



SYMPTOMS DEPRESSION AMONG ELDERLY WOMEN WITH CERVICAL CANCER: A PSYCHOLOGICAL PROFILE STUDY

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ABSTRACT

Depression is a psychological problem that often occurs in cancer patients due to an imbalance of neurotransmitters such as serotonin, norepinephrine, and dopamine that affect mood, anxiety, and cognition. This study aims to determine the relationship between elderly characteristics and depressive symptoms in cervical cancer patients. Method: The study used a descriptive design with a cross-sectional approach on 76 elderly respondents from a total population of 102 people, who were selected using purposive sampling based on inclusion and exclusion criteria. The research instrument used the Geriatric Depression Scale (GDS) with 15 questions, and the data were analyzed descriptively using a crosstab test. The results showed that most respondents were in the pre-elderly age (73.7%), unemployed (68.4%), married (82.9%), had suffered from cancer for more than six months (65.8%), and were in stage III (47.4%). Based on GDS measurements, the majority of respondents experienced mild depression (51.3%). The analysis showed a tendency that age, occupation, marital status, duration of illness, and cancer stage were related to the level of depression. Most elderly women with cervical cancer experience mild depression, so early screening and psychological intervention with a bio-psycho-social approach are needed to improve quality of life and treatment success.

Keywords: cancer; cervical; depression; elderly

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INTRODUCTION

Cancer is a major public health, social and economic problem in the 21st century, causing nearly one in six deaths (16.8%) and one in four deaths (22.8%) from non-communicable diseases (NCDs) worldwide (Bray et al., 2024). One type of cancer is cervical cancer. With the aging population, the number of new cancer diagnoses worldwide is expected to triple by 2050 (Pilleron et al., 2021). The risk of tumor development and death in the population aged 70 years is 11 and 16 times higher than in the population <65 years. Based on clinical practice, early diagnosis of cancer in elderly patients is often difficult due to complex and atypical clinical symptoms (Yoshida & Inoue, 2021). A cancer diagnosis is often accompanied by negative impacts on mental health, such as changes in body image and function, persistent pain, stress and anxiety, depression, and fear of cancer recurrence and death (Hermanto et al., 2019). The prevalence of depression is reported to be high in older adults with cancer and depression often goes undetected in the older population with cancer. (Gu et al., 2020).

Depression is a common psychological problem in cancer patients. It occurs when there is a disruption or imbalance of the neurotransmitters serotonin, norepinephrine, and dopamine in the parts of the brain that regulate mood, anxiety, cognition, and fear. This can lead to negative impacts such as prolonged chemotherapy, cognitive impairment, increased suicide rates, increased patient perception of pain, decreased sensitivity to treatment efficacy, and prolonged hospitalization

(Muthmainah & Wiyono Nanang, 2017; Sari, 2019). Symptoms of depression include a depressed mood or loss of pleasure or interest in activities for a prolonged period of time (World Health Organization, 2023). Other symptoms, such as neurovegetative symptoms, including fatigue, loss of appetite or weight, and insomnia, are very common in other medical illnesses (Malhi & Mann, 2018b). Based on the results of previous research, the data on depression in cancer patients undergoing chemotherapy showed that most of them had mild depression, 15 respondents (53.57%), 5 (17.86%) respondents experienced moderate depression, 8 (28.57%) respondents did not experience depression (Yogi et al., 2018). Inappropriate management strategies for depressive symptoms can lead to greater disease-related distress and poor adjustment to treatment.

Symptoms of depression arise from poor coping mechanisms. If a cancer patient has good or adaptive coping mechanisms, they are able to deal with problems effectively. If they have poor or maladaptive coping mechanisms, they are unable to deal with problems effectively, leading to negative thoughts that negatively impact the individual (Elis & Daeli, 2018). Coping occurs automatically when an individual perceives a stressful or threatening situation. The individual then takes action to address the tension as quickly as possible. The individual then evaluates the situation and then decides which coping mechanisms to employ. Coping reactions to problems vary widely from one individual to another and over time within the same individual (Nadati & Mulayyah, 2019). The results of previous research showed that the majority of cancer sufferers had negative coping mechanisms, namely 91 people (94.8%) out of 96 respondents (Andinata et al., 2020). Supported by the results of previous research, it shows that the majority of respondents who had adaptive coping experienced at least 51 respondents (75%) of depression, and 9 respondents with maladaptive coping experienced moderate depression (52.9%) (Widiyanti et al., 2022). The aim of this study was to determine the relationship between characteristics and symptoms of depression.

METHOD

This research is a descriptive study with a cross-sectional approach. The population in the study was 102 elderly people with cervical cancer, and based on the results of calculations using the sample determination formula, the number of samples was 76 respondents. The sampling technique used was purposive sampling by considering the inclusion and exclusion criteria that have been set. The questionnaire used was the Geriatric Depression Scale (GDS) which contains 15 questions with the answer "YES" (questions number 2, 3, 4, 6, 8, 9, 10, 12, 14, 15) with a score of 1, the answer "NO" (questions number 1, 5, 7, 11, 13) with a score of 0. With the results of measuring scores of 0-4 (normal), 5-8 (mild depression), 9-11 (moderate depression), and 12-15 (severe depression). This questionnaire has been tested for validity and reliability in previous studies, the results obtained GDS-15 Indonesian version with Cronbach's alpha 0.755. The Indonesian version of the GDS-15 correlated with the Indonesian version of the HAM-D. ROC analysis showed an area under the curve (AUC) of 92.2% (95% CI 88.6%-95.7%), cut-off value = 5.50, sensitivity of 71.8%, and specificity of 87.6%. Conclusion: The Indonesian version of the GDS-15 showed good results for validity and reliability (Utami, 2020). The collected data were analyzed using crosstabs and descriptive analysis to describe the profile of depressive symptoms in elderly with cervical cancer. This research has passed ethical testing with number 098/VII/EC/P3M/STIKES/2025.

RESULT

Based on the research results presented in Table 1, it is known that the majority of respondents were in the pre-elderly age group (45–59 years), namely 73.7%. Most respondents were unemployed (68.4%) and were married (82.9%). Based on the duration of illness, the majority of respondents had suffered from the disease for more than 6 months (65.8%). In terms of medical conditions, most respondents were in stage III cancer (47.4%). Based on the results of measuring depression levels using the Geriatric Depression Scale (GDS), most respondents experienced mild depression (51.3%).

Table 1.
Respondent characteristics (n= 76)

Respondent characteristics	f	%
Age		
Pre-elderly (45-59)	56	73.7
Elderly (60-74)	20	26.3
Job	24	31.6
Working	52	68.4
Not Working		
Status	63	82.9
Married	13	17.1
Divorced		
Duration of Illness	26	34.2
6 months	50	65.8
> 6 months		
Cancer Stage		6.6
I	5	
II	32	42.1
III	36	47.4
IV	3	3.9
Depression		
normal	20	26.3
mild depression	39	51.3
moderate depression	15	19.7
severe depression	2	2.6

Table 2.
Characteristics of depression in elderly (n= 76)

Variable	Depression			
	Normal	Normal	Moderate	Severe
Age				
Pre-elderly (45-59)	13	28	13	2
Elderly (60-74)	7	11	2	0
Job				
Working	8	12	12	1
Not Working	12	27	15	1
Status				
Married	18	32	12	1
Divorced	2	7	3	1
Duration of Illness				
6 months	5	15	6	0
> 6 months	15	24	9	2
Cancer Stage				
I	1	4	0	0
II	10	15	5	2
III	9	19	8	0
IV	0	1	2	0

Depression rates were higher in the elderly (60–74 years) than in the pre-elderly. Most elderly individuals experienced mild to moderate depression, indicating that the older the patient, the higher the risk of developing depression. Unemployed respondents had a higher proportion of depression than employed respondents. This suggests that employment status influences psychological well-being, as unemployment can increase the risk of depression due to reduced activity and social support. Divorced or single respondents tended to experience more severe depression than those who were still married. Emotional support from a partner plays a significant role in reducing the risk of depression. Respondents with an illness lasting more than six months showed higher levels of depression than those with an illness lasting less than six months. This suggests that the longer a person suffers from a chronic illness, the greater the likelihood of experiencing psychological distress and depression. Most respondents with stage II and III cancer experienced mild to moderate depression, while those with stage IV cancer experienced more severe depression. This suggests that the higher the stage of cancer, the more severe the depression experienced by patients.

DISCUSSION

This study shows that some elderly women with cervical cancer experience significant depressive symptoms. This finding is consistent with previous studies that reported a prevalence of depressive symptoms in elderly women with cancer of approximately 14.9% (Prajuli et al., 2021). Physiologically, depression in the elderly occurs due to changes in the function of brain neurotransmitters, such as decreased levels of serotonin, dopamine, and norepinephrine, which play a role in regulating mood, motivation, and cognition (Malhi & Mann, 2018a). In addition, the aging process causes degeneration of the central nervous system which has an impact on disrupting the chemical balance of the brain so that the elderly are more susceptible to mood disorders (Cotter et al., 2020). This condition is exacerbated by chronic diseases and multimorbidity, such as cancer, hypertension, or diabetes, which increase physiological and psychological stress (Bao et al., 2025).

According to the psychosocial aspect, the elderly often face loss, one of which is a life partner, a decline in social roles in the family or society, which results in experiencing disruption of social interaction (Zhang et al., 2023). The negative impact is social isolation, which can worsen feelings of loneliness and cause depression (Li et al., 2024). In the context of cervical cancer, older adults experience additional psychological stress due to fear of death, treatment side effects, and the social stigma that persists in Indonesian society. More than 60% of cervical cancer patients experience moderate to severe depression and anxiety, which are closely associated with a reduced quality of life (Azizi et al., 2023).

The study also found that the majority of respondents with advanced disease and a disease duration of more than six months showed higher levels of depression compared to respondents with early disease. This finding aligns with previous research that suggests that disease burden and length of treatment increase the risk of depression due to physical exhaustion, chemotherapy side effects, and uncertainty about recovery (Gu et al., 2020). Age is also an important factor, where the elderly tend to experience a decreased ability to adapt to stress due to illness, so they are more prone to mood disorders than younger age groups (Fidecki et al., 2025). Marital status also influences depression levels; respondents who are unmarried or have lost a spouse are at higher risk due to reduced emotional and social support, which acts as a protective factor against psychological stress. In older adults with chronic illnesses, such as cancer, the physical and psychological burden of the condition, including pain, dependence, and functional decline, exacerbate depressive symptoms (Gontijo Garcia et al., 2023).

CONCLUSION

This study shows that most elderly women with cervical cancer experience mild depression, and a small proportion experience moderate to severe depression. This condition illustrates that depression is a common psychological problem in elderly people with chronic diseases such as cervical cancer, which is influenced by various factors, including advanced age, marital status, employment, duration of illness, and cancer stage. Older women, those who are unemployed, unmarried, and those with advanced cancer and a disease duration of more than six months tend to have higher levels of depression. These findings emphasize the importance of early screening and integrated psychological interventions in cervical cancer care, particularly in the elderly population, to prevent negative impacts on quality of life and treatment success. Therefore, a bio-psycho-social approach needs to be implemented comprehensively in nursing and oncology services for elderly people with cervical cancer.

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