

ORIGINAL RESEARCH

Mental Health Factors Identification of Cancer Patients in Hospital X

Ethical Approval No. 012103019

Identifikasi Faktor-Faktor Kesehatan Mental pada Pasien Kanker di Rumah Sakit X

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ABSTRACT

Background: The physical health of people living with cancer causes disturbances in mental health or mental health and affects sufferers' overall quality of life. As many as 34.4% of cancer patients in Indonesia experience depression due to anxiety and fear. **Purpose:** This research is to understand the mental health of cancer patients in hospitals and to know the relationship between mental health in cancer patients and other factors. **Methods:** This type of research is quantitative with a cross-sectional design. The analysis used in this study is the Pearson Chi-Square analysis. The independent variables used are respondent characteristics, family support, and spirituality, with the dependent variable being mental health. **Results:** The results of the study showed that cancer patients had the latest elementary school education (40.6%), status not working (61.5%), female (66.7%), early elderly (35.4%), 70.8% received moderate family support, 76% had moderate spirituality, 51% experienced moderate stress, and 57.3% had depression. The characteristics of respondents in this study, namely gender, education, occupation, and spiritual factors, were not associated with mental health in cancer patients. **Conclusion:** The result shown that age and family support are related to the mental health of cancer patients, while other characteristics and spirituality has no relationship with mental health.

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ABSTRAK

Latar Belakang: Kesehatan fisik penderita kanker menyebabkan gangguan pada kesehatan mental atau kesehatan mental dan mempengaruhi kualitas hidup penderita secara keseluruhan. Sebanyak 34,4% penderita kanker di Indonesia mengalami depresi akibat kecemasan dan ketakutan. **Tujuan:** Penelitian ini untuk mengetahui kesehatan jiwa pasien kanker di rumah sakit dan mengetahui hubungan antara kesehatan jiwa pasien kanker dengan faktor lainnya. **Metode:** Jenis penelitian ini adalah kuantitatif dengan desain cross sectional. Analisis yang digunakan dalam penelitian ini

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adalah analisis Pearson Chi-Square. Variabel bebas yang digunakan adalah karakteristik responden, dukungan keluarga, dan spiritualitas, dengan variabel terikatnya adalah kesehatan jiwa. **Hasil:** Hasil penelitian menunjukkan pasien kanker berpendidikan terakhir SD (40,6%), status tidak bekerja (61,5%), perempuan (66,7%), lanjut usia dini (35,4%), 70,8% mendapat dukungan keluarga sedang, 76% memiliki spiritualitas sedang, 51% mengalami stres sedang, dan 57,3% mengalami depresi. Karakteristik responden dalam penelitian ini yaitu jenis kelamin, pendidikan, pekerjaan, dan faktor spiritual tidak berhubungan dengan kesehatan jiwa pada pasien kanker. **Kesimpulan:** Hasil penelitian menunjukkan bahwa usia dan dukungan keluarga berhubungan dengan kesehatan mental pasien kanker, sedangkan karakteristik lain dan spiritualitas tidak berhubungan dengan kesehatan mental.

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INTRODUCTION

One of the leading causes of death in the world today is cancer. In 2018, 9.8 deaths occurred due to cancer. There are various types of cancer. The cancers that contribute to morbidity and mortality are lung cancer, breast cancer, colorectal cancer, prostate cancer, skin cancer, and liver cancer. Approximately 70% of cancer deaths occur in low- and middle-income countries (WHO, 2017).

Based on the 2013 Basic Health Research, the prevalence of people living with cancer in Indonesia's population of all ages is 1.4 per cent. Indonesia is one of the lower-middle economic category countries. The number of people living with cancer in Central Java province has the highest estimate of people living with cancer, 68,638 people (Kementrian Kesehatan RI, 2015). Cancer cases in Central Java have a fairly high incidence of cancer. Cancer is still the main cause of morbidity and mortality, with 1.5 per cent of cervical cancer cases and 0.6 per cent of breast cancer (Dinas Kesehatan Provinsi Jawa Tengah, 2019).

Research conducted by Khoiriyah & Handayani (2020) states that there are 34% of women cancer patients suffer from mental health. Another study also found that as many as 25.71 percent of cancer patients had low depression, 45.71 percent had moderate depression, and 28.58 percent had severe depression (Widoyono et al., 2017).

Depression experienced by cancer patients usually begins when a person is diagnosed with cancer, and then the stage status of cancer

continues. This condition will affect people living with cancer to feel depressed, stressed, to depression (Khoiriyah & Handayani, 2020). This cancer does not only cause physical problems but also impacts psychology and causes psychological pressure so that it is declared stressed (Kemenkes RI, 2015).

Cases of mental health disorders such as depression, stress, depression in cancer patients are influenced by several factors, including age, education level, occupation, and place of residence. The advanced age of a cancer patient can increase his anxiety because physically, the elderly are old, uncertainty can also arise because of the low cure rate and other congenital diseases. Anxiety can also arise because of knowledge that has or lack of education. Hence, it will cause mental disorders in dealing with the disease. The limitations of doing activities for the elderly or with chronic diseases result in limitations in socializing (Khoiriyah & Handayani, 2020), making the people living with cancer feel more lonely and isolated.

Family support also affects severe depression in cancer patients indirectly (Shinta et al., 2019). Support from family or people closest to people living with cancer is Indonesia's most important and reasonable support. The family is the main party that provides support when someone experiences problems or is sick (Pradhatmo et al., 2017). Family support will affect the psychology of cancer patients because cancer patients will feel reassured, consoled, and loved (Vrontaras, 2018). Spiritual support can also positively impact; prayer can provide peace because it can improve the individual's relationship with God. Besides that, prayer also improves the

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There are 34% of women cancer patients who suffers from mental health (Khoiriyah&Handayani, 2020)

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patient's quality of life which includes physical and mental (Wiksuarini et al., 2018).

Family support and spirituality have a very close relationship. With family support, other family members can give each other strength and can help in solving problems. In family support, there is spiritual support which is one way to overcome problems. The background of the researchers is to understand the mental health of cancer patients in hospitals and to know the relationship between mental health in cancer patients and other factors.

METHODS

This research is quantitative research with an observational analytic method conducted with a cross-sectional approach. Cross-sectional research is a study where the measurement is carried out only once, and the risk factors and disease are observed at the same time (Susilani & Wibowo, 2018). This study aims to determine the factors associated with the mental health of cancer patients at Hospital X. The independent variables in this study were the characteristics of the respondents (it is about the age, gender, occupation, and education of the cancer patients), family support (the relationship between the cancer patients with the family), and the condition of cancer patients especially about their spirituality. The dependent variable in this study is the mental health of cancer patients.

The sample in this study uses a purposive sampling technique, namely sampling based on subjective considerations on the condition that the respondent can provide information from the researcher's questions (Susilani & Wibowo, 2018). The sample size is calculated based on the sample formula for calculating the cross-sectional survey. The research instruments and tools used are the Center for Epidemiological Studies Depression Scale (CES-D) Questionnaire, Perceived Stress Scale (PSS), Development of The Family Support Scale (FSS) for Elderly People, Daily Spiritual Experience Scale (DSES).

RESULTS

Characteristic of Respondents

Patient characteristics are important as a basic reference for a study. The characteristic describes the subjects to be studied. The following are the characteristics of the respondents in this study described in the frequency distribution based on

the characteristics of cancer patients in Hospital X, as shown in Table 1.

The result are contains of the output of the research, it should be clear and concise. The result should describe or summarize the authentic findings, valid, and in accordance with the objectives and methods of research.

Examples of writing the statistic:

The risk of secondhand smoke exposure on the incidence of anemia in pregnant mothers OR = 4.09; 95% CI (1.07 < OR < 16.26). Results showed that the environmental risks of TB incidence is $p = 0.02$ with $\alpha = 0.05$. Odds Ratio, Chi square.

Table 1
Frequency Distribution of Characteristics of Cancer Patients in Hospital X

Characteristic	n	%
Age		
Late Adolescence (17-25 Years Old)	5	5.2
Early Adults (26-35 Years Old)	7	7.3
Late Adults (36-45 Years Old)	20	20.8
Early Elderly (46-55 Years Old)	34	35.4
Late Elderly (56-65 Years Old)	19	19.8
Seniors (>65 Years Old)	11	11.5
Gender		
Male	32	33.3
Female	64	66.7
Occupation		
Employment	37	38.5
Unemployment	59	61.5
Education		
Not going to school	13	13.5
Elementary School	39	40.6
Junior High School	26	27.1
Senior High School	18	18.8
Associate degree	0	0
Bachelor/Master/PhD	0	0

Source: Primary Data, 2021

Table 1 shows the frequency distribution of the characteristics of cancer patients in Hospital X. It can be seen from the age of cancer patients, 35.4 per cent are the early elderly aged 46-55. For the gender, it is mostly occurring in women as many

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as 64 patients (66.7%). Most of the respondents are not working (61.5%), but as many as 39 patients had a final education of Elementary School, which is equal to 40.6%.

Univariate Analysis

The frequency distribution of family support in cancer patients in hospitals can be seen in Table 2.

Table 2
Frequency Distribution of Family Support, Spirituality, and Mental Health of Cancer Patients

	n	%
Family Support		
Low	16	16.7
Moderate	68	70.8
High	12	12.5
Total	96	100
Spirituality		
Low	0	0
Moderate	73	76
High	23	24
Total	96	100
Spirituality		
Absolutely not	0	0
Somewhat close	49	51
Close	43	45
Very close	4	4
Total	96	100
Stress		
Low	39	40.6

	n	%
Moderate	49	51
High	8	8.3
Total	96	100
Depression		
No	41	42.7
Yes	55	57.3
Total	96	100

Source: Primary Data, 2021

Most cancer patients receive moderate family support equal to 70.8% (68 patients). It is shown that most cancer patients have a moderate spirituality level (76%). the frequency distribution of spirituality regarding proximity to God in cancer patients at X Hospital, it is known that most cancer patients feel somewhat close to God as many as 49 respondents, which is equal to 51%. From the Tabel 2, shown that most cancer patients experience moderate stress, as many as 49 respondents (51%) and experiencing depression as many as 55 respondents (57.3%).

Bivariate Analysis

Age has a significant relationship with mental health (stress) in cancer patients, as shown in Tabel 3 and family support has a significant relationship with mental health (depression), as shown in Table 4. It is known that from a total of 96 cancer patients, in total there are eight people categorized having high stress level, ranging from late adults (36-45 years old) to late elderly (56-65 years old).

Table 3
Relationship between Characteristics of Cancer Patients and Mental Health (Stress) at Hospital X

Characteristics	Stress						N	P-value
	Low		Moderate		High			
	n	%	n	%	n	%		
Age (Years Old)								
Late Adolescence: 17-25	4	4,2	1	1,0	0	0	5	5,2
Early Adults: 26-35	1	0,0	7	7,3	0	0	7	7,3
Late Adults: 36-45	12	12,5	7	7,3	1	1	20	20,8
Early Elderly: 46-55	16	16,7	13	13,5	5	5,2	34	35,4
Late Elderly: 56-65	5	5,2	12	12,5	2	2,1	19	19,8
Seniors: >65	2	2,1	9	9,4	0	0	11	11,5
Gender								
Male	11	11,5	18	18,8	3	3,1	32	33,3
Female	28	29,2	31	32,3	5	5,2	64	66,7
Occupation								
Employment	27	28,1	25	26	7	7,3	59	61,5
Unemployment	12	12,5	24	25	1	1	37	38,5

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Characteristics	Stress						N		P-value
	Low		Moderate		High		N	%	
	n	%	n	%	n	%	N	%	
Education									
Not going to school	4	4,2	6	6,3	3	3,1	13	13,5	0,541
Elementary School	16	16,7	21	21,9	2	2,1	39	40,6	
Junior High School	13	13,5	11	11,5	2	2,1	26	27,1	
Senior High School	6	6,3	11	11,5	1	1	18	18,8	
Associate's Degree	0	0	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	0	0	

Family Support									
Low	2	2,1	12	12,5	2	2,1	16	16,7	0,19
Moderate	32	33,3	33	34,4	3	3,1	68	70,8	
High	5	5,2	4	4,2	3	3,1	12	12,5	
Spirituality									
Low	0	0	0	0	0	0	0	0	0,153
Moderate	32	33,3	37	38,5	4	4,2	73	76,0	
High	7	7,3	12	12,5	4	4,2	23	24,0	

Source: Primary Data, 2021

Table 4
Relationship between Characteristics of Cancer Patients and Mental Health (Depression) at Hospital X

Characteristics	Depression				N		P-value
	No		Yes		N	%	
	n	%	n	%			
Age (Years Old)							
Late Adolescence: 17-25	3	3,1	2	2,1	5	5,2	0,304
Early Adults: 26-35	2	2,1	5	5,2	7	7,3	
Late Adults: 36-45	8	8,3	12	12,5	20	20,8	
Early Elderly: 46-55	19	19,8	15	15,6	34	35,4	
Late Elderly: 56-65	5	5,2	14	14,6	19	19,8	
Seniors: >65	4	4,2	7	7,3	11	11,5	
Gender							
Male	14	14,6	18	18,8	32	33,3	0,884

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Characteristics	Depression				N		P-value
	No		Yes		N	%	
	n	%	n	%			
Female	27	28,1	37	38,5	64	66,7	
Occupation	41	42,7	55	57,3	96	100	
Employment	28	29,2	31	32,3	59	61,5	0,235
Unemployment	13	13,5	24	25	37	38,5	
Education							
Not going to school	9	9,4	4	4,2	13	13,5	0,100
Elementary School	18	18,8	21	21,9	39	40,6	
Junior High School	9	9,4	17	17,7	26	27,1	
Senior High School	5	5,2	13	13,5	18	18,8	
Associate's Degree	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	
Family Support							
Low	2	2,1	14	14,6	16	16,7	0,01
Moderate	31	32,3	37	38,5	68	70,8	
High	8	8,3	4	4,2	12	12,5	
Spirituality							
Low	0	0	0	0	0	0	0,932
Moderate	31	32,3	42	43,8	73	76	
High	10	10,4	13	13,5	23	24	

Source: Primary Data, 2021

DISCUSSION

The Relationship between Cancer Patient Characteristics and Mental Health in Hospital X

The relationship between the characteristics of cancer patients, namely age and mental health, stress, has a significant relationship. The result aligns with Khoiriyah and Handayani (2020) research regarding women's emotional, mental health with cancer in Indonesia. The study explains that the older a person is, the more quickly his psychological condition will be disturbed. It can be because the older age will cause different anxiety levels, such as feelings of anxiety because there is no certainty about the disease he is suffering or because of his physical independence (Khoiriyah & Handayani, 2020).

In contrast to the characteristics of cancer patients, such as gender, occupation, and education, both stress and depression at Hospital X did not have a significant relationship. These results follow the research conducted by Utami et al. (2017), which examined the psychosocial aspects of breast cancer patients and the research conducted by Suwitianisa et al. (2015) regarding

the factors that influence depression in cancer patients treated at RSUD Arifin Achmad Riau Province.

Research conducted by Utami & Mutikasari (2017) explains no relationship between education and work with stress or depression. Research conducted by Suwitianisa et al. (2015) also states no significant relationship between and gender depression levels. Likewise, with the research conducted by Prima et al. (2020) that there is no relationship between age and gender with stress.

Women generally can be more expressive of their feelings and emotions. For example, psychologically, women are easier to cry as a form of emotional outburst and easier to persuade or change their beliefs (Nurhayati, 2018). This psychological change can make it easier for women to finally express concerns that are one of the beginnings of stress or depression and easier to return to positive thinking about what they are experiencing. In this study, education and work had no relationship to mental health, either stress or depression. It can happen because not everyone who has low education will have insufficient knowledge (Utami & Mustikasari, 2017). A person's knowledge can be obtained from family,

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society, or electronic media as a source of information (Suwistianisa et al., 2015). In addition, not everyone who does not work will be mentally disturbed because some people think that not working can be a time for them to be calmer and reduce external stressors.

Relationship between Family Support for Cancer Patients and Mental Health at Hospital X

In this study, it was found that family support has a relationship with mental health, in this case, depression. The result aligns with the research conducted by Suwistianisa et al. (2015) regarding the factors that influence the level of depression in cancer patients treated at the Arifin Achmad Hospital, Riau Province and research conducted by Yuliati et al. (2020) regarding the relationship between family support and depression in breast cancer patients.

14 cancer patients who received low family support and 68 cancer patients who received family support were experiencing depression. Family support can affect the psychology and emotional response of cancer patients and, of course, will help in the healing process of cancer patients (Suwistianisa et al., 2015). The family will help protect them or help overcome the mood problems of cancer patients. Families provide meaningful support for people living with cancer in the form of motivation and spirituality.

Cancer patients with low family support feel that they do not get enough support from the family. It might happen due to the lack of family interaction and the lack of information that cancer patients can obtain. Research also explains that low family support triggers depression. It can cause patients to experience severe pain (Su et al., 2017). The source of human strength that leads to the happiness of life can increase a person's immunity so that they can overcome the pain they suffer.

Therefore, special attention is needed in the treatment of cancer patients. One of them is with family support, especially from the closest family. With family support, cancer patients will feel more excited, valued, and motivated to undergo treatment for better conditions (Yuliati et al., 2020). Support from family or close people with cancer gives a feeling of being protected so that patients feel more comfortable with the disease they are suffering.

The Relationship between Spirituality of Cancer Patients and Mental Health in Hospital X

Spirituality of cancer patients with mental health did not have a significant relationship in Hospital X. The result is different from the research conducted by Wiksuarini et al. (2018) about spirituality and quality of life of cancer patients and Chaar et al. (2018) regarding evaluating the impact of spirituality on the quality of life, anxiety, and depression. A transverse observational study explains that spirituality is related to mental health among patients with cancer.

The previous research explains that spirituality has a relationship with mental health because high spirituality will change the mindset of patients who can be more able to accept their condition and live their illness with gratitude to God. Cancer patients will assume that their disease is the will of God. This situation will make cancer patients more intensive in carrying out worship to make cancer patients calmer and have hope for recovery (Wiksuarini et al., 2018).

However, other studies have shown that coping with spirituality can have an excellent mental health effect and can also be a lousy coping. If a person can associate his illness condition with a constructive attitude based on their faith, it can encourage adaptation to health and psychological adjustment to stress. However, if a person tends to see that their illness is a punishment for an existential crisis, then spiritual coping becomes negative (Rego & Nunes, 2019).

Although the concepts of religiosity and spirituality are offensive, the two things have different meanings. Spirituality can be related to one's religion. However, it can also be related to other things such as the experience one has in seeking meaning, purpose and well-being between oneself and others, with oneself or with the ultimate reality (Amir & Lesmawati, 2016).

The idea is aligned with the results of the distribution of spirituality frequencies regarding the proximity of cancer patients to God, which is as many as 49 cancer patients, 51% feel they have a "quite close" relationship with God. From the majority of Muslim cancer patients, not all of them have faith or attachment to their God even though when measured on average, they have moderate spirituality (73 patients) and high spirituality (23 patients).

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CONCLUSION

The analysis results show that the characteristics of cancer patients with mental health are influenced by age. Meanwhile, the respondent's characteristics in terms of gender, education, and occupation are not related to the mental health of cancer patients. Family support with mental health affects cancer patients, while spirituality in cancer patients has no relationship with mental health.

Based on the research, the researcher provides several suggestions. For Hospital X, it is hoped that it will continue to provide services or facilities to provide mental support for cancer patients and assist cancer patients in preventing mental health disorders due to their conditions. While for cancer patients in Hospital X, it is expected that the patients will continue to increase their confidence and ability in undergoing treatment to prevent mental disorders that can affect their physical condition. Last, for other researchers, the researchers suggest conducting further research on the factors that affect the mental health of cancer patients with more in-depth or qualitative methods.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article.

AUTHOR CONTRIBUTIONS

All authors are participating actively in research and article writing and partly responsible for the content of writing, including in the preparation and writing of concepts, designs, analysis, or revision of the article.

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ORIGINAL RESEARCH

Mental Health Factors Identification of Cancer Patients in Hospital X

Identifikasi Faktor-Faktor Kesehatan Mental pada Pasien Kanker di Rumah Sakit X

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ABSTRACT

Background: The physical health of people living with cancer causes disturbances in mental health or mental health and affects sufferers' overall quality of life. As many as 34.40% of cancer patients in Indonesia experience depression due to anxiety and fear. **Purpose:** This research is to understand the mental health of cancer patients in hospitals and to know the relationship between mental health in cancer patients and other factors. **Methods:** This type of research is quantitative with a cross-sectional design. The analysis used in this study is the Pearson Chi-Square analysis. There are 96 respondents for this research. The independent variables used are respondent characteristics, family support, and spirituality, with the dependent variable being mental health. **Results:** The results of the study showed that cancer patients had the latest elementary school education (40.60%), status not working (61.50%), female (66.70%), early elderly (35.40%), 70.80% received moderate family support, 76% had moderate spirituality, 51% experienced moderate stress, and 57.30% had depression. The characteristics of respondents in this study, namely gender, education, occupation, and spiritual factors, were not associated with mental health in cancer patients. **Conclusion:** The result shown that age and family support are related to the mental health of cancer patients, while other characteristics and spirituality has no relationship with mental health.

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ABSTRAK

Latar Belakang: Kesehatan fisik penderita kanker menyebabkan gangguan pada kesehatan mental atau kesehatan mental dan mempengaruhi kualitas hidup penderita secara keseluruhan. Sebanyak 34,40% penderita kanker di Indonesia mengalami depresi akibat kecemasan dan ketakutan. **Tujuan:** Penelitian ini untuk mengetahui kesehatan jiwa pasien kanker di rumah sakit dan mengetahui hubungan antara kesehatan jiwa pasien kanker dengan faktor lainnya. **Metode:** Jenis penelitian ini adalah kuantitatif dengan desain cross sectional. Analisis yang digunakan dalam penelitian ini

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adalah analisis Pearson Chi-Square. Terdapat 96 responden pada penelitian ini. Variabel bebas yang digunakan adalah karakteristik responden, dukungan keluarga, dan spiritualitas, dengan variabel terikatnya adalah kesehatan jiwa. **Hasil:** Hasil penelitian menunjukkan pasien kanker berpendidikan terakhir SD (40,60%), status tidak bekerja (61,50%), perempuan (66,70%), lanjut usia dini (35,40%), 70,80% mendapat dukungan keluarga sedang, 76% memiliki spiritualitas sedang, 51% mengalami stres sedang, dan 57,30% mengalami depresi. Karakteristik responden dalam penelitian ini yaitu jenis kelamin, pendidikan, pekerjaan, dan faktor spiritual tidak berhubungan dengan kesehatan jiwa pada pasien kanker. **Kesimpulan:** Hasil penelitian menunjukkan bahwa usia dan dukungan keluarga berhubungan dengan kesehatan mental pasien kanker, sedangkan karakteristik lain dan spiritualitas tidak berhubungan dengan kesehatan mental.

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INTRODUCTION

One of the leading causes of death in the world today is cancer. In 2018, 9.80% deaths occurred due to cancer. There are various types of cancer. The cancers that contribute to morbidity and mortality are lung cancer, breast cancer, colorectal cancer, prostate cancer, skin cancer, and liver cancer. Approximately 70% of cancer deaths occur in low- and middle-income countries (WHO, 2017).

Based on the 2013 Basic Health Research, the prevalence of people living with cancer in Indonesia's population of all ages is 1.40%. Indonesia is one of the lower-middle economic category countries. The number of people living with cancer in Central Java province has the highest estimate of people living with cancer, 68,638 people (Kementrian Kesehatan RI, 2015). Cancer cases in Central Java have a fairly high incidence of cancer. Cancer is still the main cause of morbidity and mortality, with 1.50% of cervical cancer cases and 0.60% of breast cancer (Dinas Kesehatan Provinsi Jawa Tengah, 2019).

There are 34% of women cancer patients suffer from mental health (Khoiriyah & Handayani, 2020). Another study also found that as many as 25.71% of cancer patients had low depression, 45.71% had moderate depression, and 28.58 percent had severe depression (Widoyono et al., 2017). Depression experienced by cancer patients usually begins when a person is diagnosed with cancer, and then the stage status of cancer continues. This condition will affect people living with cancer to feel depressed, stressed, to

depression (Khoiriyah & Handayani, 2020). This cancer does not only cause physical problems but also impacts psychology and causes psychological pressure so that it is declared stressed (Kemenkes RI, 2015).

Cases of mental health disorders such as depression, stress, depression in cancer patients are influenced by several factors, including age, education level, occupation, and place of residence. The advanced age of a cancer patient can increase his anxiety because physically, the elderly are old, uncertainty can also arise because of the low cure rate and other congenital diseases. Anxiety can also arise because of knowledge that has or lack of education. Hence, it will cause mental disorders in dealing with the disease. The limitations of doing activities for the elderly or with chronic diseases result in limitations in socializing (Khoiriyah & Handayani, 2020), making the people living with cancer feel more lonely and isolated.

Family support also affects severe depression in cancer patients indirectly (Shinta et al., 2019). Support from family or people closest to people living with cancer is Indonesia's most important and reasonable support. The family is the main party that provides support when someone experiences problems or is sick (Pradhatmo et al., 2017). Family support will affect the psychology of cancer patients because cancer patients will feel reassured, consoled, and loved (Vrontaras, 2018). Spiritual support can also positively impact; prayer can provide peace because it can improve the individual's relationship with God. Besides that, prayer also improves the

patient's quality of life which includes physical and mental (Wiksuarini et al., 2018).

Family support and spirituality have a very close relationship. With family support, other family members can give each other strength and can help in solving problems. In family support, there is spiritual support which is one way to overcome problems. This study aims to determine the factors associated with the mental health of cancer patients at Hospital X.

METHODS

This research is quantitative research with an observational analytic method conducted with a cross-sectional approach. Cross-sectional research is a study where the measurement is carried out only once, and the risk factors and disease are observed at the same time (Susilani & Wibowo, 2018). The independent variables in this study were the characteristics of the respondents (it is about the age, gender, occupation, and education of the cancer patients), family support (the relationship between the cancer patients with the family), and the condition of cancer patients, especially about their spirituality. The dependent variable in this study is the mental health of cancer patients.

The sample in this study uses a purposive sampling technique, namely sampling based on subjective considerations on the condition that the respondent can provide information from the researcher's questions (Susilani & Wibowo, 2018). The sample size is calculated based on the sample formula for calculating the cross-sectional survey. The research instruments and tools used are the Center for Epidemiological Studies Depression Scale (CES-D) Questionnaire, Perceived Stress Scale (PSS), Development of The Family Support Scale (FSS) for Elderly People, and Daily Spiritual Experience Scale (DSES). This study already has Ethical Approval No. 012103019.

RESULTS

Characteristics of Respondents

Patient characteristics are important as a basic reference for a study. The characteristic describes the subjects to be studied. The following are the characteristics of the respondents in this study described in the frequency distribution based on the characteristics of cancer patients in Hospital X, as shown in Table 1.

The result are contains of the output of the research, it should be clear and concise. The result should describe or summarize the authentic findings, valid, and in accordance with the objectives and methods of research.

The risk of secondhand smoke exposure on the incidence of anemia in pregnant mothers OR = 4.09; 95% CI (1.07 < OR < 16.26). Results showed that the environmental risks of TB incidence is $p = 0.02$ with $\alpha = 0.05$.

Table 1
Frequency Distribution of Characteristics of Cancer Patients in Hospital X

Characteristic	n	%
Age		
Late Adolescence (17-25 Years Old)	5	5.2
Early Adults (26-35 Years Old)	7	7.3
Late Adults (36-45 Years Old)	20	20.8
Early Elderly (46-55 Years Old)	34	35.4
Late Elderly (56-65 Years Old)	19	19.8
Seniors (>65 Years Old)	11	11.5
Gender		
Male	32	33.3
Female	64	66.7
Occupation		
Employment	37	38.5
Unemployment	59	61.5
Education		
Not going to school	13	13.5
Elementary School	39	40.6
Junior High School	26	27.1
Senior High School	18	18.8
Associate degree	0	0
Bachelor/Master/PhD	0	0

Source: Primary Data, 2021

Table 1 shows the frequency distribution of the characteristics of cancer patients in Hospital X. It can be seen from the age of cancer patients, 35.4 per cent are the early elderly aged 46-55. For the gender, it is mostly occurring in women as many as 64 patients (66.70%). Most of the respondents are not working (61.50%), but as many as 39

patients had a final education of Elementary School, which is equal to 40.60%.

Univariate Analysis

The frequency distribution of family support in cancer patients in hospitals can be seen in Table 2.

Table 2
Frequency Distribution of Family Support, Spirituality, and Mental Health of Cancer Patients

	n	%
Family Support		
Low	16	16.70
Moderate	68	70.80
High	12	12.50
Total	96	100
Spirituality		
Low	0	0
Moderate	73	76
High	23	24
Total	96	100
Spirituality		
Absolutely not	0	0
Somewhat close	49	51
Close	43	45
Very close	4	4
Total	96	100
Stress		
Low	39	40.60
Moderate	49	51
High	8	8.30
Total	96	100
Depression		
No	41	42.70
Yes	55	57.30
Total	96	100

Source: Primary Data, 2021

Most cancer patients receive moderate family support equal to 70.80% (68 patients). It is shown that most cancer patients have a moderate spirituality level (76%). the frequency distribution of spirituality regarding proximity to God in cancer patients at X Hospital, it is known that most cancer patients feel somewhat close to God as many as 49 respondents, which is equal to 51%. From the Tabel 2, shown that most cancer patients experience moderate stress, as many as 49 respondents (51%) and experiencing depression as many as 55 respondents (57.30%).

Bivariate Analysis

Age has a significant relationship with mental health (stress) in cancer patients, as shown in Tabel 3 and family support has a significant relationship with mental health (depression), as shown in Table 4. It is known that from a total of 96 cancer patients, in total there are eight people categorized having high stress level, ranging from late adults (36-45 years old) to late elderly (56-65 years old).

DISCUSSION

The Relationship between Cancer Patient Characteristics and Mental Health in Hospital X

The relationship between the characteristics of cancer patients, namely age and mental health, stress, has a significant relationship. The result aligns research regarding women's emotional, mental health with cancer in Indonesia. The study explains that the older a person is, the more quickly his psychological condition will be disturbed. It can be because the older age will cause different anxiety levels, such as feelings of anxiety because there is no certainty about the disease he is suffering or because of his physical independence (Khoiriyah & Handayani, 2020).

In contrast to the characteristics of cancer patients, such as gender, occupation, and education, both stress and depression at Hospital X did not have a significant relationship. These results follow the research conducted by Utami & Mutikasari (2017), which examined the psychosocial aspects of breast cancer patients and the research conducted by Suwitianisa et al. (2015) regarding the factors that influence depression in cancer patients treated at RSUD Arifin Achmad Riau Province.

Research conducted by Utami & Mutikasari (2017) explains no relationship between education and work with stress or depression. Research conducted by Suwitianisa et al. (2015) also states no significant relationship between and gender depression levels. Likewise, with the research conducted by Prima et al. (2020) that there is no relationship between age and gender with stress.

Women generally can be more expressive of their feelings and emotions. For example, psychologically, women are easier to cry as a form of emotional outburst and easier to persuade or change their beliefs (Nurhayati, 2018). This psychological change can make it easier for

women to finally express concerns that are one of the beginnings of stress or depression and easier to return to positive thinking about what they are experiencing. In this study, education and work had no relationship to mental health, either stress or depression. It can happen because not everyone who has low education will have insufficient knowledge (Utami & Mustikasari, 2017). A person's knowledge can be obtained from family, society, or electronic media as a source of information (Suwistianisa et al., 2015). In addition, not everyone who does not work will be mentally disturbed because some people think that not working can be a time for them to be calmer and reduce external stressors.

Relationship between Family Support for Cancer Patients and Mental Health at Hospital X

In this study, it was found that family support has a relationship with mental health, in this case, depression. The result aligns with the research conducted by Suwistianisa et al. (2015) regarding the factors that influence the level of depression in cancer patients treated at the Arifin Achmad Hospital, Riau Province and research conducted by Yuliati et al. (2020) regarding the relationship between family support and depression in breast cancer patients.

14 cancer patients who received low family support and 68 cancer patients who received family support were experiencing depression. Family support can affect the psychology and emotional response of cancer patients and, of course, will help in the healing process of cancer patients (Suwistianisa et al., 2015). The family will help protect them or help overcome the mood problems of cancer patients. Families provide meaningful support for people living with cancer in the form of motivation and spirituality.

Cancer patients with low family support feel that they do not get enough support from the family. It might happen due to the lack of family interaction and the lack of information that cancer patients can obtain. Research also explains that low family support triggers depression. It can cause patients to experience severe pain (Su et al., 2017). The source of human strength that leads to the happiness of life can increase a person's immunity so that they can overcome the pain they suffer.

Therefore, special attention is needed in the treatment of cancer patients. One of them is with

family support, especially from the closest family. With family support, cancer patients will feel more excited, valued, and motivated to undergo treatment for better conditions (Yuliati et al., 2020). Support from family or close people with cancer gives a feeling of being protected so that patients feel more comfortable with the disease they are suffering.

The Relationship between Spirituality of Cancer Patients and Mental Health in Hospital X

Spirituality of cancer patients with mental health did not have a significant relationship in Hospital X. The result is different from the research conducted by Wiksuarini et al. (2018) about spirituality and quality of life of cancer patients and Chaar et al. (2018) regarding evaluating the impact of spirituality on the quality of life, anxiety, and depression. A transverse observational study explains that spirituality is related to mental health among patients with cancer.

The previous research explains that spirituality has a relationship with mental health because high spirituality will change the mindset of patients who can be more able to accept their condition and live their illness with gratitude to God. Cancer patients will assume that their disease is the will of God. This situation will make cancer patients more intensive in carrying out worship to make cancer patients calmer and have hope for recovery (Wiksuarini et al., 2018).

However, other studies have shown that coping with spirituality can have an excellent mental health effect and can also be a lousy coping. If a person can associate his illness condition with a constructive attitude based on their faith, it can encourage adaptation to health and psychological adjustment to stress. However, if a person tends to see that their illness is a punishment for an existential crisis, then spiritual coping becomes negative (Rego & Nunes, 2019).

Although the concepts of religiosity and spirituality are offensive, the two things have different meanings. Spirituality can be related to one's religion. However, it can also be related to other things such as the experience one has in seeking meaning, purpose and well-being between oneself and others, with oneself or with the ultimate reality (Amir & Lesmawati, 2016).

The idea is aligned with the results of the distribution of spirituality frequencies regarding the proximity of cancer patients to God, which is

as many as 49 cancer patients, 51% feel they have a "quite close" relationship with God. From the majority of Muslim cancer patients, not all of them have faith or attachment to their God even though

when measured on average, they have moderate spirituality (73 patients) and high spirituality (23 patients).

Table 3

Relationship between Characteristics of Cancer Patients and Mental Health (Stress) at Hospital X

Characteristics	Stress						N		P-value
	Low		Moderate		High		N	%	
	n	%	n	%	n	%			
Age (Years Old)									
Late Adolescence: 17-25	4	4.2	1	1	0	0	5	5.20	0.00
Early Adults: 26-35	1	0.0	7	7.30	0	0	7	7.30	
Late Adults: 36-45	12	12.50	7	7.30	1	1	20	20.80	
Early Elderly: 46-55	16	16.70	13	13.50	5	5.20	34	35.40	
Late Elderly: 56-65	5	5.2	12	12.50	2	2.10	19	19.80	
Seniors: >65	2	2.1	9	9.40	0	0	11	11.50	
Gender									
Male	11	11.50	18	18.80	3	3.10	32	33.30	0.68
Female	28	29.20	31	32.30	5	5.20	64	66.70	
Occupation									
Employment	27	28.10	25	26	7	7.30	59	61.50	0.05
Unemployment	12	12.50	24	25	1	1	37	38.50	
Education									
Not going to school	4	4.20	6	6.30	3	3.10	13	13.50	0.54
Elementary School	16	16.70	21	21.90	2	2.10	39	40.60	
Junior High School	13	13.50	11	11.50	2	2.10	26	27.10	
Senior High School	6	6.30	11	11.50	1	1	18	18.80	
Associate' s Degree	0	0	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	0	0	
Family Support									
Low	2	2.10	12	12.50	2	2.10	16	16.70	0.19
Moderate	32	33.30	33	34.40	3	3.10	68	70.80	
High	5	5.20	4	4.20	3	3.10	12	12.50	
Spirituality									
Low	0	0	0	0	0	0	0	0	0.15
Moderate	32	33.30	37	38.50	4	4.20	73	76	
High	7	7.30	12	12.50	4	4.20	23	24	

CONCLUSION

The analysis results show that the characteristics of cancer patients with mental health are influenced by age. Meanwhile, the respondent's characteristics in terms of gender, education, and occupation are not related to the mental health of cancer patients. Family support with mental health affects cancer patients, while spirituality in cancer patients has no relationship with mental health.

Based on the research, the researcher provides several suggestions. For Hospital X, it is hoped that it will continue to provide services or facilities to provide mental support for cancer patients and assist cancer patients in preventing mental health disorders due to their conditions. While for cancer patients in Hospital X, it is expected that the patients will continue to increase their confidence and ability in undergoing treatment to prevent mental disorders that can affect their physical condition. Last, for other researchers, the

researchers suggest conducting further research on the factors that affect the mental health of cancer patients with more in-depth or qualitative methods.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article.

AUTHOR CONTRIBUTIONS

SS handle the concept and idea of the research, RR responsible for the final version of the manuscript, WR and FN carried out the experiment. All authors shaped the research.

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Table 4

Relationship between Characteristics of Cancer Patients and Mental Health (Depression) at Hospital X

Characteristics	Depression				N		P-value
	No		Yes		N	%	
	n	%	n	%			
Age (Years Old)							
Late Adolescence: 17-25	3	3.10	2	2.10	5	5.20	0.30
Early Adults: 26-35	2	2.10	5	5.20	7	7.30	
Late Adults: 36-45	8	8.30	12	12.50	20	20.80	
Early Elderly: 46-55	19	19.80	15	15.60	34	35.40	
Late Elderly: 56-65	5	5.20	14	14.60	19	19.80	
Seniors: >65	4	4.20	7	7.30	11	11.50	
Gender							
Male	14	14.60	18	18.8	32	33.30	0.88
Female	27	28.10	37	38.50	64	66.70	
Occupation							
Employment	28	29.20	31	32.30	59	61.50	0.23
Unemployment	13	13.50	24	25	37	38.50	
Education							
Not going to school	9	9.40	4	4.20	13	13.50	0.10
Elementary School	18	18.80	21	21.90	39	40.60	
Junior High School	9	9.40	17	17.70	26	27.10	
Senior High School	5	5.20	13	13.50	18	18.80	
Associate' s Degree	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	
Family Support							
Low	2	2.10	14	14.60	16	16.70	0.01
Moderate	31	32.30	37	38.50	68	70.80	
High	8	8.30	4	4.20	12	12.50	
Spirituality							
Low	0	0	0	0	0	0	0.93
Moderate	31	32.30	42	43.80	73	76	
High	10	10.40	13	13.50	23	24	

Source: Primary Data, 2021

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ORIGINAL RESEARCH

MENTAL HEALTH FACTORS IDENTIFICATION OF CANCER PATIENTS IN HOSPITAL X

Identifikasi Faktor-Faktor Kesehatan Mental pada Pasien Kanker di Rumah Sakit X

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ABSTRACT

Background: Physical health of cancer sufferers causes mental health disorders and unconsciously affects the overall quality of life of patients. As many as 34.40% of cancer patients in Indonesia experience depression due to anxiety and fear. **Objective:** Therefore, this study was conducted to determine the mental health of cancer patients in the hospital so that it is known the relationship between the mental health of cancer patients and other factors, such as the characteristics of the respondents, family support, and spirituality. **Methods:** This type of research is quantitative with a cross-sectional design. The analysis used in this study is the Pearson Chi-Square analysis. There were 96 respondents in this study who were cancer patients from Hospital X. The independent variables used were respondent characteristics (age, gender, occupation, and education), family support, and spirituality, with the dependent variable being mental health (stress and depression). **Results:** The results showed that cancer patients with the last education of elementary school (40.60%), unemployed status (61.50%), female (66.70%), early elderly (35.40%), 70, 80% received moderate family support, 76% had moderate spirituality, 51% experienced moderate stress, and 57.30% experienced depression. Characteristics of respondents in this study, namely gender, education, occupation, and spiritual factors, are not related to mental health in cancer patients. **Conclusion:** The results showed that age and family support was associated with the mental health of cancer patients, while other characteristics and spirituality were not associated with mental health.

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ABSTRAK

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Latar Belakang: Kesehatan fisik penderita kanker menyebabkan gangguan pada kesehatan mental dan secara tidak sadar akan memengaruhi kualitas hidup penderita secara keseluruhan. Sebanyak 34,40% penderita kanker di Indonesia mengalami depresi akibat kecemasan dan ketakutan. **Tujuan:** Oleh karena itu, penelitian ini dilakukan untuk mengetahui kesehatan jiwa pasien kanker di rumah sakit, sehingga diketahui hubungan antara kesehatan jiwa pasien kanker dengan faktor lainnya, seperti karakteristik responden, dukungan keluarga, dan spiritualitas. **Metode:** Jenis penelitian ini adalah kuantitatif dengan desain cross sectional. Analisis yang digunakan dalam penelitian ini adalah analisis Pearson Chi-Square. Terdapat 96 responden pada penelitian ini yang merupakan pasien kanker dari Rumah Sakit X. Variabel bebas yang digunakan adalah karakteristik responden (umur, jenis kelamin, pekerjaan, dan Pendidikan), dukungan keluarga, dan spiritualitas, dengan variabel terikatnya adalah kesehatan jiwa (stress dan depresi). **Hasil:** Hasil penelitian menunjukkan pasien kanker berpendidikan terakhir SD (40,60%), status tidak bekerja (61,50%), berjenis kelamin perempuan (66,70%), berumur lanjut usia dini (35,40%), 70,80% mendapat dukungan keluarga sedang, 76% memiliki spiritualitas sedang, 51% mengalami stres sedang, dan 57,30% mengalami depresi. Karakteristik responden dalam penelitian ini yaitu jenis kelamin, pendidikan, pekerjaan, dan faktor spiritual tidak berhubungan dengan kesehatan jiwa pada pasien kanker. **Kesimpulan:** Hasil penelitian menunjukkan bahwa usia dan dukungan keluarga berhubungan dengan kesehatan mental pasien kanker, sedangkan karakteristik lain dan spiritualitas tidak berhubungan dengan kesehatan mental.

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INTRODUCTION

One of the leading causes of death in the world today is cancer. In 2018, 9.80% of deaths occurred due to cancer. There are various types of cancer. The cancers that contribute to morbidity and mortality are lung cancer, breast cancer, colorectal cancer, prostate cancer, skin cancer, and liver cancer. Approximately 70% of cancer deaths occur in low- and middle-income countries (WHO, 2017).

Based on the previous research that has been done, pediatric cancer patients, primarily males aged 6-10 years, and suffered from leukemia (Fithriyah et al., 2020) and based on 2013 Basic Health Research, the prevalence of people living with cancer in Indonesia's population of all ages is 1.40%. Indonesia is one of the lower-middle economic category countries. The number of people living with cancer in Central Java province has the highest estimate of people living with cancer, 68,638 (Kementrian Kesehatan RI, 2015). Cancer cases in Central Java have a relatively high incidence of cancer. Cancer is still the leading

cause of morbidity and mortality, with 1.50% of cervical cancer cases and 0.60% of breast cancer (Dinas Kesehatan Provinsi Jawa Tengah, 2019).

34% of women cancer patients suffer from mental health (Khoiriyah & Handayani, 2020). Another study also found that 25.71% of cancer patients had low depression, 45.71% had moderate depression, and 28.58% had severe depression (Widoyono, Setiyarni, & Effendy, 2017). Depression experienced by cancer patients usually begins when a person is diagnosed with cancer, and then the stage status of cancer continues. This condition will affect people living with cancer to feel depressed, stressed, to depression (Khoiriyah & Handayani, 2020). This cancer does not only cause physical problems but also impacts psychology and causes psychological pressure so that it is declared stressed (Kemenkes RI, 2015).

Cases of mental health disorders such as depression, stress, and depression in cancer patients are influenced by several factors, including age, education level, occupation, and place of residence. The advanced age of a cancer patient can increase his anxiety because the elderly

are old physically, and uncertainty can also arise because of the low cure rate and other congenital diseases. Stress can also occur because of knowledge that has or lacks education. Hence, it will cause mental disorders in dealing with the disease. The limitations of doing activities for the elderly or with chronic diseases result in limitations in socializing, making the people living with cancer feel more lonely and isolated (Khoiriyah & Handayani, 2020).

Family support also affects severe depression in cancer patients indirectly (Shinta et al., 2019). Support from family or people closest to people living with cancer is Indonesia's most essential and reasonable support. The family is the leading party that provides support when someone experiences problems or is sick (Pradjatmo, Nisman, & Fatmawati, 2017). Family support will affect the psychology of cancer patients because cancer patients will feel reassured, consoled, and loved (Vrontaras, 2018). Spiritual support can also positively impact; prayer can provide peace because it can improve the individual's relationship with God. Besides that, prayer enhances the patient's quality of life, including physical and mental (Wiksuarani, Rochmawati, & Rahmah, 2018).

Family support and spirituality have a very close relationship. With family support, other family members can give each additional strength and help solve problems. In family support, spiritual support is one way to overcome difficulties. This study aims to determine the factors associated with the mental health of cancer patients at Hospital X, such as family support and spirituality. Through this research, doctors and family members can maintain cancer patients' mental health.

METHODS

This research is quantitative with an observational analytic method conducted with a cross-sectional approach. Cross-sectional research is a study where the measurement is carried out only once, and the risk factors and disease are observed at the same time (Susilani & Wibowo, 2018). The independent variables in this study were the characteristics of the respondents (it is about the age, gender, occupation, and education of the cancer patients), family support (the relationship between the cancer patients with the family), and the condition of cancer patients, especially about their spirituality. The dependent

variable in this study is the mental health of cancer patients.

The sample in this study uses a purposive sampling technique, namely sampling based on subjective considerations on the condition that the respondent can provide information from the researcher's questions (Susilani & Wibowo, 2018). The sample size is calculated based on the sample formula for calculating the cross-sectional survey. The research instruments and tools used are the Center for Epidemiological Studies Depression Scale (CES-D) Questionnaire, Perceived Stress Scale (PSS), Development of The Family Support Scale (FSS) for Elderly People, and Daily Spiritual Experience Scale (DSES). This study already has Ethical Approval No. 012103019.

RESULTS

Characteristics of Respondents

Patient characteristics are important as an essential reference for a study. The characteristic describes the subjects to be studied. The following are the characteristics of the respondents in this study described in the frequency distribution based on the factors of cancer patients in Hospital X, as shown in Table 1.

The result contains the research output; it should be clear and concise. The result should describe or summarize the authentic findings, valid, and by the objectives and methods of study.

The risk of second-hand smoke exposure on the incidence of anemia in pregnant mothers OR = 4.09; 95% CI (1.07 < OR < 16.26). Results showed that the environmental risks of TB incidence is $p = 0.02$ with $\alpha = 0.05$.

Table 1
Frequency Distribution of Characteristics of Cancer Patients in Hospital X

Characteristic	n	%
Age		
Late Adolescence (17-25 Years Old)	5	5.2
Early Adults (26-35 Years Old)	7	7.3
Late Adults (36-45 Years Old)	20	20.8
Early Elderly (46-55 Years Old)	34	35.4
Late Elderly (56-65 Years Old)	19	19.8
Seniors (>65 Years Old)	11	11.5
Gender		

Characteristic	n	%
Male	32	33.3
Female	64	66.7
Occupation		
Employment	37	38.5
Unemployment	59	61.5
Education		
Not going to school	13	13.5
Elementary School	39	40.6
Junior High School	26	27.1
Senior High School	18	18.8
Associate degree	0	0
Bachelor/Master/PhD	0	0

Source: Primary Data, 2021

Table 1 shows the frequency distribution of the characteristics of cancer patients in Hospital X. It can be seen from the age of cancer patients, 35.4 percent are the early elderly aged 46-55. For the gender, it mainly occurs in women, as many as 64 patients (66.70%). Most respondents are not working (61.50%), but as many as 39 patients had a final elementary school education, which is 40.60%.

Univariate Analysis

The frequency distribution of family support in cancer patients in hospitals can be seen in Table 2.

Table 2
Frequency Distribution of Family Support, Spirituality, and Mental Health of Cancer Patients

Variable	n	%
Family Support		
Low	16	16.70
Moderate	68	70.80
High	12	12.50
Total	96	100
Spirituality		
Low	0	0
Moderate	73	76
High	23	24
Total	96	100
Spirituality		
Absolutely not	0	0
Somewhat close	49	51
Close	43	45
Very close	4	4
Total	96	100

Variable	n	%
Stress		
Low	39	40.60
Moderate	49	51
High	8	8.30
Total	96	100
Depression		
No	41	42.70
Yes	55	57.30
Total	96	100

Source: Primary Data, 2021

Most cancer patients receive moderate family support (70.80%). It is shown that most cancer patients have an intermediate spirituality level (76%). The frequency distribution of spirituality regarding proximity to God in cancer patients at X Hospital is known that most cancer patients feel somewhat close to God, as many as 49 respondents, equal to 51%. Table 2 shows that most cancer patients experience moderate stress, with as many as 49 respondents (51%) and experiencing depression, as many as 55 respondents (57.30%).

Bivariate Analysis

Age has a significant relationship with mental health (stress) in cancer patients, as shown in Table 3, and family support has a substantial connection with mental health (depression), as shown in Table 4. It is known that from a total of 96 cancer patients, eight people are categorized with high-stress levels, ranging from late adults (36-45 years old) to late elderly (56-65 years old).

DISCUSSION

The Relationship between Cancer Patient Characteristics and Mental Health in Hospital X

The relationship between the characteristics of cancer patients, namely age and mental health, and stress, has a significant relationship—the result aligns research regarding women's emotional and mental health with cancer in Indonesia. The study explains that the older a person is, the more quickly his psychological condition will be disturbed. It can be because the more senior age will cause different anxiety levels, such as feelings of anxiety because there is no certainty about the disease he is suffering or because of his physical independence (Khoiriyah & Handayani, 2020). It

is also said that older cancer patients score higher in depression than young patients (Estapé, 2018).

In contrast to the characteristics of cancer patients, such as gender, occupation, and education, both stress and depression at Hospital X did not have a significant relationship. These results follow the research conducted by Utami & Mustikasari (2017), which examined the psychosocial aspects of breast cancer patients, and the research undertaken by Suwistianisa et al. (2015) regarding the factors that influence depression in cancer patients treated at RSUD Arifin Achmad Riau Province.

Utami & Mustikasari (2017) research explains no relationship between education and works with stress or depression. A study conducted by Suwistianisa et al. (2015) also states no significant relationship between gender depression levels.

Women generally can be more expressive of their feelings and emotions. For example, psychologically, women are easier to cry as a form of emotional outburst and easier to persuade or change their beliefs (Nurhayati, 2018). This psychological change can make it easier for women to finally express concerns that are one of the beginnings of stress or depression and easier to return to positive thinking about what they are experiencing. In this study, education and work had no relationship to mental health, either stress or depression. It can happen because not everyone with low education will have insufficient knowledge (Utami & Mustikasari, 2017). A person's knowledge can be obtained from family, society, or electronic media as a source of information (Suwistianisa et al., 2015). In addition, not everyone who does not work will be mentally disturbed because some people think that not working can be a time for them to be calmer and reduce external stressors.

Relationship between Family Support for Cancer Patients and Mental Health at Hospital X

This study found that family support is related to mental health, such as depression. The result aligns with the research conducted by Suwistianisa et al. (2015) regarding the factors that influence the level of depression in cancer patients treated at the Arifin Achmad Hospital, Riau Province, and research conducted by Yuliati et al. (2020) regarding the relationship between family support and depression in breast cancer patients. Sari et al. (2019) also found that good family support was associated with lower anxiety levels.

14 cancer patients who received low family support and 68 cancer patients who received family support were experiencing depression. Family support can affect the psychology and emotional response of cancer patients and, of course, will help in the healing process of cancer patients (Suwistianisa et al., 2015). The family as mediators will make patients have reasonable control of emotions, which leads to self-acceptance and the ability to live positively and optimistically (Ain et al., 2020). Families provide meaningful support for people living with cancer through motivation and spirituality. Besides, it is also suggested that there is social networking between family and cancer patients (Aprilianto et al., 2021).

Cancer patients with low family support feel that they do not get enough support from the family. It might happen due to the lack of family interaction and the lack of information that cancer patients can obtain. Research also explains that low family support triggers depression. It can cause patients to experience severe pain (Su et al., 2017). The source of human strength that leads to the happiness of life can increase a person's immunity to overcome the pain they suffer.

Therefore, special attention is needed in the treatment of cancer patients. One of them is family support, especially from the closest family. Family caregivers will have more time to interact and be close to the patients' (Saputro et al., 2021). With family support, cancer patients will feel more excited, valued, and motivated to undergo treatment for better conditions (Yuliati et al., 2020). Support from family or close people with cancer gives a feeling of being protected so that patients feel more comfortable with the disease they are suffering.

The Relationship between Spirituality of Cancer Patients and Mental Health in Hospital X

The spirituality of cancer patients with mental health did not have a significant relationship in Hospital X. The result is different from the research conducted by Wiksuarini et al. (2018) about the spirituality and quality of life of cancer patients. Chaar et al. (2018) regarding evaluating the impact of spirituality on the quality of life, anxiety, and depression. A transverse observational study explains that spirituality is related to cancer patient's mental health.

The previous research explains that spiritual well-being has a positive relationship with the

mental health (Zare et al., 2019). It is because high spirituality will change the mindset of patients who can be more able to accept their condition and live their illness with gratitude to God. In a previous study, Komariah et al. (2021) used an Islamic-based practice approach for breast cancer patients. As a result, there was a change in positive responses, which made them closer to God and have a peaceful mind in their daily life. Besides, depression and anxiety in Muslim cancer patients have a low tendency if they are more religious, which is understanding several definitions of Al-Islam, Al-Iman, and Al-Ihsan (Basri et al., 2015). Cancer patients will assume that their disease is the will of God. This situation will make cancer patients more intensive in carrying out worship to drive cancer patients calmer and have hope for recovery (Wiksuarani et al., 2018).

However, other studies have shown that coping with spirituality can have an excellent mental health effect and can also be a lousy coping. If a person can associate his illness with a constructive attitude based on faith, it can encourage adaptation to health and psychological adjustment to stress. However, if a person sees their illness as a punishment for an existential

crisis, spiritual coping becomes negative (Rego & Nunes, 2019).

Although the concepts of religiosity and spirituality are offensive, the two things have different meanings. Spirituality can be related to one's religion. However, it can also be related to other things, such as the experience of seeking meaning, purpose, and well-being between oneself and others, with oneself, or with the ultimate reality (Amir & Lesmawati, 2016).

The idea is aligned with the results of the distribution of spirituality frequencies regarding the proximity of cancer patients to God, which is as many as 49 cancer patients, 51% feel they have a "quite close" relationship with God. From the majority of Muslim cancer patients, not all of them have faith or attachment to their God; even though, when measured on average, they have moderate spirituality (73 patients) and high spirituality (23 patients).

Table 3

Relationship between Characteristics of Cancer Patients and Mental Health (Stress) at Hospital X

Characteristics	Stress						N		P-value
	Low		Moderate		High		N	%	
	n	%	n	%	n	%			
Age (Years Old)									
Late Adolescence: 17-25	4	4.2	1	1	0	0	5	5.20	0.00
Early Adults: 26-35	1	0.0	7	7.30	0	0	7	7.30	
Late Adults: 36-45	12	12.50	7	7.30	1	1	20	20.80	
Early Elderly: 46-55	16	16.70	13	13.50	5	5.20	34	35.40	
Late Elderly: 56-65	5	5.2	12	12.50	2	2.10	19	19.80	
Seniors: >65	2	2.1	9	9.40	0	0	11	11.50	
Gender									
Male	11	11.50	18	18.80	3	3.10	32	33.30	0.68
Female	28	29.20	31	32.30	5	5.20	64	66.70	
Occupation									
Employment	27	28.10	25	26	7	7.30	59	61.50	0.05
Unemployment	12	12.50	24	25	1	1	37	38.50	
Education									
Not going to school	4	4.20	6	6.30	3	3.10	13	13.50	0.54
Elementary School	16	16.70	21	21.90	2	2.10	39	40.60	
Junior High School	13	13.50	11	11.50	2	2.10	26	27.10	
Senior High School	6	6.30	11	11.50	1	1	18	18.80	
Associate's Degree	0	0	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	0	0	
Family Support									

Table 4

Characteristics	Stress						N		P-value
	Low		Moderate		High		N	%	
	n	%	n	%	n	%			
Low	2	2.10	12	12.50	2	2.10	16	16.70	0.19
Moderate	32	33.30	33	34.40	3	3.10	68	70.80	
High	5	5.20	4	4.20	3	3.10	12	12.50	
Spirituality									
Low	0	0	0	0	0	0	0	0	0.15
Moderate	32	33.30	37	38.50	4	4.20	73	76	
High	7	7.30	12	12.50	4	4.20	23	24	

Relationship between Characteristics of Cancer Patients and Mental Health (Depression) at Hospital X

Characteristics	Depression				N		P-value
	No		Yes		N	%	
	n	%	n	%			
Age (Years Old)							
Late Adolescence: 17-25	3	3.10	2	2.10	5	5.20	0.30
Early Adults: 26-35	2	2.10	5	5.20	7	7.30	
Late Adults: 36-45	8	8.30	12	12.50	20	20.80	
Early Elderly: 46-55	19	19.80	15	15.60	34	35.40	
Late Elderly: 56-65	5	5.20	14	14.60	19	19.80	
Seniors: >65	4	4.20	7	7.30	11	11.50	
Gender							
Male	14	14.60	18	18.8	32	33.30	0.88
Female	27	28.10	37	38.50	64	66.70	
Occupation							
Employment	28	29.20	31	32.30	59	61.50	0.23
Unemployment	13	13.50	24	25	37	38.50	
Education							
Not going to school	9	9.40	4	4.20	13	13.50	0.10
Elementary School	18	18.80	21	21.90	39	40.60	
Junior High School	9	9.40	17	17.70	26	27.10	
Senior High School	5	5.20	13	13.50	18	18.80	
Associate's Degree	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	
Family Support							
Low	2	2.10	14	14.60	16	16.70	0.01
Moderate	31	32.30	37	38.50	68	70.80	
High	8	8.30	4	4.20	12	12.50	
Spirituality							
Low	0	0	0	0	0	0	0.93
Moderate	31	32.30	42	43.80	73	76	
High	10	10.40	13	13.50	23	24	

Source: Primary Data, 2021

CONCLUSION

The analysis results show that the characteristics of cancer patients with mental health are influenced by age. Meanwhile, the respondent's gender, education, and occupation characteristics are not related to the mental health of cancer patients. Family support for mental health affects cancer patients, while spirituality in cancer patients has no relationship with mental health.

Based on the research, the researcher provides several suggestions. For Hospital X, it is hope that it will continue to provide services or facilities to provide mental support for cancer patients and assist them in preventing mental health disorders due to their conditions. While for cancer patients in Hospital X, it is expected that the patients will continue to increase their confidence and ability to undergo treatment to prevent mental disorders that can affect their physical condition. Last, for other researchers, the researchers suggest conducting further research on the factors that affect the mental health of cancer patients with more in-depth or qualitative methods.

CONFLICT OF INTEREST

No potential conflict of interest is relevant to this article.

AUTHOR CONTRIBUTIONS

SS handled the research's concept and idea, RR was responsible for the final version of the manuscript, and WR and FN experimented. All authors shaped the research.

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MENTAL HEALTH FACTORS IDENTIFICATION OF CANCER PATIENTS IN HOSPITAL X

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ORIGINAL RESEARCH

**MENTAL HEALTH FACTORS IDENTIFICATION OF CANCER PATIENTS
IN HOSPITAL X**

Identifikasi Faktor-Faktor Kesehatan Mental pada Pasien Kanker di Rumah Sakit X

Keywords:

age;
cancer;
family support;
mental health;
spirituality;

Kata Kunci:

usia;
kanker;
dukungan keluarga;
kesehatan mental;
spiritual

ABSTRACT

Background: Physical health of cancer sufferers causes mental health disorders and unconsciously affects the overall quality of life of patients. As many as 34.40% of cancer patients in Indonesia experience depression due to anxiety and fear. **Objective:** Therefore, this study was conducted to determine the mental health of cancer patients in the hospital so that it is known the relationship between the mental health of cancer patients and other factors, such as the characteristics of the respondents, family support, and spirituality. **Methods:** This type of research is quantitative with a cross-sectional design. The analysis used in this study is the Pearson Chi-Square analysis. There were 96 respondents in this study who were cancer patients from Hospital X. The independent variables used were respondent characteristics (age, gender, occupation, and education), family support, and spirituality, with the dependent variable being mental health (stress and depression). **Results:** The results showed that cancer patients with the last education of elementary school (40.60%), unemployed status (61.50%), female (66.70%), early elderly (35.40%), 70, 80% received moderate family support, 76% had moderate spirituality, 51% experienced moderate stress, and 57.30% experienced depression. Characteristics of respondents in this study, namely gender, education, occupation, and spiritual factors, are not related to mental health in cancer patients. **Conclusion:** The results showed that age and family support was associated with the mental health of cancer patients, while other characteristics and spirituality were not associated with mental health.

ABSTRAK

Latar Belakang: Kesehatan fisik penderita kanker menyebabkan gangguan pada kesehatan mental dan secara tidak sadar akan memengaruhi kualitas hidup penderita secara keseluruhan. Sebanyak 34,40% penderita kanker di Indonesia mengalami depresi akibat kecemasan dan ketakutan. **Tujuan:** Oleh karena itu, penelitian ini dilakukan untuk mengetahui kesehatan jiwa pasien kanker di rumah sakit, sehingga diketahui hubungan antara kesehatan jiwa pasien kanker dengan faktor lainnya, seperti karakteristik responden, dukungan keluarga, dan spiritualitas. **Metode:** Jenis penelitian ini adalah kuantitatif dengan desain cross sectional. Analisis yang digunakan dalam penelitian ini adalah analisis Pearson Chi-Square.

Terdapat 96 responden pada penelitian ini yang merupakan pasien kanker dari Rumah Sakit X. Variabel bebas yang digunakan adalah karakteristik responden (umur, jenis kelamin, pekerjaan, dan Pendidikan), dukungan keluarga, dan spiritualitas, dengan variabel terikatnya adalah kesehatan jiwa (stress dan depresi). **Hasil:** Hasil penelitian menunjukkan pasien kanker berpendidikan terakhir SD (40,60%), status tidak bekerja (61,50%), berjenis kelamin perempuan (66,70%), berumur lanjut usia dini (35,40%), 70,80% mendapat dukungan keluarga sedang, 76% memiliki spiritualitas sedang, 51% mengalami stres sedang, dan 57,30% mengalami depresi. Karakteristik responden dalam penelitian ini yaitu jenis kelamin, pendidikan, pekerjaan, dan faktor spiritual tidak berhubungan dengan kesehatan jiwa pada pasien kanker. **Kesimpulan:** Hasil penelitian menunjukkan bahwa usia dan dukungan keluarga berhubungan dengan kesehatan mental pasien kanker, sedangkan karakteristik lain dan spiritualitas tidak berhubungan dengan kesehatan mental.

INTRODUCTION

One of the leading causes of death in the world today is cancer. In 2018, 9.80% of deaths occurred due to cancer. There are various types of cancer. The cancers that contribute to morbidity and mortality are lung cancer, breast cancer, colorectal cancer, prostate cancer, skin cancer, and liver cancer. Approximately 70% of cancer deaths occur in low- and middle-income countries (WHO, 2017).

Based on the 2013 Basic Health Research, the prevalence of people living with cancer in Indonesia's population of all ages is 1.40%. Indonesia is one of the lower-middle economic category countries. The number of people living with cancer in Central Java province has the highest estimate of people living with cancer, 68,638 people (Kementrian Kesehatan RI, 2015). Cancer cases in Central Java have a relatively high incidence of cancer. Cancer is still the leading cause of morbidity and mortality, with 1.50% of cervical cancer cases and 0.60% of breast cancer (Dinas Kesehatan Provinsi Jawa Tengah, 2019).

34% of women cancer patients suffer from mental health (Khoiriyah & Handayani, 2020). Another study also found that 25.71% of cancer patients had low depression, 45.71% had moderate depression, and 28.58% had severe depression (Widoyono, Setiyami, & Effendy, 2017). Depression experienced by cancer patients usually begins when a person is diagnosed with cancer, and then the stage status of cancer continues. This condition will affect people living with cancer to feel depressed, stressed, to depression (Khoiriyah & Handayani, 2020). This cancer does not only

cause physical problems but also impacts psychology and causes psychological pressure so that it is declared stressed (Kemenkes RI, 2015).

Cases of mental health disorders such as depression, stress, and depression in cancer patients are influenced by several factors, including age, education level, occupation, and place of residence. The advanced age of a cancer patient can increase his anxiety because the elderly are old physically, and uncertainty can also arise because of the low cure rate and other congenital diseases. Stress can also occur because of knowledge that has or lacks education. Hence, it will cause mental disorders in dealing with the disease. The limitations of doing activities for the elderly or with chronic diseases result in limitations in socializing, making the people living with cancer feel more lonely and isolated (Khoiriyah & Handayani, 2020).

Family support also affects severe depression in cancer patients indirectly (Shinta et al., 2019). Support from family or people closest to people living with cancer is Indonesia's most essential and reasonable support. The family is the leading party that provides support when someone experiences problems or is sick (Pradjatmo, Nisman, & Fatmawati, 2017). Family support will affect the psychology of cancer patients because cancer patients will feel reassured, consoled, and loved (Vrontaras, 2018). Spiritual support can also positively impact; prayer can provide peace because it can improve the individual's relationship with God. Besides that, prayer enhances the patient's quality of life, including physical and mental (Wiksuarini, Rochmawati, & Rahmah, 2018).

Family support and spirituality have a very close relationship. With family support, other family members can give each additional strength and help solve problems. In family support, spiritual support is one way to overcome difficulties. This study aims to determine the factors associated with the mental health of cancer patients at Hospital X.

METHODS

This research is quantitative with an observational analytic method conducted with a cross-sectional approach. Cross-sectional research is a study where the measurement is carried out only once, and the risk factors and disease are observed at the same time (Susilani & Wibowo, 2018). The independent variables in this study were the characteristics of the respondents (it is about the age, gender, occupation, and education of the cancer patients), family support (the relationship between the cancer patients with the family), and the condition of cancer patients, especially about their spirituality. The dependent variable in this study is the mental health of cancer patients.

The sample in this study uses a purposive sampling technique, namely sampling based on subjective considerations on the condition that the respondent can provide information from the researcher's questions (Susilani & Wibowo, 2018). The sample size is calculated based on the sample formula for calculating the cross-sectional survey. The research instruments and tools used are the Center for Epidemiological Studies Depression Scale (CES-D) Questionnaire, Perceived Stress Scale (PSS), Development of The Family Support Scale (FSS) for Elderly People, and Daily Spiritual Experience Scale (DSES). This study already has Ethical Approval No. 012103019.

RESULTS

Characteristics of Respondents

Patient characteristics are important as an essential reference for a study. The characteristic describes the subjects to be studied. The following are the characteristics of the respondents in this study described in the frequency distribution based on the factors of cancer patients in Hospital X, as shown in Table 1.

The result contains the research output; it should be clear and concise. The result should describe or summarize the authentic findings, valid, and by the objectives and methods of study.

The risk of second-hand smoke exposure on the incidence of anemia in pregnant mothers OR = 4.09; 95% CI (1.07 < OR < 16.26). Results showed that the environmental risks of TB incidence is $p = 0.02$ with $\alpha = 0.05$.

Table 1
Frequency Distribution of Characteristics of Cancer Patients in Hospital X

Characteristic	n	%
Age		
Late Adolescence (17-25 Years Old)	5	5.2
Early Adults (26-35 Years Old)	7	7.3
Late Adults (36-45 Years Old)	20	20.8
Early Elderly (46-55 Years Old)	34	35.4
Late Elderly (56-65 Years Old)	19	19.8
Seniors (>65 Years Old)	11	11.5
Gender		
Male	32	33.3
Female	64	66.7
Occupation		
Employment	37	38.5
Unemployment	59	61.5
Education		
Not going to school	13	13.5
Elementary School	39	40.6
Junior High School	26	27.1
Senior High School	18	18.8
Associate degree	0	0
Bachelor/Master/PhD	0	0

Source: Primary Data, 2021

Table 1 shows the frequency distribution of the characteristics of cancer patients in Hospital X. It can be seen from the age of cancer patients, 35.4 percent are the early elderly aged 46-55. For the gender, it mainly occurs in women, as many as 64 patients (66.70%). Most respondents are not working (61.50%), but as many as 39 patients had a final elementary school education, which is 40.60%.

Univariate Analysis

The frequency distribution of family support in cancer patients in hospitals can be seen in Table 2.

Table 2
Frequency Distribution of Family Support, Spirituality, and Mental Health of Cancer Patients

Variable	n	%
Family Support		
Low	16	16.70
Moderate	68	70.80
High	12	12.50
Total	96	100
Spirituality		
Low	0	0
Moderate	73	76
High	23	24
Total	96	100
Spirituality		
Absolutely not	0	0
Somewhat close	49	51
Close	43	45
Very close	4	4
Total	96	100
Stress		
Low	39	40.60
Moderate	49	51
High	8	8.30
Total	96	100
Depression		
No	41	42.70
Yes	55	57.30
Total	96	100

Source: Primary Data, 2021

Most cancer patients receive moderate family support (70.80%). It is shown that most cancer patients have an intermediate spirituality level (76%). The frequency distribution of spirituality regarding proximity to God in cancer patients at X Hospital is known that most cancer patients feel somewhat close to God, as many as 49 respondents, equal to 51%. Table 2 shows that most cancer patients experience moderate stress, with as many as 49 respondents (51%) and experiencing depression, as many as 55 respondents (57.30%).

Bivariate Analysis

Age has a significant relationship with mental health (stress) in cancer patients, as shown in Table 3, and family support has a substantial connection with mental health (depression), as shown in Table 4. It is known that from a total of

96 cancer patients, eight people are categorized with high-stress levels, ranging from late adults (36-45 years old) to late elderly (56-65 years old).

DISCUSSION

The Relationship between Cancer Patient Characteristics and Mental Health in Hospital X

The relationship between the characteristics of cancer patients, namely age and mental health, and stress, has a significant relationship—the result aligns research regarding women's emotional and mental health with cancer in Indonesia. The study explains that the older a person is, the more quickly his psychological condition will be disturbed. It can be because the more senior age will cause different anxiety levels, such as feelings of anxiety because there is no certainty about the disease he is suffering or because of his physical independence (Khoiriyah & Handayani, 2020). It is also said that older cancer patients score higher in depression than young patients (Estapé, 2018).

In contrast to the characteristics of cancer patients, such as gender, occupation, and education, both stress and depression at Hospital X did not have a significant relationship. These results follow the research conducted by Utami & Mustikasari (2017), which examined the psychosocial aspects of breast cancer patients, and the research undertaken by Suwistianisa et al. (2015) regarding the factors that influence depression in cancer patients treated at RSUD Arifin Achmad Riau Province.

Utami & Mustikasari (2017) research explains no relationship between education and works with stress or depression. A study conducted by Suwistianisa et al. (2015) also states no significant relationship between gender depression levels.

Women generally can be more expressive of their feelings and emotions. For example, psychologically, women are easier to cry as a form of emotional outburst and easier to persuade or change their beliefs (Nurhayati, 2018). This psychological change can make it easier for women to finally express concerns that are one of the beginnings of stress or depression and easier to return to positive thinking about what they are experiencing. In this study, education and work had no relationship to mental health, either stress or depression. It can happen because not everyone with low education will have insufficient knowledge (Utami & Mustikasari, 2017). A person's knowledge can be obtained from family, society, or electronic media as a source of

information (Suwistianisa et al., 2015). In addition, not everyone who does not work will be mentally disturbed because some people think that not working can be a time for them to be calmer and reduce external stressors.

Relationship between Family Support for Cancer Patients and Mental Health at Hospital X

This study found that family support is related to mental health, such as depression. The result aligns with the research conducted by Suwistianisa et al. (2015) regarding the factors that influence the level of depression in cancer patients treated at the Arifin Achmad Hospital, Riau Province, and research conducted by Yuliati et al. (2020) regarding the relationship between family support and depression in breast cancer patients. Sari et al. (2019) also found that good family support was associated with lower anxiety levels.

14 cancer patients who received low family support and 68 cancer patients who received family support were experiencing depression. Family support can affect the psychology and emotional response of cancer patients and, of course, will help in the healing process of cancer patients (Suwistianisa et al., 2015). The family as mediators will make patients have reasonable control of emotions, which leads to self-acceptance and the ability to live positively and optimistically (Ain et al., 2020). Families provide meaningful support for people living with cancer through motivation and spirituality. Besides, it is also suggested that there is social networking between family and cancer patients (Aprilianto et al., 2021).

Cancer patients with low family support feel that they do not get enough support from the family. It might happen due to the lack of family interaction and the lack of information that cancer patients can obtain. Research also explains that low family support triggers depression. It can cause patients to experience severe pain (Su et al., 2017). The source of human strength that leads to the happiness of life can increase a person's immunity to overcome the pain they suffer.

Therefore, special attention is needed in the treatment of cancer patients. One of them is family support, especially from the closest family. Family caregivers will have more time to interact and be close to the patients' (Saputro et al., 2021). With family support, cancer patients will feel more excited, valued, and motivated to undergo treatment for better conditions (Yuliati et al.,

2020). Support from family or close people with cancer gives a feeling of being protected so that patients feel more comfortable with the disease they are suffering.

The Relationship between Spirituality of Cancer Patients and Mental Health in Hospital X

The spirituality of cancer patients with mental health did not have a significant relationship in Hospital X. The result is different from the research conducted by Wiksuarini et al. (2018) about the spirituality and quality of life of cancer patients. Chaar et al. (2018) regarding evaluating the impact of spirituality on the quality of life, anxiety, and depression. A transverse observational study explains that spirituality is related to cancer patient's mental health.

The previous research explains that spiritual well-being has a positive relationship with the mental health (Zare et al., 2019). It is because high spirituality will change the mindset of patients who can be more able to accept their condition and live their illness with gratitude to God. In a previous study, Komariah et al. (2021) used an Islamic-based practice approach for breast cancer patients. As a result, there was a change in positive responses, which made them closer to God and have a peaceful mind in their daily life. Besides, depression and anxiety in Muslim cancer patients have a low tendency if they are more religious, which is understanding several definitions of Al-Islam, Al-Iman, and Al-Ihsan (Basri et al., 2015). Cancer patients will assume that their disease is the will of God. This situation will make cancer patients more intensive in carrying out worship to drive cancer patients calmer and have hope for recovery (Wiksuarini et al., 2018).

However, other studies have shown that coping with spirituality can have an excellent mental health effect and can also be a lousy coping. If a person can associate his illness with a constructive attitude based on faith, it can encourage adaptation to health and psychological adjustment to stress. However, if a person sees their illness as a punishment for an existential crisis, spiritual coping becomes negative (Rego & Nunes, 2019).

Although the concepts of religiosity and spirituality are offensive, the two things have different meanings. Spirituality can be related to one's religion. However, it can also be related to other things, such as the experience of seeking meaning, purpose, and well-being between oneself

and others, with oneself, or with the ultimate reality (Amir & Lesmawati, 2016).

The idea is aligned with the results of the distribution of spirituality frequencies regarding the proximity of cancer patients to God, which is as many as 49 cancer patients, 51% feel they have a "quite close" relationship with God. From the majority of Muslim cancer patients, not all of them have faith or attachment to their God; even though,

when measured on average, they have moderate spirituality (73 patients) and high spirituality (23 patients).

Table 3
Relationship between Characteristics of Cancer Patients and Mental Health (Stress) at Hospital X

Characteristics	Stress						N		P-value
	Low		Moderate		High		N	%	
	n	%	n	%	n	%	N	%	
Age (Years Old)									
Late Adolescence: 17-25	4	4.2	1	1	0	0	5	5.20	0.00
Early Adults: 26-35	1	0.0	7	7.30	0	0	7	7.30	
Late Adults: 36-45	12	12.50	7	7.30	1	1	20	20.80	
Early Elderly: 46-55	16	16.70	13	13.50	5	5.20	34	35.40	
Late Elderly: 56-65	5	5.2	12	12.50	2	2.10	19	19.80	
Seniors: >65	2	2.1	9	9.40	0	0	11	11.50	
Gender									
Male	11	11.50	18	18.80	3	3.10	32	33.30	0.68
Female	28	29.20	31	32.30	5	5.20	64	66.70	
Occupation									
Employment	27	28.10	25	26	7	7.30	59	61.50	0.05
Unemployment	12	12.50	24	25	1	1	37	38.50	
Education									
Not going to school	4	4.20	6	6.30	3	3.10	13	13.50	0.54
Elementary School	16	16.70	21	21.90	2	2.10	39	40.60	
Junior High School	13	13.50	11	11.50	2	2.10	26	27.10	
Senior High School	6	6.30	11	11.50	1	1	18	18.80	
Associate's Degree	0	0	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	0	0	
Family Support									
Low	2	2.10	12	12.50	2	2.10	16	16.70	0.19
Moderate	32	33.30	33	34.40	3	3.10	68	70.80	
High	5	5.20	4	4.20	3	3.10	12	12.50	
Spirituality									
Low	0	0	0	0	0	0	0	0	0.15
Moderate	32	33.30	37	38.50	4	4.20	73	76	
High	7	7.30	12	12.50	4	4.20	23	24	

Table 4
Relationship between Characteristics of Cancer Patients and Mental Health (Depression) at Hospital X

Characteristics	Depression	N	P-value
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	No		Yes		N	%	
	n	%	n	%			
Age (Years Old)							
Late Adolescence: 17-25	3	3.10	2	2.10	5	5.20	0.30
Early Adults: 26-35	2	2.10	5	5.20	7	7.30	
Late Adults: 36-45	8	8.30	12	12.50	20	20.80	
Early Elderly: 46-55	19	19.80	15	15.60	34	35.40	
Late Elderly: 56-65	5	5.20	14	14.60	19	19.80	
Seniors: >65	4	4.20	7	7.30	11	11.50	
Gender							
Male	14	14.60	18	18.8	32	33.30	0.88
Female	27	28.10	37	38.50	64	66.70	
Occupation							
Employment	41	42.70	55	57.30	96	100	0.23
Unemployment	28	29.20	31	32.30	59	61.50	
Education							
Not going to school	9	9.40	4	4.20	13	13.50	0.10
Elementary School	18	18.80	21	21.90	39	40.60	
Junior High School	9	9.40	17	17.70	26	27.10	
Senior High School	5	5.20	13	13.50	18	18.80	
Associate's Degree	0	0	0	0	0	0	
Bachelor/Master/PhD	0	0	0	0	0	0	
Family Support							
Low	2	2.10	14	14.60	16	16.70	0.01
Moderate	31	32.30	37	38.50	68	70.80	
High	8	8.30	4	4.20	12	12.50	
Spirituality							
Low	0	0	0	0	0	0	0.93
Moderate	31	32.30	42	43.80	73	76	
High	10	10.40	13	13.50	23	24	

Source: Primary Data, 2021

CONCLUSION

The analysis results show that the characteristics of cancer patients with mental health are influenced by age. Meanwhile, the respondent's gender, education, and occupation characteristics are not related to the mental health of cancer patients. Family support for mental health affects cancer patients, while spirituality in cancer patients has no relationship with mental health.

Based on the research, the researcher provides several suggestions. For Hospital X, it is hoped that it will continue to provide services or facilities to

provide mental support for cancer patients and assist them in preventing mental health disorders due to their conditions. While for cancer patients in Hospital X, it is expected that the patients will continue to increase their confidence and ability to undergo treatment to prevent mental disorders that can affect their physical condition. Last, for other researchers, the researchers suggest conducting further research on the factors that affect the mental health of cancer patients with more in-depth or qualitative methods.

CONFLICT OF INTEREST

No potential conflict of interest is relevant to this article.

AUTHOR CONTRIBUTIONS

SS handled the research's concept and idea, RR was responsible for the final version of the manuscript, and WR and FN experimented. All authors shaped the research.

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