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EFFECTIVENESS OF THE PRI (*PSYCHO RELIGIOUS INTERVENTION*) MODEL TO IMPROVE THE PHYSICAL WELL-BEING OF CANCER PATIENTS

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ABSTRACT
Cancer imposes a significant health burden, encompassing not only physical symptoms like pain and fatigue but also substantial psychological and spiritual distress, which collectively diminish patients' overall well-being. Given the high cost of care in Indonesia, comprehensive supportive interventions are urgently needed. This study aimed to test the effectiveness of the Psycho Religious Intervention (PRI) model an innovative nursing therapy integrating psychoeducation and contemplative (tafakur) prayer on improving cancer patients' physical well-being. A randomized controlled trial (RCT) design with a pre-post test method was employed. Sixty cancer patients at Dr. Adhyatma Hospital were recruited and equally randomized into intervention and control groups. The intervention group received the PRI model for 30 minutes per session, twice daily, for four consecutive days. Effectiveness analysis using independent-samples t-tests revealed that the PRI model significantly improved physical well-being. The intervention group demonstrated a qualitative improvement from moderate (mean 159.07) to high well-being (mean 181.33), surpassing the control group (mean 161.20). Specifically, the model significantly reduced pain (p=0.010), physical fatigue (p=0.036), and sleep disturbance (p=0.016), although nausea reduction was marginally significant (p=0.058). The PRI Model is established as an effective, evidence-based self-care modality, proving highly relevant for holistic palliative care.

Keywords: cancer; contemplative (tafakur) prayer; PRI model; psychoeducation; well-being

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INTRODUCTION

Currently, cancer has become a serious global health problem, characterized by high rates of morbidity, disability, and mortality (Yunara et al., 2025). According to the American Cancer Society, cancer is a disease characterized by uncontrolled abnormal cell growth, the potential to spread to other tissues, and the ability to attack various organs of the body (Smith et al., 2019). Its high prevalence and fatal impact make cancer a major focus in global health prevention and management efforts.

Globally, the burden of cancer is enormous. Epidemiological reports indicate an increase in new cancer cases of approximately 18.1 million, with a death toll of 9.6 million in 2018 (Priyanto et al., 2023). This increasing trend continues. National Center for Health Statistics (NCHS) recorded 1,918,030 new cancer cases and 609,360 deaths, with approximately 350 deaths per day in 2022 (Siegel, 2022) .Data from the Center for Disease Control and Prevention (CDC) also reported an increase in new cases to more than 1.8 million with 606,520 deaths in 2020 (Rahmawati, 2024).

In Indonesia, cancer is a catastrophic disease with significant prevalence. According to GLOBOCAN 2022 data, breast cancer accounts for 66,271 new cases (16.2%), followed by lung cancer (38,904 cases), cervical cancer (36,964 cases), and colorectal cancer (35,676 cases) (Sung et al., 2021). Recent national-level analysis shows increasing trends from 2017 to 2020, with

incidence and mortality peaking at ages 45–60 years (Mukaromah et al., 2025). This high number of cases has a direct impact on national health insurance funding. Cancer is a catastrophic disease that occupies a very high budget in the BPJS (Social Security Agency) budget, reaching 3.5 trillion rupiah (Rahmawati, 2024). This colossal cost burden underscores the urgency of developing effective and comprehensive interventions.

Cancer diagnosis and treatment not only cause physical symptoms such as pain and lumps, but also trigger profound psychological and spiritual problems. Frequently reported complaints from patients include anxiety, depression, stress, anger, and even feelings of distance from God (Priyanto et al., 2023). The manifestation of these various complaints has an impact on the decline in the patient's overall well -being, which can further worsen the disease condition and response to management (Ruiz-casado et al., 2020).

Cancer management requires a multidisciplinary team approach that optimally involves doctors and nurses (Scott, 2021). They are expected to provide healing efforts, restore organ function, and prevent complications. In the context of nursing care, supportive therapy through palliative care is a crucial approach to improving the well-being of cancer patients, in line with the patient's perspective on optimal essential care (Virdun & Davidson, 2020). In addition to focusing on physical symptoms, efforts to prevent psychological and spiritual complications during treatment are also crucial (Emery et al., 2022).

One of the vital roles of nurses is to provide supportive therapy through independent nursing therapy, especially interventions that focus on psychological and spiritual aspects (Priyanto & Achmad Fauzi Kamal, 2021). This supportive therapy is expected to address various complaints such as anxiety, stress, and depression, improve psychological and spiritual conditions, and reduce pain and sleep disturbances. Various types of psychological and spiritual therapies have been developed, including psychoeducation and contemplative prayer. However, further exploration is needed to develop a model combining these two therapies as a comprehensive nursing intervention (Priyanto et al. (2023).

Based on these needs, the PRI (psycho religious intervention) model is proposed as a new therapy that combines psychological intervention (psycho-education) and spiritual intervention (tafakur/contemplative prayer). This model is the result of preliminary studies and trials that have been conducted, including a systematic review of psycho-education (Priyanto et al., 2024) and meditation prayer in the context of improving the well-being of cancer patients. The PRI model is considered relevant, appropriate, and easy to apply to cancer patients in any condition, and is relatively easy for nurses to learn for psychical exploration, prayer guidance, and heart reflection (tafakur/contemplation) with an attitude of tawakal and surrender to the Creator.

The development and testing of the PRI Model is crucial to ensure its optimal utilization for improving the well-being of cancer patients. Although integrated intervention models already exist (Magambo, 2024);(Suszycki, 2023), the PRI Model needs to be specifically tested in the context of nursing in Indonesia. Therefore, the purpose of this study is to analyze the effectiveness of the PRI model in improving the well-being of cancer patients.

METHOD

This study used an experimental research design with a randomized controlled trial (RCT), pre- and post-study methods, and a single-blind design. The RCT began with the entire population of cancer patients, then the criteria for sample selection were determination used purposive sampling a technique for determining samples based on inclusion and exclusion criteria with a total sample size of 60 divided into 2 groups, namely 30 samples in the intervention group and 30 samples in the control group. The intervention and control groups were randomly allocated using blocks into two

homogeneous groups that received different treatments, namely the intervention group and the control group. This study was conducted on cancer patients who received PRI model therapy. Previously, well-being was measured on day 1 (before treatment) and day 5 (after treatment). This study was conducted on cancer patients who received PRI model therapy for 4 days in Dr. Adhyatma Hospital.

The study period lasted 10 months, starting from the initial survey, preparation, licensing, implementation, data analysis, publication, reporting, and results seminar. The study subjects were determined based on inclusion and exclusion criteria. The inclusion criteria for the study sample were: 1) aged 21–55 years; suffering from cancer; 2) undergoing treatment in hospital for at least 4 days; 3) undergoing diagnostic, preoperative, postoperative, chemotherapy, and radiation therapy examinations; 4) good consciousness; 5) Karnofsky score of 50–90; 6) willing to be a respondent. Meanwhile, the exclusion criteria included: 1) cancer patients with unstable hemodynamics; 2) cancer patients who were subjects of other studies. Dropout criteria included: 1) cancer patients in emergency conditions; 2) requiring special supervision. The research procedure was carried out after the participants agreed to sign the consent form and obtained ethical approval No: 363/KEP/EC/UNW/2025, from the Health Research Ethics Committee.

The data collection method in this study used interview techniques to identify sample identity data and measure psychological and spiritual well-being, as well as pain complaints and sleep disturbances. Patient well-being measurements on days 1 and 5 were conducted using four instruments, namely: BPI (Brief Patient Inventory), RINVR (Rhodes Index Nausea, Vomiting, and Retching), BFI (Brief Fatique Inventory), and PSQI (Pittsburgh Sleep Quality Indeks).

BPI, BFI, and RINVR instruments are globally recognized as the “gold standard” in oncology due to their robust psychometric properties. BPI and BFI consistently demonstrate superior internal reliability with Cronbach's alpha values often exceeding 0.90 in cancer populations, as well as strong construct validity for mapping symptom intensity multidimensionally (Mendoza et al., 1999; Poquet & Deschamps, 2021). RINVR has been shown to have high sensitivity and specificity in detecting changes in Chemotherapy-Induced Nausea and Vomiting (CINV), with stable reliability ($r > 0.85$) that allows it to capture daily symptom fluctuations with precision post-intervention (Rhodes & McDaniel, 1999; Kim et al., 2020). For the sleep dimension, PSQI has sharp diagnostic validity with a sensitivity of 89.6% in distinguishing poor sleepers. A recent meta-analysis confirmed the PSQI's strong internal consistency across cultural backgrounds (mean alpha = 0.83), making it an unbiased measurement tool (Mollayeva et al., 2016; Zhang et al., 2020). The use of these four standardized instruments in combination ensures that the physical well-being data produced has high accuracy (validity) and consistency (reliability), so that the research results are scientifically and clinically accountable.

The analysis of physical well-being variables was conducted using a multidimensional composite score approach that integrated four instruments: BPI (pain), BFI (fatigue), RINVR (nausea-vomiting), and PSQI (sleep quality). These four instruments measure symptom burden, where high scores indicate worsening physical conditions, so data transformation and standardization procedures were performed before compilation. The analysis began by calculating the raw scores for each instrument according to standard scoring guidelines. Next, a scale conversion was performed to equalize the weights between instruments. The next step was to invert the scores using the formula: (maximum score – actual score]. This inversion aimed to change the orientation of the data so that higher values represented ‘good physical well-being’ (minimal symptoms) rather than disease severity. The final physical well-being score is obtained from the mean value of the four transformed domains. This composite value is then tested using a difference test (such as an Independent T-Test) to determine the effectiveness of the intervention in improving the patient's physical status holistically, not just reducing one specific symptom.

Before the study was conducted, the sample was given an explanation regarding the implementation of the study and everything that needed to be done during the study, then the sample signed a written consent form. The intervention group was given PRI model therapy with a duration of 30 minutes, 2 sessions per day, morning and afternoon, for 4 days, while the control group did not receive treatment.

Data collection was carried out by researchers, assisted by four AROs (observational research assistants) and four ARIs (intervention research assistants). This study involved 60 patients as respondents, consisting of 30 patients (intervention group) and 30 patients (control group) selected using a random block permutation method. The results of univariate analysis regarding the description of the socio-demographic characteristics of the respondents, the medical history of the respondents, and the description of the well-being of cancer patients in the intervention and control groups are described in the table below. In addition, bivariate difference tests were performed using the t-test.

RESULT

Socio-Demographic Characteristics of Respondents

Table 1.
Description of Socio-Demographic Characteristics Respondents based on Gender, Age, Religion and Education (n=60)

Variables	Intervention Group		Control Group		Sig.
	n	%	n	%	
Gender					1,000
1. Male	10	33.33%	11	36.67%	
2. Women	20	66.67%	19	63.33%	
Age					0.156
1. 18–30 years	7	23.33%	6	20.00%	
2. 30–45 years	5	16.67%	5	16.67%	
3. 45–60 years	4	13.33%	4	13.33%	
4. > 60 years	5	16.67%	6	20.00%	
Religion					1,000
1. Islam	28	93.33%	28	93.33%	
2. Catholic	1	3.33%		0.00%	
3. Christian	1	3.33%	1	3.33%	
Education					0.691
1. Elementary School	4	13.33%	4	13.33%	
2. Junior High School	7	23.33%	4	13.33%	
3. Senior High School	16	53.33%	18	60.00%	
4. University	3	10.00%	2	6.67%	
Total	30	100%	30	100%	

Table 1, it can be concluded that the characteristics of respondents between the intervention group and the control group are homogeneous or comparable (p>0.05). The proportion of women was greater than that of men in both groups, almost equal (p=1.000). The age distribution also showed strong similarities, spread evenly across all age groups (p=0.156). The proportion of religions in both groups was the same (1.000). The proportion of education levels between the two groups was also very similar (0.691).

Respondent's Health History

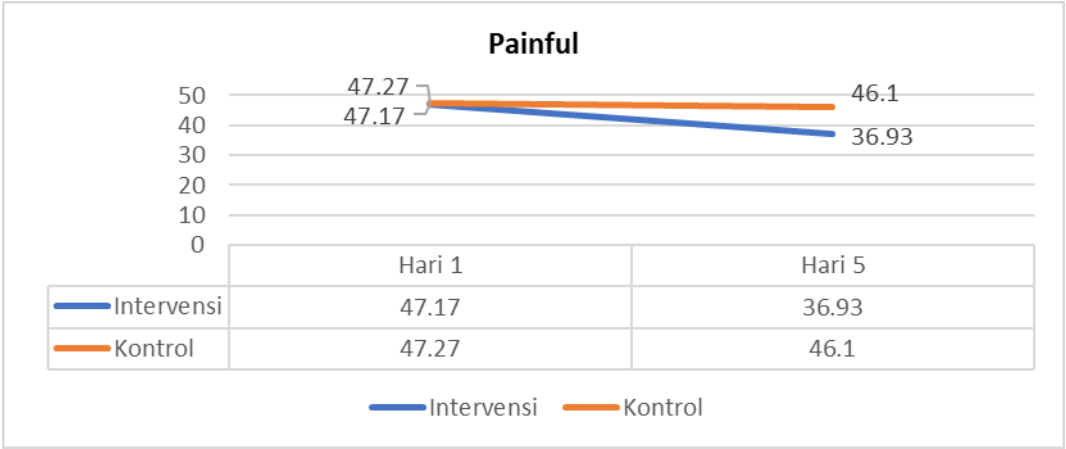
In general, the medical history data in Table 1.2 shows that the characteristics of patients in the intervention group and the control group are very similar. This similarity is seen in three main variables: cancer type, disease stage, and treatment. The distribution of cancer types suffered by patients shows very similar proportions in both groups. Similarly, regarding disease stage, the percentage of patients in each stage (I to IV) was distributed homogeneously (p=0.883) and stage (p=0.719). The proportion of patients undergoing chemotherapy, radiation, or other combination

therapies was also comparable in both groups.

Table 2.
Description of Respondents' Health History Based on Cancer Type, Stage and Management (n=60)

Variables	Intervention Group		Control Group		Sig .
	f	%	f	%	
Cancer Types					0.883
1. Mammae cancer	10	33.33%	10	33.33%	
2. Cervical cancer	3	10.00%	5	16.67%	
3. Colorectal cancer	4	13.33%	5	16.67%	
4. Coli cancer	4	13.33%	2	6.67%	
5. Nasopharynx cancer	3	10.00%	1	3.33%	
6. Hepatic cancer	2	6.67%	2	6.67%	
7. Ovarii cancer	1	3.33%	1	3.33%	
8. Prostate cancer	1	3.33%	2	6.67%	
9. Lung cancer	1	3.33%	1	3.33%	
10. Bone cancer	1	3.33%	1	3.33%	
Stadium					0.719
1. Stage I	15	50.00%	19	63.33%	
2. Stage II	10	33.33%	7	23.33%	
3. Stage III	3	10.00%	3	10.00%	
4. Stage IV	2	6.67%	1	3.33%	
Management					0.607
1. Surgery	15	50.00%	15	50.00%	
2. Chemotherapy	8	26.67%	6	20.00%	
3. Radiation therapy	0	0.00%	2	6.67%	
4. Surgery and chemotherapy	6	20.00%	5	16.67%	
5. Chemotherapy and radiation therapy	1	3.33%	2	6.67%	

Painful

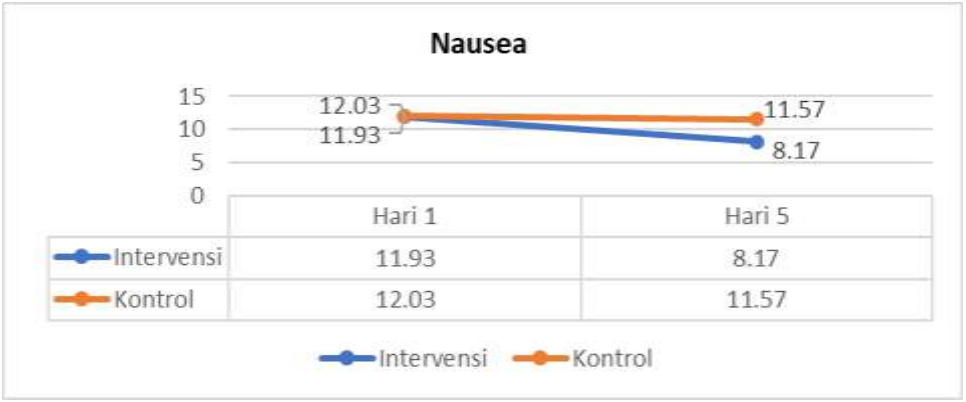


Graph 1. Painful Reduction in Cancer Patients in the Intervention and Control Groups (n=60)

Based on graph 1, it shows that there was no significant difference in pain on day 1 in both groups ($p>0.05$), both were in the moderate pain category (score 41-80). After treatment on day 5, each group experienced a significant decrease in pain scores ($p<0.05$). Pain on day 5 in the intervention group was in the mild pain category (score 1-40), while the control group was still in the moderate pain category (score 41-80).

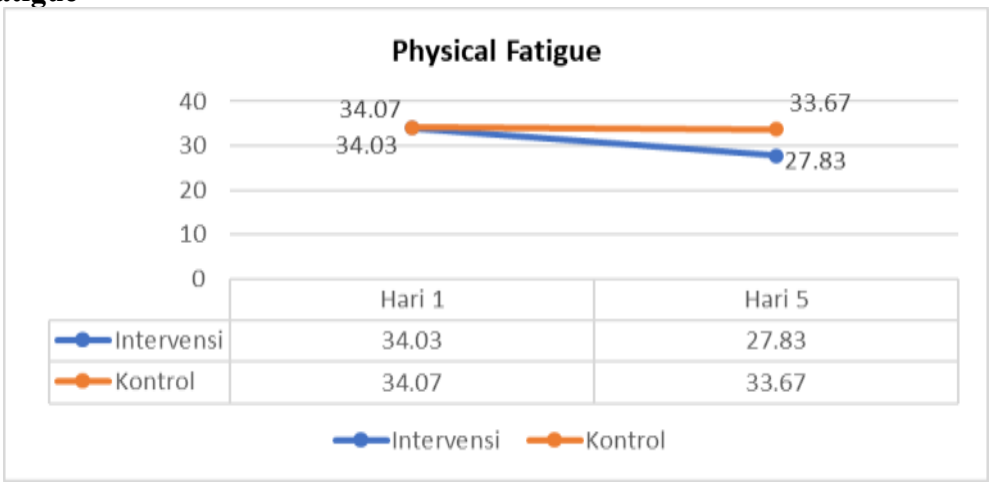
Nausea

Based on graph 2, it shows that there was no significant difference in nausea on day 1 in both groups ($p>0.05$), both were in the moderate category (score 9-16). After treatment on day 5, each group experienced an increase in scores, in the intervention group significantly ($p<0.05$), but in the control group it was not significant ($p>0.05$). Nausea on day 5 in the intervention group was in the mild category (score 1-8), while the control group was still in the moderate category (score 9-16).



Graph 2. Decrease in Nausea in Cancer Patients in the Intervention Group and Control Group (n=60)

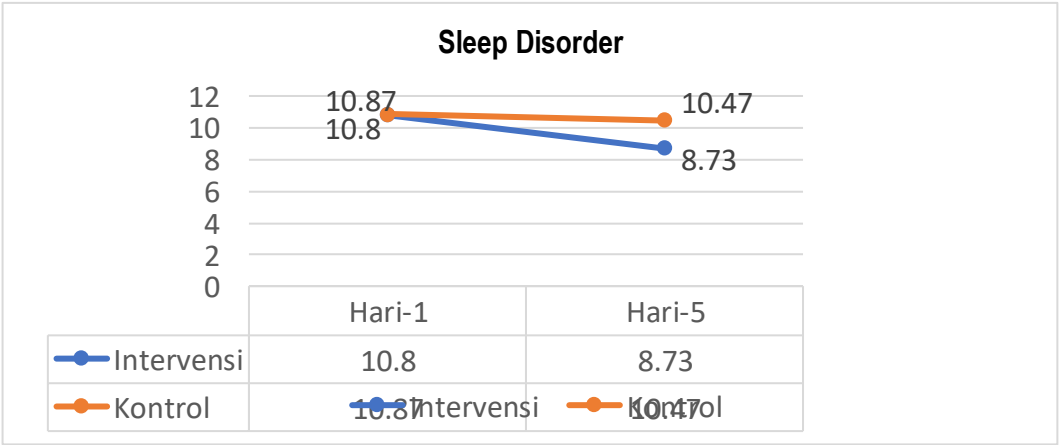
Physical Fatigue



Graph 3. Reduction in Physical Fatigue of Cancer Patients in the Intervention and Control Groups (n=60)

Based on graph 3, it shows that physical fatigue on day 1 in both groups was not significantly different ($p>0.05$), both were in the moderate category (score 31-60). After treatment on day 5, each group experienced an increase in scores, in the intervention group it was significant ($p<0.05$), but in the control group it was not significant ($p>0.05$). Physical fatigue on day 5 in both intervention groups was in the mild category (1-30), while the control group was still in the moderate category (score 31-60).

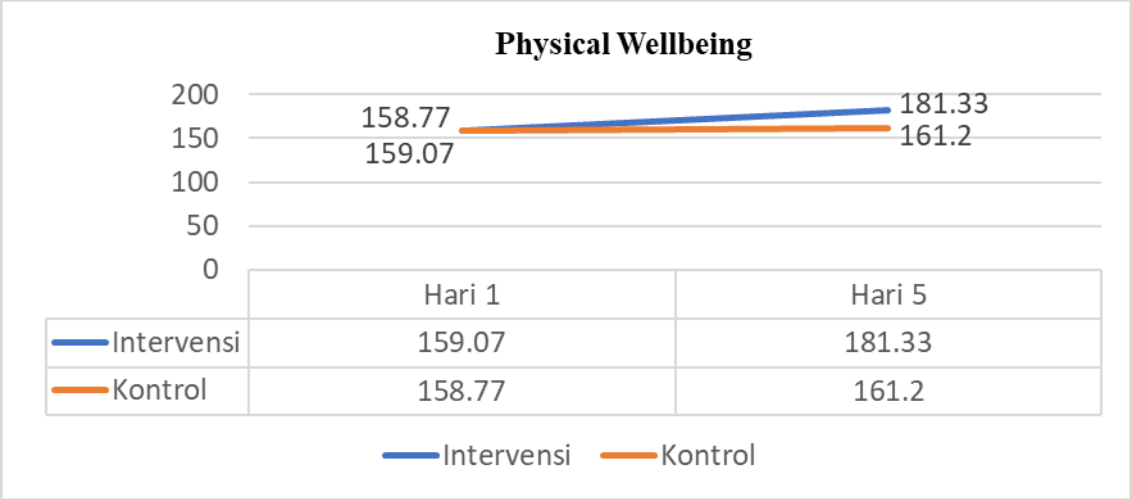
Sleep Disorder



Graph 4. Decrease in Sleep Disorder in Cancer Patients in the Intervention Group and Control Group (n=60)

Based on graph 4, there is no significant difference in sleep disturbance on day 1 in both groups (p>0.05), both are in the poor category (score 6-10). After treatment on day 5, each group experienced a significant decrease in scores (p<0.05). Sleep disturbance on day 5 in both groups was in the mild category (score 6-10).

Physical Well-being



Graph 5. Physical Well-being of Cancer Patients in Intervention and Control Groups (n=60)

Based on graph 5, it shows that there was no significant difference in the physical well-being of patients on day 1 in both groups (p>0.05), both were in the moderate category (score 84-166). After treatment on day 5, each group experienced a significant increase in scores (p<0.05). The physical well-being of patients on day 5 in the intervention group was in the high category (167-363), but in the control group it was still in the moderate category (score 84-166).

The Effect of PRI Model Intervention on Physical Well-being

Table 3.
The Effect of PRI Model Intervention on Physical Well-being of Cancer Patients (n=60)

No	Indicator	Intervention Group						Control Group						Difference (Intervention-Control)		Effectiveness of the PRI Model
		Before (day 1)		After (day 5)		Difference	Sig.	Before (day 1)		After (day 5)		Difference	Sig.			
		Mean	Elementary School	Mean	Elementary School			Mean	Elementary School	Mean	Elementary School			Difference	Sig.	
1	Painful	47.17	14.98	36.93	11.97	10.24	0,000	47.27	14.94	46.10	14.63	1.17	0.004	9.07	0.010	2.5%
2	Nausea	11.93	8.67	8.17	5.46	3.76	0,000	12.03	8.35	11.57	7.90	0.46	0.020	3.3	0.058	3.9%
3	Physical Fatigue	34.03	11.16	27.83	10.29	6.2	0,000	34.07	10.95	33.67	10.88	0.4	0.037	5.8	0.036	1.2%
4	Sleep Disorder	10.80	3.27	8.73	3.24	2.07	0,000	10.87	2.16	10.47	1.96	0.4	0.003	1.67	0.016	3.7%
5	Physical Well-being	159.07	19.71	181.33	16.50	-22.26	0,000	158.77	22.60	161.20	22.66	-2.43	0,000	-19.83	0,000	1.5%

*Calculated based on the difference *in mean* (intervention minus control) divided by *the mean* pre- intervention multiplied by 100%

DISCUSSION

Socio-Demographic Characteristics of Respondents

The results of the socio-demographic analysis of respondents showed that the characteristics between the intervention and control groups were homogeneous. This similarity in initial characteristics is an important methodological prerequisite in experimental research (Creswell & Creswell, 2017). Homogeneity ensures that any possible differences in intervention outcomes on the

dependent variable at the end of the study are truly caused by the PRI model effect and not by confounding factors. factors from differences in respondents' basic characteristics (Flanagan & Wilkins, 2024).

This higher proportion of women than men aligns with general cancer epidemiology data. Many types of cancer, such as breast and cervical cancer, which have the highest prevalence in Indonesia, are indeed primarily suffered by women (Siegel, 2022). Gender is known to influence disease response and coping strategies , so it is important to ensure its distribution is balanced across groups (Agil et al., 2025). The age variable showed an even distribution across all categories, ranging from 18 to over 60 years (p=0.156). Age is a significant factor in influencing functional status, disease severity , and psychological responses in cancer patients (Ruiz-casado et al., 2020). Older patients may have more comorbidities, while younger patients may face different psychosocial challenges.

This religious homogeneity has strong relevance in research testing the PRI (psycho religious intervention). This intervention model explicitly includes meditation prayer (spiritual therapy), the effectiveness of which is highly dependent on the respondent's religious beliefs and practices (Priyanto et al., 2023). The similarity of primary religious backgrounds ensures that the religious components of the intervention are accepted and consistently practiced by most of the research subjects. This strengthens internal validity, especially in measuring the effectiveness of spiritual-based interventions (Saharullah et al., 2024).

Educational level influences respondents' ability to understand instructions, receive psychoeducation, and internalize spiritual teachings. The majority of respondents with a high school education indicated that they had sufficient health literacy to effectively follow the psychoeducational components of the PRI Model (Magambo, 2024). This homogeneity is important to ensure that the results obtained are not biased by respondents' cognitive abilities or level of understanding, but rather by the intervention's effects. This homogeneity condition is a strong methodological foundation, strongly supporting the study's internal validity (Flanagan & Wilkins, 2024). With homogeneity across gender, age, religion, and education, any significant changes observed in patient well-being variables at the end of the study can be attributed with high confidence to the implementation of the PRI Model. Therefore, the study can proceed to test the intervention's effectiveness hypothesis while minimizing the risk of bias from confounding factors.

Respondents' Health History

The respondents' health histories had comparable clinical characteristics, indicating that the subject allocation process successfully equated clinical risk factors between groups (Flanagan & Wilkins, 2024). This similarity in clinical characteristics is essential because disease severity and type of therapy significantly influence outcome variables such as psychological and spiritual well-being (Ruiz-casado et al., 2020). The distribution of cancer types in both groups showed very similar proportions. Breast cancer was the most dominant cancer type in both groups (33.33% each), followed by cervical cancer and colorectal cancer. The high proportion of breast cancer is consistent with national epidemiological data, which shows that breast cancer is the highest case (Agil et al., 2025).

The similarity in cancer types between groups, particularly the predominance of cancers often associated with a high psychosocial impact on women, ensures that respondents' disease background is not a confounding factor when assessing the effectiveness of the PRI Model. Although there were patients across the entire stage spectrum (I to IV), the majority of respondents were in Stage I (Intervention Group: 50.00%; Control Group: 63.33%). The comparable proportions across stages (p=0.719) are significant. Disease stage directly correlates with physical symptom burden, prognosis, and patient stress levels (Emery et al., 2022). Advanced stage patients (III and IV) often experience complaints of pain, anxiety, and need more intensive palliative care than early

stage patients (Virdun & Davidson, 2020). Stage homogeneity ensures that differences in the effectiveness of the PRI Model are not due to the presence of groups with an inherently higher disease burden.

Treatment modalities, with surgery being the most common single therapy (50.00% in both groups), followed by chemotherapy. It is important to recognize that each treatment modality, such as chemotherapy and radiation, has unique physical and psychological side effects, for example, cancer-related fatigue. fatigue) which often occurs due to chemotherapy (Ruiz-casado et al., 2020). The homogeneity of medical histories, including cancer type, stage, and treatment, reinforces the assumption that outcome variables in cancer patients are strongly influenced by clinical factors. Therefore, this similarity of clinical factors strongly supports the internal validity of the study (Creswell & Creswell, 2017).

PRI model that integrate psychological and spiritual therapy are designed to address the impact of disease and management, such as anxiety, stress, and spiritual needs (Priyanto et al., 2023). With clinically equivalent groups, researchers can isolate and measure the effectiveness of the intervention without distortion from baseline disease severity. Respondents' medical history was not a significant confounding factor, and cancer type, stage, and treatment, the primary determinants of patients' physical and psychological burden, were evenly distributed. Therefore, researchers can proceed with the analysis to determine whether the PRI Model significantly improves the well-being of cancer patients, despite the small clinical differences that exist (Scott, 2021).

Painful

The results of the study presented in graph 1.1 show that pain scores on day 1 in both groups did not differ significantly and were in the moderate pain category (scores 41–80). This initial homogeneity is an important prerequisite to confirm that any significant changes that occurred at the end of the study were a direct result of the intervention provided (Creswell & Creswell, 2017). After five days of intervention, both groups experienced a significant reduction in pain scores. However, the difference in score reduction between groups indicates the superiority of the PRI Model intervention. The intervention group showed a reduction in pain scores to the mild pain category (scores 1–40), while the control group remained in the moderate pain category (scores 41–80). This indicates that the combination of psycho -education and tafakur prayer (contemplation) in the PRI Model is very effective in pain management compared to the standard care received by the control group (Priyanto et al., 2023)

The substantial reduction in pain in the intervention group can be explained by the mechanism of action of the PRI Model components. The psychoeducational component plays a crucial role in providing patients with an understanding of the nature of cancer pain, effective coping strategies, and non-pharmacological self-management techniques (Magambo, 2024). This increased understanding and sense of self-control can reduce anxiety (Priyanto et al., 2024). Anxiety and stress are psychological factors known to exacerbate pain perception (Ruiz-casado et al., 2020). By stabilizing the psychological state through education, the patient's pain threshold can be increased, resulting in a less severe pain perception. In addition to psycho -education, the prayer component of tafakur (contemplation) plays a crucial role. Spiritual therapy, including prayer and contemplation, helps patients achieve a state of tawakkul (relief) and surrender to the Creator, which effectively reduces spiritual stress and improves spiritual well-being (Saharullah et al., 2024);(Priyanto et al., 2023). This reduction in spiritual stress directly affects the autonomic nervous system, reduces muscle tension, and triggers the release of endorphins, all of which contribute to a decrease in the intensity of pain felt (Priyanto et al., 2023). The shift from moderate to mild pain category occurred only in the intervention group, confirming the unique and powerful role of this spiritual therapy integration.

These results provide clinical implications that the PRI Model can be a very effective and relevant independent nursing supportive therapy for pain management in cancer patients (Priyanto & Achmad Fauzi Kamal, 2021). Uncontrolled pain can interfere with the patient's quality of life, physical function, and psychological response (Emery et al., 2022). Therefore, the reduction in pain to the mild category achieved by the PRI Model indicates that this intervention can be integrated into standard palliative and supportive care to improve patient comfort and well-being holistically.

Nausea

Nausea scores on day 1 showed that both intervention and control groups were in the moderate category (scores 9–16), with no significant differences. This similarity reaffirms the baseline homogeneity of respondents' clinical conditions before the intervention began, ensuring that baseline nausea levels were not a confounding factor (Creswell & Creswell, 2017). Nausea is one of the most common and distressing gastrointestinal symptoms experienced by cancer patients, often caused by chemotherapy and radiation therapy, which significantly reduces quality of life (Emery et al., 2022).

After five days of treatment, there was an improvement in nausea scores, indicating a decrease in symptom severity. However, the changes differed significantly between groups. The intervention group showed a significant decrease in scores, reaching the mild category (scores 1–8), while the control group experienced a non-significant decrease ($p>0.05$) and remained in the moderate category (scores 9–16). These results clearly demonstrate the effectiveness of the PRI Model in mitigating nausea compared to standard care. The poor control of nausea in the control group ($p>0.05$) underscores the challenges of managing this symptom with conventional antiemetic therapy and routine supportive care alone (Virdun & Davidson, 2020).

The significant reduction in nausea in the intervention group can largely be attributed to the psychoeducational component of the PRI Model. Nausea, especially anticipatory nausea, has a strong psychological component, triggered by anxiety and previous negative experiences related to therapy (Ruiz-casado et al., 2020). Psychoeducation empowers patients by providing clear information about the mechanisms of nausea, identifying triggers, and teaching self-management or relaxation techniques (Priyanto et al., 2024). This increased control and decreased anxiety help break the cycle of psychological-somatic responses, effectively reducing the perceived intensity of nausea.

In addition to psycho-education, the prayer component of contemplation (tafakur) also contributes to reducing nausea. Nausea and vomiting often exacerbate spiritual stress and feelings of hopelessness. Spiritual therapy facilitates a state of deep relaxation, reduces physiological stress responses, and increases feelings of peace and acceptance (tawakal) (Priyanto et al., 2023). Relaxation induced by contemplation can stabilize the autonomic nervous system and reduce sensitivity to emetic stimuli (Saharullah et al., 2024). The combination of increased cognitive control (psycho-education) and decreased physical-emotional tension (prayer of contemplation) created a synergy that enabled the intervention group to reach a mild nausea threshold. Controlling nausea and vomiting is a primary goal in supportive care for cancer patients. If nausea can be managed to a mild level using independent nursing interventions such as the PRI Model, this can reduce dependence on antiemetic medications and improve patient adherence to cancer therapy (Priyanto et al., 2023);(Scott, 2021). Therefore, the PRI Model has great potential to be integrated as a routine complementary therapy in cancer treatment protocols to improve patients' physical well-being and overall quality of life.

Physical Fatigue

Both groups were in the moderate category (scores 31–60). Cancer-related fatigue fatigue or CRF) is the most frequently reported symptom and affects up to 90% of patients undergoing treatment,

and is a major factor that reduces quality of life (Ruiz-casado et al., 2020). After a five-day intervention, only the treatment group showed a significant decrease in physical fatigue scores, with scores moving to the mild category (score 1–30). Physical fatigue in cancer patients is multidimensional, influenced by physical conditions (anemia, inflammation) and psychological factors (depression, anxiety) (Emery et al., 2022). The PRI model, with its holistic approach, is able to break the cycle that maintains this fatigue.

The psycho -educational component of the PRI model plays a vital role in the management of CRF. Psycho -education provides patients with knowledge about the etiology of CRF, teaches energy-conserving strategies, and helps them manage their energy needs. conservation), and increase their sense of self-efficacy in managing symptoms (Priyanto et al., 2024). With a better understanding of their fatigue, patients can manage their activities and rest more effectively, which helps prevent the severity of CRF. Furthermore, psychoeducation helps relieve anxiety and stress that psychologically exacerbate fatigue, as reported in a psychosocial intervention study (Magambo, 2024).

The components of contemplative prayer contribute to physical and spiritual recovery, which results in reduced fatigue. Spiritual therapy facilitates a state of deep relaxation, which can reduce inflammatory responses and stabilize the neuroendocrine system involved in energy regulation (Saharullah et al., 2024). Achieving inner peace through meditation and tawakal can reduce psychological and spiritual burdens, which indirectly releases physical energy that was previously drained by chronic stress (Priyanto et al., 2023). As a result, the intervention group was able to achieve mild fatigue levels, which is an indication of physical well-being recovery . CRF is a symptom that is often overlooked and difficult to treat, but has a significant impact on quality of life and treatment adherence (Virdun & Davidson, 2020). Given that the PRI Model is a relatively simple, stand-alone nursing intervention, its success offers an effective, non-pharmacological, complementary therapy option. Integrating the PRI Model into standard palliative and supportive care allows nurses to actively and effectively address CRF, contributing to the overall improvement of patients' physical well-being (Priyanto & Achmad Fauzi Kamal, 2020);(Scott, 2021).

Sleep Disorder

The results of the study in graph 1.4 show that the Sleep Disturbance score on Day 1 was in the poor category (score 6–10). Sleep disturbances, including insomnia and poor sleep quality, are very common and debilitating complaints in cancer patients, often exacerbated by pain, anxiety, and treatment side effects (Emery et al., 2022). After five days of intervention, both groups showed a decrease in sleep disturbance scores, with both groups moving to the mild category (scores 6–10). Although both groups experienced significant improvement, the decrease in scores in the intervention group (which received the PRI Model) was generally greater than in the control group, which only received standard care. The significant decrease in scores in the intervention group underscores the effectiveness of the PRI Model in mitigating sleep problems. This suggests that interventions targeting psychological and spiritual aspects can disrupt the cycle of anxiety and discomfort that underlies sleep disturbances in cancer patients (Priyanto & Faridah Aini, 2025);(Priyanto & Achmad Fauzi Kamal, 2021).

Psycho -educational component of the PRI model provides patients with relaxation and sleep techniques. proper hygiene , and reducing anxiety, which often triggers insomnia (Priyanto et al., 2024). Meanwhile, the contemplation prayer component induces a state of deep relaxation, reduces physiological hyperarousal , and calms the mind from worries related to illness and prognosis (Priyanto et al., 2023). This spiritually based relaxation helps achieve the mental calm necessary for a successful transition from wakefulness to sleep, significantly improving the quality and duration of patients' rest. Poor sleep often worsens physical pain and fatigue (Ruiz-casado et al., 2020) . With reduced pain and fatigue in the intervention group, the main barriers to restful sleep were addressed. Therefore, the significant reduction in sleep disturbances in the intervention group is a strong

indicator that the PRI model effectively improves physical well-being holistically by breaking the vicious cycle between pain, fatigue, and insomnia (Virdun & Davidson, 2020).

Physical Well-being

The results presented in Figure 1.5 show that on day 1, both groups were in the moderate category for physical well-being (scores 84–166). After five days of treatment, although both groups experienced significant improvements in their scores, only the intervention group showed a dramatic qualitative improvement, moving from the moderate to the high category (scores 167–363). The control group, although improving statistically, remained stuck in the moderate category. This significant improvement was the cumulative result of improvements in more specific physical indicators, such as decreased pain, nausea, fatigue, and improved sleep, as discussed in the previous results. Physical well- being well-being) includes comfortable body function and the patient's ability to carry out daily activities without being burdened by symptoms (Virdun & Davidson, 2020). The PRI model, which effectively targets and reduces distressing These symptoms directly improve the patient's overall physical experience.

Psychoeducational component of the PRI Model contributes to improved physical well-being by increasing self-efficacy and symptom management skills. By understanding the nature of the disease and its treatment, as well as self-management techniques for pain and fatigue, patients become more empowered and less focused on their physical symptoms (Priyanto et al., 2024). This increased self-control reduces symptom-related anxiety (e.g., anticipatory nausea), which in turn decreases negative physiological responses, allowing patients to function better physically (Ruiz-casado et al., 2020). These cognitive and behavioral improvements are essential foundations for improving physical quality of life. Contemplative prayer plays a profound role in improving physical well-being. This spiritual practice facilitates deep relaxation and a calming response, which have positive physiological effects, such as decreasing stress hormones (cortisol) and increasing parasympathetic responses (Saharullah et al., 2024);(Garth, 2023). Achieving a state of trust and acceptance removes spiritual and existential burdens , which often manifest themselves as physical symptoms such as muscle tension, chronic pain, and fatigue (Priyanto et al., 2023). By addressing spiritual suffering, the patient's energy can be shifted from "fight" mode to "recovery" mode, which ultimately leads to an increase in physical well-being to a high category.

These findings confirm that for cancer patients, physical symptom relief cannot be separated from psychological and spiritual support. Holistic and integrated interventions, such as the PRI Model, are far more effective than treating physical symptoms in isolation. The PRI Model provides a framework for nurses to provide care that focuses not only on the biomedical dimension but also recognizes and addresses psychospiritual suffering (Priyanto & Achmad Fauzi Kamal, 2021). Optimal utilization of the PRI Model can reduce symptom burden, increase patient functional independence, and support quality-of-life-centered care goals (Scott, 2021). Thus, the PRI Model is an innovative and highly relevant nursing modality for improving physical comprehensive well-being of cancer patients.

The Effect of PRI Model Intervention on Physical Well-being

Table 1 shows that the PRI model was shown to significantly improve the physical well-being of cancer patients. The improvement in physical well-being in the intervention group was very striking, indicated by an increase in the mean score from 159.07 (before the intervention) to 181.33 (after the intervention), with a large difference (-22.26) and highly significant (p=0.000). Although the control group also experienced a slight improvement (p=0.000), their difference in improvement was much smaller (-2.43). The difference in improvement of -19.83 between the intervention and control groups indicates the superior effectiveness of the PRI Model in supporting the physical aspects of patients, with a strong interaction significance value (p=0.000). This improvement in physical well-being reflects the holistic results of integrated therapy (Priyanto & Achmad Fauzi

Kamal, 2021).

The PRI model specifically demonstrated very high effectiveness in reducing symptoms of pain and disturbed sleep. Pain in the intervention group decreased substantially (mean difference 10.24, p=0.000), compared to the control group, which only decreased slightly (mean difference 1.17, p=0.004). Similarly, disturbed sleep decreased significantly in the intervention group (mean difference 2.07, p=0.000), significantly more than in the control group (mean difference 0.4, p=0.003). These pain reductions and sleep improvements are interrelated; with pain reduction through psychoeducation and contemplation (Priyanto et al., 2023a), the quality of patients' rest and sleep improves, which in turn supports physical recovery and reduces fatigue (Emery et al., 2022). The interaction effect of the PRI Model on these two indicators was highly significant (p=0.010 for Pain and p=0.016 for Sleep Disturbance).

The positive effects of the PRI Model were also seen in mitigating Physical Fatigue and Nausea. Physical fatigue in the intervention group was significantly reduced (mean difference 6.2, p=0.000), compared to a very small decrease in the control group (mean difference 0.4, p=0.037). This difference in effectiveness of the PRI Model on fatigue was significant (p=0.036). Cancer- related fatigue fatigue is a very common symptom and is resistant to conventional therapy (Ruiz-casado et al., 2020). This significant decrease indicates that the PRI Model, through its spiritual component, is able to stabilize physiological stress responses and increase energy and endurance. Meanwhile, although nausea was also significantly reduced in the intervention group (p=0.000), the PRI Model's effectiveness on nausea showed borderline significance (p=0.058), which may indicate that nausea has a strong physical component, but is still positively affected by the psychological and spiritual aspects of the intervention (Priyanto et al., 2024).

The advantage of the PRI Model lies in its integrative nature. Reductions in pain, nausea, fatigue, and sleep disturbances do not occur in isolation, but rather are the result of the combined effects of psychoeducation (psychological aspects) and meditative prayer (spiritual aspects). Psychoeducation helps patients manage stress and increase self-efficacy, which indirectly relieves physical symptoms exacerbated by anxiety (Magambo, 2024). Meanwhile, spiritual therapy through contemplation helps patients achieve inner peace, reduce spiritual burdens, and produce protective and restorative physiological responses (Saharullah et al., 2024);(Garth, 2023). This integration creates a stronger synergy in influencing the neurological and endocrine pathways involved in pain perception, nausea, and fatigue, compared to single interventions.

These findings strongly support the PRI model as a highly effective independent nursing modality for improving the physical well-being of cancer patients. Pain, fatigue, and sleep disturbance are the primary complaints affecting quality of life (Virdun & Davidson, 2020), the PRI Model provides an evidence-based tool that can be easily adopted by nurses in palliative and supportive care (Priyanto & Achmad Fauzi Kamal, 2021). Routine implementation of these interventions can complement pharmacological therapy, reduce overall symptom burden, and achieve holistic, patient-centered care, tailored to the needs of cancer patients to receive optimal care.

CONCLUSION

The PRI model, which integrates psychological (psychoeducation) and spiritual (prayer contemplation) interventions, is highly effective and significant in improving the physical well-being of cancer patients. The PRI model's effectiveness is not only statistical, but also shows dramatic qualitative changes. Patients in the group receiving the PRI model experienced an increase in overall physical well-being from the current category to a higher level after the intervention. In contrast, the control group that did not receive the intervention remained in the transformative PRI model category with moderate strength.

The success of the PRI model is reinforced by its significant impact in improving the most disturbing physical conditions of cancer patients: 1) Pain: The PRI model is highly effective in reducing pain intensity (p=0.010), successfully lowering patient scores from the current category to the mild category, which is a substantial clinical improvement; 2) Physical Fatigue: This intervention also showed significant effectiveness in addressing physical fatigue (p=0.036), with the intervention group's scores improving to the mild category; 3) Sleep Disturbances, patients who received the PRI model experienced a significant reduction in sleep disturbances (p=0.016), indicating better sleep quality; 4) Nausea: The PRI model also contributed significantly to reducing nausea (p=0.000) in the intervention group.

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