Article

Anxiety and Depression of Cancer Patients: Phylosophical Review of Psychological Aspects

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Abstract: Introduction: Cancer is a group of diseases caused by uncontrolled and abnormal cell growth caused by the accumulation of genetic and epigenetic changes. Based on data from Dr Kariadi Hospital in 2021, lung cancer, breast cancer, and cervical cancer were 1,259 cases, this incident increased significantly from 2020. Based on the data obtained, the sequence of lung cancer cases was 241, breast cancer 623 , and cervical cancer 395. Both cancer and its treatment can weaken the patient's immune system, this is what makes cancer sufferers have a risk of anxiety and depression. **Objective:** To find out the description of anxiety and depression in cancer patients at RSUP Dr. Kariadi Semarang. **Methods:** The design of this study was descriptive quantitative, with a population of 56 patients and calculated using a stratified random sampling formula so that a sample of 49 respondents was obtained. The instrument or measuring instrument in this study used the Hospital Anxiety and Depression Scale (HADS). **Results:** Most cancer patients experienced mild anxiety and did not experience depression or at normal levels, from the number of respondents as many as 49 respondents, 27 respondents experienced mild anxiety (55.1%) and did not experience depression or at normal levels as many as 22 respondents (44, 9%). **Suggestion:** It is hoped that it can provide input for nurses to provide counseling to patients as an effort to reduce the anxiety and depression felt by patients.

Keywords: cancer; anxiety; depression

1. Introduction

Cancer is an important global health issue, accounting for more than 10 million deaths in 2018. There are many types of cancer including breast cancer, cervical cancer, bone cancer, brain cancer, blood cancer, gland cancer, and various types of cancer that occur in various body tissues[1]. Cancer is a group of diseases causedn by abnormal and uncontrolled cell growth caused by the accumulation of genetic and epigenetic changes [2]. Cancer is often known as a tumor, but not all tumors are cancerous. Cancer is a general term in jenis tumor malignant. Kanker can menimpa all orang, on seeach body, dan every age, but is more commonly found at the age of 40 years [3].

Cancer is a group of diseases caused by uncontrolled and abnormal cell growth caused by the accumulation of genetic and epigenetic changes [2]. Based on data from RSUP Dr Kariadi 2021, lung cancer, breast cancer, and cervical cancer, there are 1,259 cases of this incident, up significantly from 2020. Based on the data obtained, the sequence of cases of lung cancer incidence was 241, breast cancer 623, and cervical cancer 395[4]. This disease is characterized by the uncontrolled growth of cells, which can infiltrate and damage healthy cells in the body. Generally, before the cancer spreads or damages the tissue cells around it, people do not feel any complaints or symptoms [3]. Cancer is a chronic disease that affects emotional status and changes in daily activities, causing physiological and psychological problems [5].

The stigma of cancer that is synonymous with suffering and indignity makes for a stressful disease for patients diagnosed. According to Globocan 2018 data in 2018 there

were 18.1 million new cases, about 9.6 million experienced deaths, and the total sufferers were about 43.5 million. Indonesia alone has a total of 348,809 new cases and a death rate of 207. The 210 most common types of cancer are breast, cervical, lung, colorectal, and liver cancers.[1]. This condition shows that cancer is closely related to death so that a person who experiences it is likely to experience psychological problems [6].

Various treatment methods for cancer patients have been developed in many countries including Indonesia. One of the most commonly used cancer treatment metolde is chemotherapy. Chemotherapy is a form of cancer treatment by giving anti-cancer drugs in the form of liquid pills or capsules that can be given through an IV that aims to kill cancer cells [7].

In cancer and its treatment, it can weaken the patient's immune system. Cancer causes a weakened immune system if cancer cells spread in the bone marrow where white blood cells are produced. Generally, leukemia and lymphoma cancer can weaken the immune system, but some other types of cancer also weaken the immune system[3]. In chemotherapy, it is not only about cancer cells, but also about cells found throughout the body. Chemotherapy thickening has side effects on the physical and psychological. Physical side effects that occur are anemia, diarrhea, fatigue, hair loss, vomiting nausea, weight loss, anorexia, and constipation.[7]. These side effects have an impact on the patient's psychology so that the patient feels uncomfortable, anxious, and even depressed to undergo chemotherapy treatment [6]. Based on the diagnosis from doctors in 2021 at RSUP Dr. KARIADI Semarang, as many as 1,257 people suffered from lung cancer, breast cancer, and cervical cancer. [4]

Psychosocial problems were found in the study among 6213 cancer patients who experienced depression as much as 23.4% and17.7% experienced anxiety [5]. In a study conducted on 112 women with breast cancer, it was found that the prevalence of 43.4% experienced depression and 56.2% experienced anxiety [8]. Events that can contribute to the incidence of psychosocial disorders are the cancer itself, treatment, and the impact of cancer which is continuously considered a bad event. Suffering from cancer itself has become a great stressor and resulted in anxiety about function, social values, finances, family burdens, and death. In addition to this, cancer treatment will produce an impact that creates discomfort both physical and psychological. The study conducted mentioned an increase in anxiety and depression of cancer patients before or after undergoing chemotherapy treatment [9].

2. Methods

The type of research used in this study is quantitative research. This study used a quantitative descriptive research design. Quantitative descriptive is a type of research whose specifications are systematic. The design of this study uses analytical methods through the *Cross Sectional* approach. Cross-sectional research design is a study that studies the correlation between exposure or risk factors (independent) with consequences or effects (dependent), with data collection carried out simultaneously at one time between risk factors and their effects meaning that all variables, both independent variables and dependent variables, are observed at the same time [10]. The population in this study was the number of patients with lung cancer, breast cancer, and cervical cancer in December 2021, a total of 56 patients at RSUP Dr Kariadi Semarang, Central Java. The determination of the number of samples can be done by means of statistical calculations, namely by using a stratified random sampling formula used to determine samples from a known population of 56 patients and obtaining the results of 49 respondents. The instrument or measuring instrument for data collection in this study used the *Hospital Anxiety and Depression Scale* (HADS). This instrument test uses a validity test, which is an index used to determine the tool to measure correctly or validly. In the reability test that has been carried out on stroke patients as many as 20 people, a HADS scale was found, namely 0.076 (p < 0.01) for the anxiety subscale and 0.681 (p < 0.01) for the depression subscale [11]. So that the HADS scale can be used as a reliable or trustworthy inspection instrument.

3. Results

Data collection was obtained by filling out a questionnaire with a total of 49 respondents. Where this sample was grouped based on the characteristics of respondents, where the characteristics included age, gender, education, and duration of diagnosis.

3.1. Characteristics of Respondents

Based on data collection at RSUP Dr Kariadi Semarang, the number of respondents was obtained by 49 respondents and the characteristics in this study included age, gender, education, and duration of diagnosis.

Table 1. Frequency of respondents based on age, gender, education and duration of diagnoses.

Characteristics	f	%	Mean	Std. Deviation	Min	Max
Age			44,72	13,791	26	62
Adult	3	6,1				
Late adult	15	30,6				
Elderly	24	49,0				
Late elderly	7	14,3				
Gender						
Male	5	10,2				
Female	44	89,8				
Education						
Elementary	15	30,6				
Junior high	7	14,3				
High school	16	32,7				
Diploma	5	10,2				
Bachelor	6	12,2				
Duration of diagnoses			2	4,917	4	65,3
1-6 months	16	32,7				
7-12 months	15	30,6				
1 year or more	18	36,7				

The characteristics of respondents based on table 4.1 showed that the most respondents were in the early elderly category with vulnerable aged 46-55 years (49%) and the least were early adults with vulnerable age 26-35 years (6.1%). The characteristics of respondents by gender showed that the most respondents were women with a frequency of 44 respondents or 89.8% and men with a frequency of 5 or 10.2%. The characteristics of respondents based on gender showed that the most respondents were with a high school education level of 16 respondents or 32.7% and the fewest respondents were with a Diploma education level of 5 respondents or 12.2%. The characteristics of respondents based on the length of time diagnosed with cancer were at most 1 year more with a frequency of 18 respondents or 36.7% and the least was 7-12 months with a frequency of 15 respondents or 30.6%.

3.2. Anxiety and Depression in Cancer Patients

Based on the results of the research carried out, the anxiety level was obtained

Table 2. Frequency of anxiety level.

Level of anxiety	frequency(f)	presentage (%)
normal	16	32,7
mild	27	55,1
middle	6	12,2
Total	49	100

The level of anxiety rate according to table 4.2 is the most in the mild anxiety level of 27 respondents or 55.5% and the least level is moderate anxiety, which is 6 respondents or 12.2%.

Based on the results of the research conducted, the category of depression level was obtained

Table 3. Frequency of depression.

Level of depression	frequency (f)	presentage (%)
normal	22	44,9
mild	21	42,9
middle	6	12,2
Total	49	100

The category of depression levels according to table 4.3 is the most at the normal level of 22 respondents or 44.9% and the least level is moderate depression, which is 6 respondents or 12.2%.

4. Discussion

4.1. Characteristics of Respondents

4.1.1. Age

The results of the study conducted on respondents showed that the average age of respondents was 44.72 years. In the age category, respondents mostly showed that the most respondents were in the early elderly category with vulnerable aged 46-55 years (49%) and the least were early adults with vulnerable age 26-35 years (6.1%). The results of this study are supported by the results of research from [12] which states that the relationship of age with anxiety due to individual maturity will affect the coping ability of an individual's mechanism that is more difficult to experience anxiety because individuals have a greater adaptability to anxiety than they are not yet mature. From this it follows that the more mature a person is in age, the better the mechanism of adaptation to anxiety or depression. Age correlates with experience, experience correlates with knowledge, understanding and views on a disease or event so that it will form perceptions and attitudes. Here is also supported by the results of research conducted [13] his research mentions more in the early elderly who experience more severe anxiety. This is because there is not much experience in dealing with stress so that their coping mechanisms still need to be formed properly.

4.1.2. Gender

The results of the study showed that the characteristics of respondents showed that the most respondents were women with a frequency of 44 respondents or 89.8% and men with a frequency of 5 respondents or 10.2%. The findings from the study could be due to the type of cancer that the average sufferer is female. These results are supported by the results of studies from [14] which found that women experienced higher anxiety than men but found that anxiety had no relationship with demographic factors such as age, ethnicity, age, education, religion, marital status, length of illness since diagnosis, severity of disease, and location of cancer. This is also supported by studies conducted by [15] which

found that female patients were twice as many as male patients. 68.2% of female patients were caused by more female patients than men and fewer male cancer patients undergoing chemotherapy.

4.1.3. Education

The results showed based on the type oflamin in the table that the most respondents were with high school education tiers of 16 respondents or 32.7% and the fewest respondents were with Diploma education levels of 5 respondents or 12.2%.   This result is supported by theory [16] where knowledge or cognitive is an important domain for the formation of actions, behaviors based on knowledge will be more lasting than those that are not based on knowledge. This is also supported from the results of studies conducted by [15] which found that the dominant cancer patients had a high school education of 39.4%.

4.1.4. Duration of Diagnoses

The results showed that the characteristics of respondents based on the duration of diagnosis of cancer were at most 1 year more with a frequency of 18 respondents or 36.7% and the least was 7-12 months with a frequency of 15 respondents or 30.6%. These results are supported by research [14] which mentions that patients who are diagnosed with more than 12 months have higher psychological problems, are easily disturbed and alertness increases. This condition can get worse in patients who experience a recurrence of the disease.

4.2. *Overview of Anxiety and Depression in Cancer Patients*

4.2.1. Ansietas

In this study, results were obtained in the form of the most anxiety level categories were at the mild anxiety level of 27 respondents or 55.5% and the least level was moderate anxiety, namely 6 respondents or 12.2%. In this anxiety, respondents of the female sex contributed the largest number in mild-level anxiety, namely a number of 24 respondents or 49% and ansietas was being found in women with a figure of 6 respondents or .For the early adult age category, the highest number of mild-level anxiety diagnoses was 14 respondents or 29% and moderate anxiety was found in the late elderly as many as 3 respondents or . In the long-diagnosed category of respondents with 7-12 months suffering from cancer, 12 respondents or 24% experienced mild-level anxiety, this is the highest rate in this category and the lowest number is obtained in respondents diagnosed with 1-6 months and 7-12 months with a number of 2 or if in a percentage of it is as large.

These results are supported on the study [14] which found that women experienced more higher anxiety than men but here it was found that anxiety had no relationship with demographic factors such as age, ethnicity, age, education, religion, marital status, length of illness since diagnosis, severity of disease, and location of cancer. This result is also in line with [12] which states that the relationship of age with anxiety due to individual maturity will affect the coping ability of an individual who is more difficult to experience anxiety because the individual has a greater adaptability to anxiety than the age that has not matur. From this it follows that the more mature a person is in age, the better the mechanism of adaptation to anxiety or depression. Age correlates with experience, experience correlates with knowledge, understanding and views on a disease or event so that it will form perceptions and attitudes. In the long period of diagnosis strengthened ber based on the results of research from [17] that the majority of people with cancer experienced illness with a time span of 1-12 bulan in 33 respondents (73.3%).

4.2.2. Depression

For the results of the depression category in this study, the most results were obtained at the normal level of 22 respondents or 44.9% and the least level was moderate depression, namely 6 respondents or 12.2%. In the early elderly age category, the highest number at the normal level was 12 respondents or 24% and the least was in early

adulthood at normal and moderate levels. In the sex category 20 responden or 41% of women reported at normal levels this being the highest rate in this category and the lowest figure in male respondents with moderate levels amounting to 0 respondents or 0%. In the old category diagnosed with more than 1 year with 14 respondents or 29% at the normal level, this is the highest number in this category and the lowest is at the level of depression being over 1 year old.

The results of this gender criterion are supported by the study [18] which found that women experienced more depression than men due to the type of cancer suffered by most of the female sex. This result is also in line with [12] which states that the relationship of age with depression due to individual maturity will affect the coping ability of an individual who is more difficult to experience anxiety because individuals have a greater adaptability to anxiety than the age that has not matur. From this it follows that the more mature a person is in age, the better the mechanism of adaptation to anxiety or depression. Age correlates with experience, experience correlates with knowledge, understanding and views on a disease or event so that it will form perceptions and attitudes. In terms of length in line with research [14] which mentions that patients diagnosed for more than 12 months have higher psychological problems, are easily disturbed and alertness increases. This condition can get worse in patients who experience a recurrence of the disease.

5. Conclusion

From the results of research on the picture of anxiety and depression in cancer patients at RSUP DR. Kariadi Semarang, researchers can conclude:

1. The characteristics of respondents based on research conducted at RSUP DR. Kariadi Semarang can be seen that the average respondent is 44.72 with the youngest age of 26 years and the oldest age of 62 years with a standard deviation of 0.791. The gender of the respondents was mostly female as many as 44 respondents or 89.8% with the last level of education at most was high school as many as 16 respondents (32.7%) and most of the respondents diagnosed for more than 1 year amounted to 18 respondents or 36.7%

2. The ansietas and depression experienced by cancer patients at RSUP DR. Kariadi Semarang, most of the respondents experienced mild anxiety and depression at a normal level, from the number of respondents as many as 49 ansietas. This mild ansietas alone was 27 respondents (55.1%) and normal levels of depression were 22 respondents (44.9%).

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