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Quality of life in gynecological cancer patients: focusing in religious aspects

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A B S T R A C T

Background: Gynecological cancer is a malignancy that attacks the reproductive organs, affecting not only physical health but also psychological and emotional well-being, often causing depression and anxiety. Religious and spiritual factors have been identified as potential moderators of quality of life in cancer patients.

Objective: This study evaluates the relationship between religious aspects spirituality, awareness, and religious coping and quality of life in gynecological cancer patients.

Methods: A cross-sectional study involved 61 gynecological cancer patients undergoing chemotherapy at Margono Hospital. Data were collected using validated instruments: FACIT-Sp for spirituality, FMI for awareness, Brief R-Cope for religious coping, PSS-10 for stress, and WHOQOL-BREF for quality of life. The Pearson correlation coefficient was used to assess the relationship between variables.

Results: Spirituality (r = 0.434), awareness (r = 0.425), positive religious coping (r = 0.313), and stress (r = -0.515) were significantly correlated with quality of life. Negative religious coping (r = -0.121) showed a negative but non-significant correlation.

Conclusions: This study highlights that spirituality, mindfulness, and positive religious coping are significantly associated with improved quality of life in gynecologic cancer patients. These results emphasize the potential role of religious and spiritual support as an integral component of comprehensive cancer care to improve overall patient well-being.

INTRODUCTION

Gynaecological cancers remain a significant public health concern, with profound impacts on the quality of life of affected individuals. They take over 50 % of mortality rate among cancer patients in Indonesia around 2020.[1,2] While the survivor of the gynecologically cancer still must suffer from physical, psychological, and social burden due to their cancer and effect of therapy throughout their life.[3] Unbearable physical symptoms and psychosocial pressures impact their quality of life.

To cope with the challenges of stress due to continuous physical and psychosocial problems requires reliable coping strategies. Many strategies were taught a lot, such as relaxation techniques, yoga, and even religious support in the palliative care protocol.[3] However, the role of religious aspect contribution of religious support in is still superficial, such as clergy visits supporting worship practices.[4] On the other hand, Indonesian are religious people, therefore the influence of religious spiritual belief may integrate into their life behaviour including coping style.

According to previous research, mindfulness, and spirituality have been shown to improve the quality of life in cancer patients significantly. [5–8] Moreover, spirituality is recognized as an irreducible human motivation, playing a particularly beneficial role in addressing the unique challenges faced by cancer survivors. However, while these aspects have been explored in various cancer populations, studies focusing on their specific impact on gynecological cancer patients remain limited. The nuanced role of religious and spiritual factors particularly mindfulness, spirituality, and religious coping has not been comprehensively examined in this patient group despite their profound relevance in a culturally and religiously diverse context such as Indonesia.[9]

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This study aims to address this gap by investigating the relationship between religious aspects and quality of life in gynecologic cancer patients. The findings are expected to provide valuable insights to inform the development of religion and spiritual-based interventions tailored to this population.

METHOD

Study Design

The research design used was cross-sectional.

Setting and Respondent

This study was conducted in May 2024 at Margono Soekardjo Purwokerto Hospital. The population in this study was gynecological cancer patients undergoing chemotherapy, and the sample size was 61 patients. Inclusion criteria included gynecological cancer patients undergoing chemotherapy who had the mental capacity to complete the questionnaire, participate in the interview effectively, and submit written consent. Patients with severe physical or psychological symptoms were not included in the study. The sampling technique used was consecutive sampling.

The Variable, Instrument, and Measurement

This study's independent variables included spirituality, mindfulness, positive religious coping, and stress. Spirituality was measured using the FACIT-Sp12 scale. Mindfulness was assessed using the Freiberg Mindfulness Inventory. Positive and negative religious coping was assessed using the Brief R Cope. The Perceived Stress Scale (PSS-10) measured respondents' stress levels. The dependent variable, quality of life, was measured using the WHOQOL-BREF. Data were collected through structured interviews.

Data Analysis

Pearson's r correlation tested the correlation between predictive variables and quality of life. It also tested the correlation coefficient index and direction between spirituality, mindfulness, positive religious coping, negative religious coping, stress, and quality of life.

Ethical Considerent

The Ethics Committee of Margono Soekardjo Hospital in Purwokerto has reviewed and approved this study, with approval number 420/956/VII/2019.

RESULTS

Based on the results in Table 1, the majority of participants in this study were Muslim (98.4%), married (75.4%), and had a low level of education, with most only completing elementary school (62.2%). Many were housewives (63.9%) with limited income; 57.4% earned IDR 1–3 million monthly, while 34.4% earned less than IDR 1 million. Despite having 100% insurance coverage, their low socioeconomic status represents a potential barrier to accessing comprehensive cancer care. Cervical cancer was the most common diagnosis (68.9%), followed by ovarian cancer (19.7%), uterine cancer (9.8%), and vulvar cancer (1.6%). Participants were primarily middle-aged (mean age 49.36 years), with a mean time since diagnosis of 7.26 years, reflecting the chronic nature of their disease and the need for long-term support.

Table 1. Characteristic Respondent (n=61)

Characteristics	Result
Age, yo	49.36
Religion	
Islam	60 (98.4%)
Catholic	1 (1.6%)
Mariage Status	
Single	3 (4.9%)
Married	46 (75.4%)
widow	12 (19.6%)
Education	
Elementary School	38 (62.2%)
Junior High School	10 (16.4%)
Senior High School	9 (1.5%)
University/Higher	4 (6.6%)
Job	
Housewife	39 (63.9%)
Farmer	10 (16.4%)
Running Business	8 (13.1%)
Dependent	2 (3.3%)
Government/Military Services	1 (1.6%)
Private Employee	1 (1.6)
Job Status	
Active	38 (62.3%)
Temporary Leaves	11 (18%)
Resigned	12 (19.7%)
Income (IDR)	
< 1 million	21 (34.4%)
1-3 million	35 (57.4)
6-10 million	4 (6.6%)
> 10 million	1 (1.6%)
Insurance Covered	
Yes	61 (100%)
Cancer Type	
Ca Cervix	42 (68.9%)
Ca Ovarium	12 (19.7%)
Ca Uterus	6 (9.8%)
Ca Vulva	1 (1.6%)
Time since diagnosed Cancer	7.26 years

Table 2. Average Score of Quality of Life, PRC, NRC, Mindfulness, Spirituality, and Perceived Stress

Variables	Mean ± SD	Scale range
Quality of Life (QoL)	65.94 ± 10	0-100
Physical WB	61.27 ± 18.5	0-100
Psychological WB	71.04 ± 12.9	0-100
Social WB	68.03 ± 15.7	0-100
Environmental WB	64.60 ± 11.2	0-100
Overall WB	66.39 ± 17.6	0-100
Health Satisfaction	64.34 ± 22.2	0-100
Positive Religious Coping (PRC)	20.03 ± 1.8	0-21
Negative Religious Coping (NRC)	3.02 ± 2.8	0-21
Mindfulness	42.21 ± 5.9	14-56
Spirituality	35.38 ± 4.5	0-40
Perceived Stress	13.41 ± 5.2	0-48

Table 3. Results of Pearson r Correlation Test Between Spirituality, Mindfulness, Stress, PRC, NRC and Quality of Life and Each Domains

Variables	Physical Well Being	Psychological Well Being	Social Well Being	Environmental Well Being	Overall Well Being	Life Satisfaction	QoL
Spirituality	0.491*	0.25	0.340*	0.116	0.272*	0.178	0.425*
Mindfulness	0.466*	0.369*	0.133	0.25	0.117	0.357*	0.434*
Stress	-0.527*	-0.449*	-0.155	-0.450*	-0.163	-0.345*	-0.515*
PRC	0.202	0.19	0.436**	0.196	0.139	0.122	0.313*
NRC	-0.117	0.028	-0.07	0.001	-0.155	-0.103	-0.121

Based on the results in Table 2, the mean quality of life (QoL) score among participants was 65.94 (SD = 10) on a 0–100 scale. Among the well-being dimensions, psychological well-being (71.04 ± 12.9) scored the highest, while physical well-being (61.27 ± 18.5) scored the lowest. Positive religious coping (20.03 ± 1.8 out of 21) and spirituality (35.38 ± 4.5 out of 40) were high, indicating their significance as coping mechanisms. Negative religious coping was low (3.02 ± 2.8), and perceived stress was moderate (13.41 ± 5.2 out of 48).

Based on the results in Table 3, correlation analysis revealed a significant relationship between spirituality, mindfulness, stress, and quality of life (QoL). Spirituality was positively correlated with physical well-being ($r = 0.491$, $p < 0.05$), social well-being ($r = 0.340$, $p < 0.05$), overall well-being ($r = 0.272$, $p < 0.05$), and QoL ($r = 0.425$, $p < 0.05$). Mindfulness showed a strong positive correlation with physical well-being ($r = 0.466$, $p < 0.05$), psychological well-being ($r = 0.369$, $p < 0.05$), and QoL ($r = 0.434$, $p < 0.05$). Stress was negatively correlated with physical well-being ($r = -0.527$, $p < 0.05$), psychological well-being ($r = -0.449$, $p < 0.05$), environmental well-being ($r = -0.450$, $p < 0.05$), and Quality of Life ($r = -0.515$, $p < 0.05$). Positive religious coping (PRC) was positively correlated with social well-being ($r = 0.436$, $p < 0.01$) and Quality of Life ($r = 0.313$, $p < 0.05$). In contrast, negative religious coping (NRC) was not significantly correlated with any outcome variables.

DISCUSSION

Our finding indicates that spirituality, mindfulness, and positive religious coping significantly correlate with quality of life. It means that high spirituality, mindfulness, and positive religious coping will be in line with improving the quality of life. This finding supports the previous study that the individual religious aspect was consistently correlated with quality of life.[10] This finding clarifies the theory of self-transcendence, where a vulnerable situation can improve well-being through self-transcendence moment.[11] In the clinical setting, this finding provides evidence of the importance of spiritual care among cancer patients as a part of the regular and routine protocol.

Cancer patients experience broad anxiety, fear, and depression within the treatment that can affect their quality of life.[12] Increasing the level of spirituality may be linked to adjustment to adverse life events and effective coping.[13] Spirituality works to suppress the symptoms experienced through spiritual activities such as gratitude, praying, and worshiping because there is dopamine activation from the release of positive emotions, which are responsible for making someone feel calm so that the patient no longer focuses on something irrational.[14] Our results suggest that mindfulness coping mechanisms are an effective intervention to improve the physical well-being and quality of life of gynaecologic cancer patients. In addition, mindfulness is also beneficial when used as part of a holistic approach for other cancer patients.

Based on the Freiburg Mindfulness Inventory (FMI), a questionnaire to measure mindfulness in individuals, our study showed that mindfulness has a positive relationship with aspects of well-being in gynaecological cancer patients with the greatest influence on physical well-being and quality of life. These results supported the idea that mindfulness encourages patients to focus on the thoughts and feelings that arise, accept those feelings, and be non-judgmental.[15,16] This approach helps patients change how they perceive and accept situations and improves their ability to regulate emotions. In a previous study, mindfulness was shown to improve mental health by reducing symptoms of anxiety, depression, and stress, which are common problems associated with patients undergoing gynaecological cancer treatment.[17–19] Previous research has also shown that mindfulness influences pain perception in cancer patients.[20] Neuroimaging research found that increased levels of mindfulness were associated with decreased activity of the amygdala, the part of the brain responsible for stress response, and increased activity of the prefrontal cortex, which plays a role in pain regulation.[21]

PRC can increase the quality of life and decrease stress because it affects the patient's response to disease and their ability to deal with a bad prognosis.[22] Cancer diagnosis acts as a stressor to the patient because of a bad prognosis and causes life changes in many aspects, such as physical, psychological, and social. Previous research found diversity of PRC factors has been related to lower levels of stress, better pain management, greater post-traumatic growth, greater ease of treatment decision-making, and higher peak cortisol levels for various cancers and also played a mediational role in the relationship between relinquishing control and physical symptoms as well as physical and functional quality of life.[10,23-24]

Current research found that the PRC style tends to remain relatively stable over time and that a secure PRC can serve as a resource for individuals during significant life stress.[25] The health care workers can help find and select suitable PRC styles based on the patient's culture and beliefs. Health workers can also help maintain and support the patient's PRC because if patients have bad religious coping and Negative Religious Coping, it can affect the patient's

response to the diagnosis and receiving treatment.[26] Applying PRC, such as prayer, daily prayer attendance, offerings, and consulting religious experts regarding inpatient treatment and support that provide facilities for spiritual activity, can help achieve the goals of palliative treatment and increase the quality of life.[27–28]

CONCLUSIONS AND RECOMMENDATION

In conclusion, our study shows that religious aspects such as spirituality, mindfulness, and positive religious coping in gynaecological cancer patients can improve their overall quality of life. In addition, the daily lives of Indonesians are embedded with religious practices, so interventions based on religion and spirituality need to be included. Therefore, based on all the data obtained from this study, health practitioners assess the physical aspects of patient care. Still, the positive religious elements must also be considered as a modality to overcome coping problems and achieve comprehensive care.

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