

FACTORS INFLUENCING UNMET NEEDS IN FEMALE REPRODUCTIVE CANCER PATIENTS

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ABSTRACT There are various unmet needs in cancer care, including those experienced by female patients with reproductive cancer. The greater the number of unmet needs, the lower the quality of life for women with reproductive cancer problems. Therefore, it is important to identify the factors influencing these unmet needs in this population. This study aims to explore the factors that affect unmet needs among reproductive cancer patients. The study employed a cross-sectional design, involving 116 female reproductive cancer survivors as respondents. The instrument used was the Cancer Survivors' Unmet Needs (CaSUN). Data analysis was conducted univariately, bivariately using correlation tests, ANOVA, and Independent T-tests, and multivariately using multiple logistic regression tests. The results showed that the majority of respondents had a moderate level of unmet needs. Several factors influencing unmet needs were identified, including: income factors on survivorship; duration of diagnosis on information needs; age factors on quality of life; and income and employment factors on relationships. Furthermore, the dominant factor contributing to unmet needs was employment.

KEYWORDS: *Female Reproductive Cancer, Unmet Needs.*

1. INTRODUCTION

Cancer survivors are a group of patients who require greater attention from the healthcare system and healthcare teams, especially after completing cancer treatments such as chemotherapy, radiotherapy, surgery, and other hospital-based treatment methods (Kanaungnit et al., 2019).

Cancer remains a major health problem worldwide. More than 19 million cancer cases occurred in 2020, with the global mortality rate reaching 10.65% (The Global Cancer Observatory, 2020). Among the many types of cancer, reproductive cancer is one of the leading causes of mortality among women. This cancer develops in female reproductive organs such as the uterine corpus, cervix, ovaries, vagina, vulva, fallopian tubes, or peritoneum. In 2012 and 2019, approximately 94,000 women were diagnosed with reproductive cancer. The risk of reproductive cancer increases with age (Basha & Ahmad, 2021).

A cancer diagnosis affects various dimensions of women's lives, including physical, psychological, social, and spiritual aspects. Cancer therapies such as surgery, chemotherapy, radiotherapy, and hormonal therapy often cause health complaints. However, physical and psychological adjustments vary among survivors. Some women are able to adapt effectively to the diagnosis and treatment, while others may require longer periods to adjust (Truant et al., 2017).

Supporting the adjustment of female reproductive cancer patients to their illness can be done by addressing unmet needs, also referred to as Cancer Survivors' Unmet Needs. This involves assessing the extent to which needs are met, unmet, or not required at all within domains such as survivorship, comprehensive care, information needs, quality of life, and relationships with partners/family. Unmet needs among female reproductive cancer patients may be influenced by factors such as age, education, income, employment, and duration of diagnosis. Supportive care needs reflect the feelings experienced when subjective perceptions do not align with desired conditions (Hediya Putri et al., 2018).

Identifying unmet needs among cancer survivors in the early stages of treatment provides opportunities to address them and improve the quality of healthcare services. Based on this background, the research problem addressed in this study is: What are the factors influencing unmet needs in female reproductive cancer patients?

2. METHOD

This study employed a non-experimental quantitative research method with a cross-sectional design. The population consisted of all female reproductive cancer patients at Hasan Basry Hospital and Ulin General Hospital, Banjarmasin, totaling 116 respondents. The inclusion criteria were women with reproductive cancer aged 26–60 years who were undergoing cancer therapy at Brigjend H. Hasan Basry Hospital and Ulin General Hospital, Banjarmasin, living with their family and husband, and willing to participate as respondents. Sampling was conducted using a total sampling technique from January 2023 to mid-February 2023.

The instruments used in this study included a demographic questionnaire to collect data on age, marital status, education, income, and occupation, as well as clinical characteristics such as date of diagnosis, cancer stage, ongoing therapy, and metastasis. This questionnaire was designed with open-ended questions. In addition, the CaSUN (Cancer Survivors' Unmet Needs) instrument was used to assess unmet needs. The CaSUN contains 35 items with three response options: A (not needed), B (needed but already met), and C (needed but unmet). If respondents selected C, they were required to further indicate the level of need using a scale of 1 (low need), 2 (moderate need), or 3 (high need).

3. RESULT AND DISCUSSION

3.1 Results

Univariate Analysis

The study included 116 respondents with a mean age of 37.08 years (SD = 8.35). The youngest participant was 26 years old and the oldest was 60 years old. Regarding education level, the majority had completed higher education (bachelor's degree or above), totaling 60 respondents (51.7%). Monthly income levels showed that most participants earned less than IDR 1 million, totaling 34 respondents (29.3%). Based on employment status, most respondents were employed (72.4%). Regarding the duration of diagnosis, the majority (87.1%) had been diagnosed with cancer for more than one year.

Table 1. Characteristics of Respondents

Data Demografi	F	% (SD)	Mean
Usia			37,08 (8.35)
Tingkat Pendidikan			
SD	2	1,7	
SMP	11	9,5	
SMA	43	37,1	
Sarjana (S1, S2, S3)	60	51,7	
Pendapatan Perbulan			
< 1 juta	34	29,3	
1 – 2 juta	31	26,7	
2 – 3 juta	33	28,4	
3 – 4 juta	13	11,2	
4 – 5 juta	3	2,6	
> 5 juta	2	1,7	
Pekerjaan			
Bekerja	84	72,4	
Tidak Bekerja	32	27,6	
Lama Terdiagnosis			
< 1 tahun	15	12,9	
> 1 tahun	101	87,1	

Bivariate Analysis

The survivorship domain showed that 109 respondents (93.3%) reported unmet needs, with the majority (62.9%) at a moderate level. The comprehensive care domain showed that 104 respondents (89.6%) reported unmet needs, with most (53.4%) at a moderate level. For the information domain, 100 respondents (86.2%) reported unmet needs, with most (52.6%) at a moderate level. The quality of life domain revealed that 107 respondents (92.2%) had unmet needs, with most (41.4%) at a low level. Finally, the relationship domain showed that 104 respondents (89.6%) reported unmet needs, with the majority (58.6%) at a moderate level.

Table 2. Prevalence of Met and Unmet Needs

	F	%
Kelangsungan Hidup		
Tidak butuh	0	0
Butuh tapi telah terpenuhi	7	6
Butuh belum terpenuhi	109	93,9
- Kurang butuh	10	8,6
- Butuh tingkat Sedang	73	62,9
- Sangat butuh	26	22,4
Perawatan Komprehensif		
Tidak butuh	9	7,8
Butuh tapi telah terpenuhi	3	2,6
Butuh belum terpenuhi	104	89,6
- Kurang butuh	30	25,9
- Butuh tingkat Sedang	62	53,4
- Sangat butuh	12	10,3
Informasi		
Tidak butuh	9	7,8
Butuh tapi telah terpenuhi	7	6
Butuh belum terpenuhi	100	86,2
- Kurang butuh	32	27,6
- Butuh tingkat Sedang	61	52,6
- Sangat butuh	7	6
Kualitas Hidup		
Tidak butuh	3	2,6
Butuh tapi telah terpenuhi	6	5,2
Butuh belum terpenuhi	107	92,2
- Kurang butuh	48	41,4
- Butuh tingkat Sedang	45	38,8
- Sangat butuh	14	12,1
Hubungan		
Tidak butuh	5	4,3
Butuh tapi telah terpenuhi	4	3,4
Butuh belum terpenuhi	104	89,6
- Kurang butuh	26	22,5
- Butuh tingkat Sedang	68	58,6
- Sangat butuh	13	11,2

The results also showed domain-specific mean scores, with the highest mean score in the survivorship domain ($M = 3.94$, $SD = 0.56$). Overall, 94% of respondents had unmet needs, with the most pressing domain being quality of life (57.8%), followed by comprehensive care (42.2%), information (41.4%), relationships with partners/family (37.1%), and survivorship (32.8%).

Table 3 . Domain Scores of Unmet Needs

Domain	min	Max	mean	SD	f (%)
Kelangsungan Hidup	2.00	4.60	3.94	0.56	32.8

Perawatan Komprehensif	1.60	5.00	3.82	0.76	42.2
Informasi	1.60	5.00	3.63	0.73	41.4
Kualitas Hidup	2.00	5.00	3.76	0.61	57.8
Hubungan dengan pasangan	1.60	4.80	3.86	0.67	37.1

Multivariate Analysis

Multivariate analysis using multiple linear regression (Enter method) was conducted to determine the dominant factors influencing unmet needs. Independent variables with $p < 0.25$ in bivariate analysis were included in the model. The income factor was excluded ($p = 0.410$).

Table 4 – Bivariate Analysis Results

Variabel Independen	sig.
Usia	0.015
Pendidikan	0.004
Pendapatan	0.410
Pekerjaan	0.143
Lama Terdiagnosis	0.161

Table 5. Multiple Linear Regression Analysis

Independent Variables	R Square	Sig.	t-test (t count)	t table	B
Age	0.117	0.016	2.477	1.9817	0.029
Education		0.005	2.976		0.420
Employment		0.014	2.484		0.554
Duration of Diagnosis		0.179	-1.354		-0.358

Statistical testing showed an R square value of 0.117, indicating that these four factors explained 11% of the variance in unmet needs, while the remaining variance was explained by other factors. Since the p value of the duration of diagnosis factor was 0.179 ($p > 0.05$), this variable was excluded from the final model.

Table 6. Final Multiple Linear Regression Analysis

Independent Variables	R Square	Sig.	t-test (t count)	t table	B
Age	0.102	0.018	2.405	1.9817	0.028
Education		0.003	3.047		0.424
Employment		0.010	2.613		0.582

The statistical test yielded an R square value of 0.102, meaning that the three factors (age, education, and employment) explained 10% of the variance in unmet needs, while the remaining variance was explained by other factors.

Based on the multivariate analysis, the factors that significantly influenced unmet needs were identified through beta values. The beta coefficients were: age ($\beta = 0.028$), education ($\beta = 0.424$), and employment ($\beta = 0.582$). Therefore, the most influential factor in determining unmet needs was employment.

3.2 Discussion

This study found a relationship between age factors and unmet needs in the aspects of survival, comprehensive care, information needs, quality of life, and relationships with partners/family. The study revealed that the average age of respondents was between 26–60 years. In this study, age influenced unmet needs in the quality-of-life domain. A similar finding was also observed in a previous study conducted by Joe & Darmayasa (2019), which stated that age is closely related to the course of cervical cancer, where earlier sexual contact increases the possibility of cervical cancer at a younger age.

The relationship between education level and unmet needs in survival, comprehensive care, information needs, quality of life, and relationships with partners/family showed that the majority of respondents in this study had a bachelor's degree, with a total of 60 respondents. From the analysis, it was found that education level did not affect unmet needs. Similar results were also reported in a previous study conducted by Robin et al. (2011). Their research indicated that individuals seeking information were associated with better psychosocial outcomes, such as satisfaction with the information received, decision-making, treatment, and improved physical function. Patients with lower education levels have been shown to ask fewer questions and face greater difficulties in effectively communicating their preferences.

The relationship between income level and unmet needs in survival, comprehensive care, information needs, quality of life, and relationships with partners/family showed that the majority of respondents in this study had a monthly income of less than 1 million rupiah. The analysis indicated that income significantly influenced unmet needs in the survival and partner/family relationship domains. Similar findings were reported in a study conducted by Hwang and Park (2006), which found that income below 2 million rupiah per month was a significant predictor of unmet needs. Low-income patients were more likely to report unmet needs in physical and daily living domains. Such patients may have limited resources to meet daily personal care and physical needs.

The relationship between the length of diagnosis and unmet needs in survival, comprehensive care, information needs, quality of life, and relationships with partners/family showed that the majority of respondents had been diagnosed for more than one year. The analysis revealed that the duration of diagnosis significantly influenced the information needs domain. Similar results were

also observed in a previous study conducted by El-Kass (2021), which found that most respondents had been diagnosed for more than one year. The study reported that undergoing cancer treatment can affect nearly every aspect of daily life, including incontinence, bowel problems, sexual dysfunction, weight changes, sleep disturbances, and fatigue.

The relationship between employment status and unmet needs in survival, comprehensive care, information needs, quality of life, and relationships with partners/family showed that the majority of respondents in this study were employed. The analysis indicated that employment status significantly influenced unmet needs in the partner/family relationship domain. Similar findings were reported in a study conducted by Okamura, M., Fujimori, M., et al. (2021), which identified factors associated with unmet needs, revealing that changes in employment after a cancer diagnosis and poor social support were linked to unmet needs in psychological aspects, the healthcare system, information needs, as well as family care and support.

Based on the findings of this study, the dominant factor contributing to unmet needs was employment status. The results also showed that the majority of respondents were employed. Socioeconomically disadvantaged patients may face greater barriers in accessing healthcare services for cancer treatment and follow-up care. Indirect treatment costs, which are not covered by insurance, as well as complex and time-consuming referral systems, were identified as major barriers for Indonesian cancer patients in seeking healthcare services (Chae, B.J., Lee, J., et al., 2019).

4. CONCLUSION

This study found that the factors contributing to unmet survival needs among female reproductive cancer patients are income. The factors contributing to unmet comprehensive care needs among female reproductive cancer patients showed no significant contribution from age, education, income, length of diagnosis, or employment. The factor contributing to unmet information needs among female reproductive cancer patients is length of diagnosis. The factor contributing to unmet quality of life needs among female reproductive cancer survivors is age. The factors contributing to unmet relational needs among female reproductive cancer patients are income and employment. The dominant factor contributing to unmet needs among female reproductive cancer patients is employment.

Suggestions

Nurses can take an approach using nursing care to assess the extent of unmet needs in female reproductive cancer patients. Nurses should understand the various conditions and requirements of

female reproductive cancer patients so that previously unmet needs can be properly fulfilled according to patient needs. It is also important to pay attention to assertiveness and empathy toward cancer survivors so that female reproductive cancer patients feel safe and comfortable.

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