration of physical, emotional, social, and spiritual aspects in improving patient well-being. Furthermore, mindfulness and meditation methods have also been widely used as non-pharmacological interventions for cancer and palliative

patients. Research by Dong (2024) indicates that MBSR can reduce anxiety and depressive symptoms and contribute positively to the quality of life of patients. In fact, mindfulness meditation can significantly reduce pain, improve physical function, and support the psychological well-being of palliative patients (Standnyk, 2023). Thus, this study strengthens the evidence that relaxation-based and spiritual interventions can be an effective non-medication approach in reducing stress.

The findings of the Wilcoxon Signed Rank Test showed a statistically significant reduction in stress levels following the intervention. This shows that there are significant differences in respondents' stress levels pre and post intervention. This demonstrates that the intervention effectively reduced psychological tension among participants, likely due to enhanced relaxation, positive emotional regulation, and improved spiritual comfort. These findings are in line with research by Wulandari (2022), who reported that guided imagination relaxation techniques can reduce anxiety and stress in palliative patients through stimulation of physically and emotionally relaxed conditions. Thus, non-pharmacological interventions that focus on psychological aspects have been shown to contribute to a reduction in stress in patients. Theoretically, the reduction in palliative patient stress can be explained through a holistic care approach.

According to World Health Organization (2023), palliative care must include physical, psychological, social, and spiritual aspects to improve patient well-being. Interventions that focus on psychological and spiritual aspects can reduce emotional distress, increase comfort, and provide meaning to life. However, the magnitude of change is also influenced by individual characteristics such as age, education level, and duration of illness, which affect how effectively patients respond to spiritual and relaxation interventions.

The results of the Spearman Rank correlation test showed that Spiritual Management was not significantly correlated with stress levels. These results show that the application of spirituality does not necessarily reduce stress in respondents. This aligns with the study by Perez (2025), which found that while spirituality can protect against stress, its impact is usually mediated by other factors, including patients' health conditions, family support, and social environment. Iannello (2022) also adds that religious practices and spirituality are indeed associated with better mental health, but the variation in research results suggests that these relationships are strongly influenced by individual characteristics and social support.

These results are consistent with Crespo (2024), who reported that spiritual support provided by healthcare professionals is associated with enhanced quality of life and greater patient satisfaction in palliative care. This suggests that while spiritual management contributes to emotional stability, its effectiveness depends on the patient's receptivity, coping style, and external support system. However, to consistently reduce stress, a multimodal approach is needed such as a combination of spiritual management with psychological stress management, mindfulness, and family support (Best, 2022).

The simple linear regression analysis indicated that nurses' competence in implementing spiritual management did not significantly affect respondents' stress levels. The regression coefficient with a significance of $p = 0.601$ ($p > 0.05$) demonstrates that nurse competence does not have a statistically meaningful impact on stress reduction. In addition, the value of the determination coefficient $R^2 = 0.006$ indicates that the competence of the nurse is only able to explain 0.6% of the variation in stress, while the remaining 99.4% can be impacted by external factors not included in

the study variables. These results imply that while nurses' competence is essential for quality care delivery, stress reduction in palliative patients is a multifactorial process influenced by physical condition, family support, social interaction, and personal spirituality.

Consequently, the implications are particularly relevant to palliative nursing, family nursing, and community health nursing. In clinical settings—such as hospitals, palliative care units, and hospice nurses must integrate physical, psychosocial, and spiritual assessments into routine care and collaborate with multidisciplinary teams. In community settings, including home-based palliative care, the findings emphasize the need to empower family caregivers, strengthen social support, and ensure ongoing spiritual and emotional guidance. Therefore, these results highlight the importance of a holistic, patient-centered, and family-involved approach across both clinical and community nursing environments. The results of this study highlight the need to develop multidimensional interventions integrating spiritual, psychological, and social components to more effectively reduce patients' stress levels.

This study has several limitations, including the use of a quasi-experimental design with a one-group pretest–posttest approach without a control group, which limits the strength of causal inference, as well as a relatively small sample size and limited research location, resulting in limited generalization of the results. In addition, the measurement of stress and spirituality using self-report instruments has the potential to cause response bias, and this study has not evaluated the long-term impact of the intervention.

Therefore, future research is recommended to use a randomized controlled trial design with a larger and more diverse sample, apply a longitudinal design to assess the sustainability of the intervention effects, and develop a multidimensional intervention that integrates spiritual management, psychological approaches, and family support to gain a more comprehensive understanding of stress reduction efforts in palliative care patients.

CONCLUSION

These results demonstrate the effectiveness of the intervention in lowering stress levels in palliative patients, shown by the significant reduction observed between pre- and post-intervention assessments. However, the application of spiritual management has not been shown to be significantly related to stress levels, so spirituality does not directly reduce respondents' stress. In addition, nurse competence also did not have a significant effect on stress levels, as only a small fraction of the variation in stress could be explained by these factors. Thus, the reduction in stress in palliative patients is more influenced by the interventions provided as well as other factors outside of spiritual management and nurse competence.

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REFERENCES

Best, M. C., Jones, K., Washington, J., Sullivan, J., Kearney, M., & Puchalski, C. (2023). Evaluation of the interprofessional spiritual care education curriculum in Australia: Online. *Palliative and Supportive Care, 21*(1), 65–73. https://doi.org/10.1017/S1478951522000244

Coelho, J., Querido, A., Costeira, C., & Laranjeira, C. (2025). Spiritual care competence in palliative care: A concept analysis. *Journal of Religion and Health, 64*(5), 3740–3762. https://doi.org/10.1007/s10943-025-02408-1

Cristina, F., Santos, D., Macieira, T. G. R., & Yao, Y. (2023). *[Article title unavailable]*. *Clinical Oncology*. https://doi.org/10.1016/j.clon.2023.06.018

Croghan, I. T., Chesak, S. S., Adusumalli, J., Fischer, K. M., Beck, E. W., Patel, S. R., Ghosh, K., Schroeder, D. R., & Bhagra, A. (2021). Stress, resilience, and coping of healthcare workers during the COVID-19 pandemic. *Journal of Primary Care & Community Health, 12*, 1–8. https://doi.org/10.1177/21501327211008448

Cruz-Perez, C., Javier-Aliaga, D., Calizaya-Milla, Y. E., & Saintila, J. (2025). Is spiritual well-being a protective factor against stress? An analysis in a sample of Peruvian Christians. *Psychiatry Investigation, 22*(5), 504–512. https://doi.org/10.30773/pi.2024.0146

Dinas Kesehatan Provinsi Sumatera Utara. (2022). *Profil kesehatan Provinsi Sumatera Utara tahun 2022*. Dinas Kesehatan Provinsi Sumatera Utara.

Dong, X., Liu, Y., Fang, K., Xue, Z., Hao, X., & Wang, Z. (2024). The use of mindfulness-based stress reduction (MBSR) for breast cancer patients: A meta-analysis. *BMC Psychology, 12*(1), Article 209. https://doi.org/10.1186/s40359-024-02092-y

Ernawati, H., & Hafsari, A. T. (2025). Intervensi spiritual pada pasien chronic kidney disease yang menjalani hemodialisis. *Jurnal Keperawatan*, *xx*(x), 112–122.

Firmanda, G. I., Pratiwi, W. N., Sunarno, R. D., & Wahyuningsih, A. (2025). Pengaruh edukasi terhadap pengetahuan dan kepatuhan obat pada penderita TB di Karanganyar. *Jurnal Keperawatan Klinis dan Komunitas (Clinical and Community Nursing Journal), 9*(1), 28–36. https://doi.org/10.22146/jkkk.104297

Gianfredi, V., Nucci, D., Pennisi, F., Maggi, S., Veronese, N., & Soysal, P. (2025). Aging, longevity, and healthy aging: The public health approach. *Aging Clinical and Experimental Research, 37*(1), 1–12. https://doi.org/10.1007/s40520-025-03021-8

Handayani, F., & Rosita, I. N. (2022). Analisis karakteristik, pengetahuan, dan sikap perawat terhadap perawatan paliatif di rumah sakit daerah Kabupaten Subang. *Journal Keperawatan, 1*(2), 91–97. https://doi.org/10.58774/jourkep.v1i2.12

Iannello, N. M., Inguglia, C., Silletti, F., Albiero, P., Cassibba, R., Lo Coco, A., & Musso, P. (2022). How do religiosity and spirituality associate with health-related outcomes of adolescents with chronic illnesses? A scoping review. *International Journal of Environmental Research and Public Health, 19*(20), Article 13172. https://doi.org/10.3390/ijerph192013172

Kementerian Kesehatan Republik Indonesia. (2022). *Profil kesehatan Indonesia tahun 2021*. Pusat Data dan Informasi Kementerian Kesehatan RI.

Komariah, M., Agustina, H. R., Rahayuwati, L., Kurniawan, K., Gartika, N., Mago, A., Qadous, S. G., & Maulana, S. (2024). Strengthening psychological well-being of Indonesian females with breast cancer through the religious-based caring program: A quasi-experimental study among Muslim population. *Belitung Nursing Journal, 10*(4), 416–423. https://doi.org/10.33546/bnj.3452

Narsa, A. C., Maulidya, V., Reggina, D., Andriani, W., & Rijai, H. R. (2022). Studi kasus: Pasien gagal ginjal kronis (stage V) dengan edema paru dan ketidakseimbangan cairan elektrolit. *Jurnal Sains dan Kesehatan, 4*(Special Issue 1), 17–22. https://doi.org/10.25026/jsk.v4ise-1.1685

Nirwan, Warsid, A., Wirdayanti, Sari, R., & Semaangga, N. (2023). Faktor-faktor yang berhubungan dengan kejadian diabetes melitus di Puskesmas Kecamatan Tomoni Kabupaten Luwu Timur. *Jurnal Promotif Preventif, 6*(6), 877–885.

Nuraini, T., Andrijono, Irawaty, D., Umar, J., & Gayatri, D. (2018). Spirituality-focused palliative care to improve Indonesian breast cancer patient comfort. *Indian Journal of Palliative Care, 24*(2), 196–201. https://doi.org/10.4103/IJPC.IJPC_5_18

Prieto-Crespo, V., Arevalo-Buitrago, P., Olivares-Luque, E., García-Arcos, A., & López-Soto, P. J. (2024). Impact of spiritual support interventions on the quality of life of patients who receive palliative care: A systematic review. *Nursing Reports, 14*(3), 1906–1921. https://doi.org/10.3390/nursrep14030142

Quinn, B., & Connolly, M. (2023). Spirituality in palliative care. *BMC Palliative Care, 22*(1), Article 11. https://doi.org/10.1186/s12904-022-01116-x

Riang, A., Gulo, B., Hasibuan, E. K., & Saragih, M. (2022). Hubungan kecerdasan intelektual, emosional, dan spiritual dengan kualitas kehidupan kerja perawat. *Jurnal Keperawatan, 4*(1), 1–10.

Riang, A., Gulo, B., & Simanjuntak, E. Y. (2021). Meeting spiritual needs to improve the quality of life of patients under COVID-19 supervision. *Indonesian Journal of Nursing Education, 6*(2), 79–86. https://doi.org/10.24990/injecv6i2.362

Sari, Y., & Sidabutar, R. R. (2022). Hubungan pengetahuan dan sikap perawat dengan kemampuan pemenuhan kebutuhan spiritual terhadap pasien cemas di ruang ICU.

Contagion: Scientific Periodical Journal of Public Health and Coastal Health, 4(1), 45–52. https://doi.org/10.30829/contagion.v4i1.11657

Stadnyk, A., Casimiro, H. J., & Reis-Pina, P. (2024). Mindfulness on symptom control and quality of life in patients in palliative care: A systematic review. *American Journal of Hospice and Palliative Medicine, 41*(6), 706–714. https://doi.org/10.1177/10499091231190879

Ulliya, S., Nurmalia, D., Sulisno, M., Ardani, M. H., & Susilastuti, M. S. (2023). Gambaran kompetensi spiritual perawat. *Jurnal Kepemimpinan dan Manajemen Keperawatan, 6*(1), 27–34. https://doi.org/10.32584/jkmk.v6i1.2031

World Health Organization. (2019). *Palliative care for noncommunicable diseases*. World Health Organization.

Wulandari, F., & Nurachmah, E. (2022). Efektivitas intervensi relaksasi imajinasi terbimbing terhadap penurunan kecemasan dan nyeri pada pasien paliatif. *Journal of Pharmaceutical and Health Research, 3*(3), 106–111. https://doi.org/10.47065/jharma.v3i3.2851