



Religious Concerns on Financial and Psychological Hardship of Cancer Survivors in Eastern Indonesia

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ABSTRACT

Cancer survivors face significant financial hardship and psychological distress during treatment. This study investigates the role of religiosity as a coping mechanism for cancer survivors experiencing these challenges. Using an explanatory sequential mixed-method approach, the study analyzed data from 817 patients in the quantitative phase and conducted in-depth interviews with 8 informants representing breast, cervical, lung, and prostate cancer. Quantitative findings indicate that 63% of respondents experienced high financial hardship, while 37% faced moderate hardship. Out-of-pocket expenses, including transportation, accommodation, and uncovered medical costs, contributed to these difficulties. Qualitative interviews revealed that financial strain often led to job loss, debt accumulation, and emotional stress, further exacerbating patient challenges. Religiosity emerged as a critical coping strategy, with participants reporting that spiritual practices and reliance on faith provided emotional strength, reduced depression, and enhanced psychological resilience. This study highlights the need for integrated support systems, including expanded insurance coverage, hospital-based spiritual care, and community-driven support programs. The findings contribute to understanding religiosity's role in managing financial and psychological burdens, particularly in resource-limited settings such as Eastern Indonesia.

Keywords: *Cancer Survivors; Coping Mechanisms; Financial Hardship; Psychological Distress; Religiosity.*

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INTRODUCTION

Cancer is a catastrophic disease that imposes significant financial burdens and affects many patients. It is also associated with an extremely high mortality rate. When an individual is diagnosed with cancer and requires hospitalization, the financial costs are often borne by the patient, placing them under considerable strain (Girgis, Lambert, Johnson, Waller, & Currow, 2013). Research indicates that cancer patients face a heightened risk of financial distress, especially when out-of-pocket (OOP) expenses exceed \$2,000 annually (IDR 28,266,100) and account for more than 20% of a family's income (Pisu, Maria, et al., 2017).

For instance, breast cancer patients in Malaysia exhibit significant psychological challenges, with 31.7% experiencing anxiety and 22.0% depression, as noted in a study

conducted in urban areas. Patients without adequate financial support are particularly vulnerable to depression (Hassan et al., 2015). Depression, the most prevalent psychological condition among cancer patients, often disrupts their ability to maintain normalcy in life, potentially leading to suicidal ideation (Maneeton, Maneeton, & Mahathep, 2012). Approximately 20% of cancer patients experience depression, with a lack of adherence to therapy being a contributing factor to suicidal tendencies (Macmillan, 2018). Additionally, financial hardship frequently exacerbates the health outcomes of cancer patients (Sharp, Carsin, & Timmons, 2013).

There is a common misconception that medical treatment alone is sufficient for cancer recovery. Cancer survivors often face long-term psychological stress following intensive therapy (Wang et al., 2017). This psychological stress can interfere with daily activities and overall well-being. Studies have shown that such stress has biological implications, including inflammation, autonomic dysfunction, deregulated activity, hypothalamic-pituitary-adrenal (HPA) axis disturbances, disease progression, and even mortality (Bortolato et al., 2017). As such, addressing the well-being of cancer survivors requires considering cancer as a biopsychosocial disease, rather than solely a biomedical or chronic condition (Cordova, Riba, & Spiegel, 2017).

Another study revealed that reducing anxiety among cancer patients could improve their survival rates (Jones et al., 2017). Comprehensive treatment strategies for cancer patients should address physical, psychological, social, and spiritual health concerns, particularly as therapeutic procedures often induce prolonged stress. Social support during chemotherapy is especially crucial (Swartzman, Sani, & Munro, 2017). Additionally, cancer patients with coexisting chronic conditions have a diminished likelihood of survival.

While some studies have explored the role of religiosity in alleviating psychological stress among cancer patients, such as those by Ng Guan Chong et al. (2017) and Al Eid et al. (2020), these studies often lack a focus on financial hardship as a critical aspect of coping. Furthermore, conflicting findings – such as those by Abou Kassm et al. (2018), which suggest religiosity does not influence depression and stress – highlight a gap in understanding the broader implications of religiosity as a coping mechanism. Specifically, there is insufficient research on how religiosity may mitigate the combined psychological and financial burdens experienced by cancer patients.

Moreover, little attention has been given to the cultural and contextual relevance of such coping mechanisms in specific local settings. For example, in regions like Makassar, where religious and cultural values are deeply ingrained in community life, exploring the role of religiosity as a coping strategy could provide unique insights into its effectiveness. This is particularly relevant given the challenges of limited healthcare access and financial support in the area. Addressing these gaps could contribute to a more holistic understanding of how religiosity impacts the well-being of cancer patients, not only in Makassar but also in similar socio-cultural contexts globally.

The present study aims to investigate the impact of religious involvement on the psychological and financial hardships experienced by cancer survivors during treatment, while addressing the gap in understanding religiosity's role as a comprehensive coping mechanism in culturally specific contexts.

MATERIAL AND METHOD

The study employs the explanatory sequential mixed method. As shown by John W. Creswell, the explanatory sequential mixed method is a method in which the

author first conducts quantitative research, analyzes the results, and organizes the data to be explained with qualitative research. Qualitative study is regarded as explanatory because the outcomes of the initial quantitative data are explained forward with qualitative data. This is seen as sequential since the quantitative phase is followed by a qualitative phase (Creswell, 2014).

The target population in this study based on medical record data was 817 patients in phase I at Hasanuddin University Teaching Hospital in Makassar. Afterward, utilizing a questionnaire, a sample of 360 people were recruited, with only 185 answering. The investigation was carried out qualitatively in phase II. The study included 8 (eight) informants: 2 breast cancer patients, 2 cervical cancer patients, 2 lung cancer patients, and 2 prostate cancer patients.

RESULT AND DISCUSSION

Financial Hardship in Cancer Patients

The author conducted a study in 2018 on cancer patients who were transported to Makassar City, particularly those at Hasanuddin University Teaching Hospital, Makassar. Furthermore, fill out the questionnaire form we created and distributed to 360 respondents. However, about 185 people (51.38 %) replied. The characteristics of the respondents are summarized in the table 1 below:

Characteristics Respondent

Respondent characteristics may include residence, gender, age, marital status, type of cancer, stage of cancer, educational status, and the type of treatment being followed.

Table 1. General Characteristics of Respondents with Cancer Patients at the Hasanuddin University Teaching Hospital Makassar in 2018

Characteristics Respondent	Total	(%)
Domicile/place stay		
South Sulawesi	122	65, 94%
Outside South Sulawesi	63	34.06 %
Type Sex		
Male	79	42.71%
Female	106	57.29%
Age		
< 40 years old	15	8.12%
40-60 years	124	67.02%
> 60 years old	46	24.86%
Marital Status		
Married	158	85.40%
Number of Children		
Not yet/ not married	27	24.60%
Type of Cancer		
Breast Cancer	64	34.60%
Cervix Cancer	42	22.70%
Lungs Cancer	47	25.40%
Prostate Cancer	32	17.30
Cancer Stage		
Stage 1	16	8.65 %

Stage 2	30	16.22 %
Stage 3	105	56.76 %
Stage 4	34	18.37 %
Type of Treatment		
Operation	33	17.84 %
Chemotherapy	107	57.84 %
Radiotherapy	45	24.32 %

Source: Secondary Data, 2018

As indicated in table 1 above, cancer patients receive treatment such as surgery, chemotherapy, and radiation. The cost of this treatment type is extremely high, nevertheless, it has no direct impact on patients with BPJS membership due to it being covered by the payment scheme. During the treatments and waiting period, the financial hardship is more evident. Patients must wait at least 3 months before using radiation services. Patients must wait for an average of 2 weeks for surgery and treatment. The waiting period requires the patient to spend out of pocket while in Makassar which is frequently without clarity on the treatment schedule.

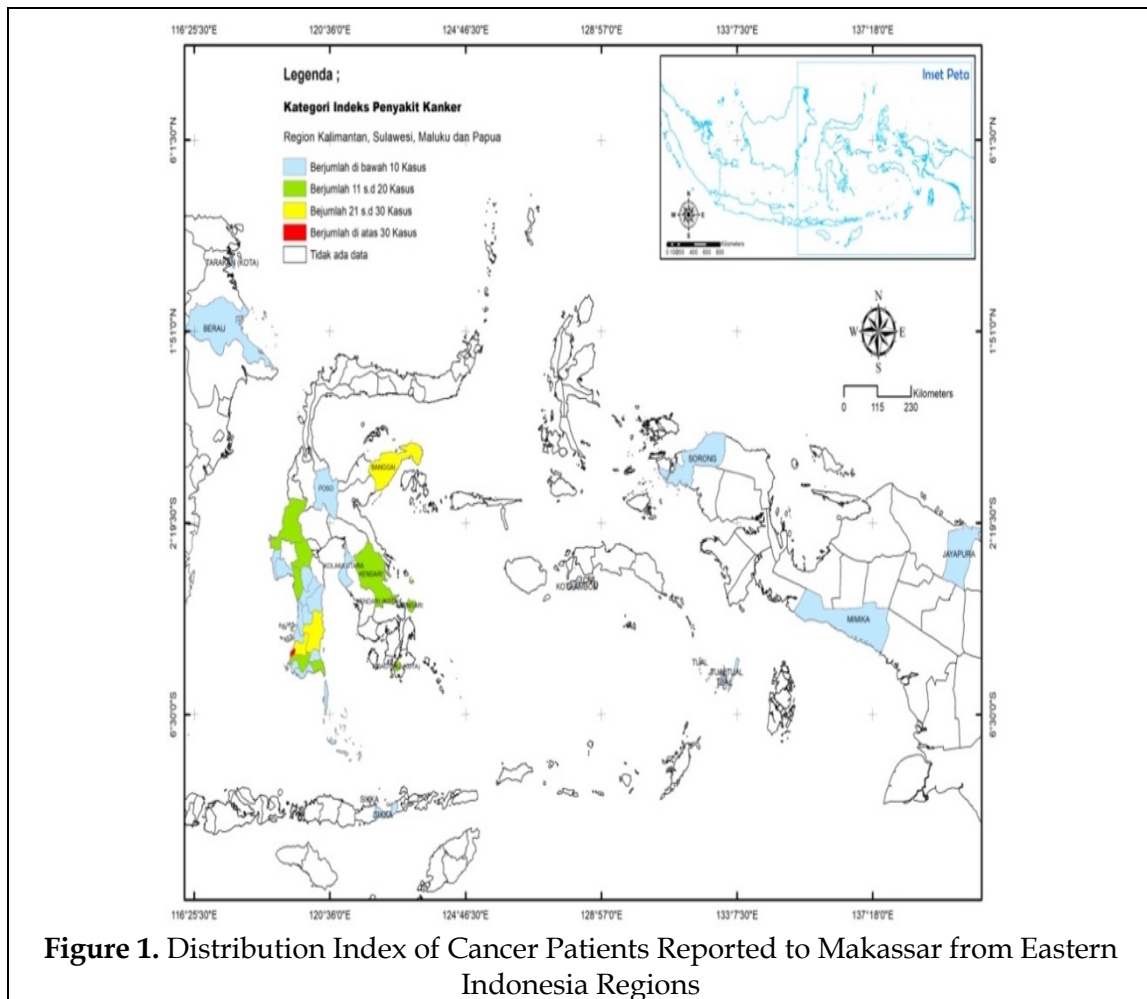


Figure 1 depicts the distribution index of cancer patients referred to Makassar from various regions in Eastern Indonesia. The map highlights regions with different levels of cancer patient referrals, using a color-coded system to indicate the severity of the reported index. Areas marked in red represent regions with the highest concentration of

cancer patient referrals, followed by yellow for moderate levels, and green for lower levels. Meanwhile, regions in blue have significantly fewer reported cases, illustrating minimal referrals.

The map clearly shows that most cancer patients referred to Makassar come from South Sulawesi and its surrounding provinces. These areas serve as the primary sources of referrals, particularly to Hasanuddin University Teaching Hospital, which is a central hub for cancer treatment in Eastern Indonesia. Regions farther from Makassar, such as parts of Maluku and Papua, display a lower index, indicating potential disparities in healthcare access and referral systems across Eastern Indonesia.

This distribution underscores the critical role of Makassar as a regional center for cancer treatment while also reflecting the geographic and infrastructural challenges faced by patients in accessing specialized healthcare services. Based on one of the study's aims, which is to examine the financial hardship of cancer patients, the classification is based on monthly income minus total treatment costs. As a result, the categorization is displayed in the table 2 below:

Table 2. Characteristics of Respondents Based on Financial Hardship Category at Hasanuddin University Teaching Hospital in 2018

Category	Total	(%)
High	117	63%
Currently	68	37%
Low	-	-

Source: Primary Data

Table 2 highlights the financial hardship experienced by cancer patients at Hasanuddin University Teaching Hospital in 2018. The findings reveal that a significant proportion of respondents, **63% (117 individuals)**, faced high financial hardship, where their monthly income was insufficient to cover the total treatment costs. Meanwhile, **37% (68 individuals)** experienced moderate or current financial hardship, indicating that while their financial strain was substantial, it was comparatively less severe. Notably, no respondents fell into the low financial hardship category, underscoring the pervasive and severe economic burden faced by all cancer patients surveyed. These findings emphasize the financial challenges cancer patients endure, particularly during treatment, which can contribute to further psychological and emotional stress.

Psychological Financial Hardship

A cancer patient has psychological pressure due to the costs of treatment as well as the psychological cost of his disease. To conduct a more in-depth investigation, we conducted in-depth interviews with a sample of cancer survivors who had encountered this psychological pressure. Four persons were interviewed, one for each type of disease: breast cancer survivors, cervical cancer survivors, lung cancer survivors, and prostate cancer survivors.

1. Breast Cancer Survivors

The informant (IRT) is a housewife from Gowa Regency in South Sulawesi. She was diagnosed with breast cancer in 2017 and had surgically removed her breasts. She has also been through chemotherapy 5 times. The informant has no children and

survives solely on her husband's earnings. Her husband drives public transportation. When completing therapy, patients begin to face psychological and financial hardships. Since his wife is being treated in the hospital, the family's head must leave his job. The informant was unable to handle her activities after leaving the hospital, particularly cooking, washing, and even going to the bathroom. As a result, the husband is always obligated to accompany his wife. Unless it is covered by BPJS, certain unexpected costs must be spent, such as requiring purchasing medicines that are not covered by BPJS and are relatively expensive, as well as paying for blood bags whenever the hospital's blood bank is out of stock.

2. Cervical Cancer Survivor

The informant is a housewife (IRT) from Baubau town in Southeast Sulawesi. Her spouse works at a gas station close to his residence and relies only on his money to survive. She was immediately transferred to Makassar after she was diagnosed with cervical cancer in 2017. The mother's psychological financial hardship began when she had to continue therapy every two weeks since she had to stay in Makassar and look for a boarding house. During their stay in Makassar, she was accompanied by her first daughter who had been forced to leave her husband in the village to be with her parents. Thus, his son could still take care of his family's everyday necessities in Makassar.

3. Lungs Cancer Survivor

An informant is a man who is employed as an entrepreneur in Banggai Regency, Central Sulawesi. After having chemotherapy several times in the city of Manado, he was treated in Makassar. When he had to travel to Makassar City regularly, he began to have both psychological and financial hardship. This is quite pricey. Furthermore, he had to leave his employment every time he departed, causing a significant decrease in his earnings.

4. Prostate Cancer Survivor

The informant is a male who works as a Civil Servant (PNS) in Muna Regency, Southeast Sulawesi. He was treated in Makassar since he needs radiation. Radiotherapy equipment is now exclusively accessible at Hasanuddin University Teaching Hospital. When the informant had to travel a long distance from Muna to Makassar, the psychological financial hardship began. Transportation costs are high, and the number of radiotherapy machine users is huge. Informants should wait 3-4 months for the schedules, which are often unclear. The informant believed that the costs spent while waiting had increased, therefore he abandoned his employment at the office.

Religious Concerns Cancer Survivorship

Social ability to adapt and interact with the environment is one of the factors that influence the success of the coping strategy. Furthermore, one factor that is quite helpful when experiencing financial hardship is having assets available for sale to reduce the cost of cancer treatment. When asked about features of cancer survivors' religiosity, all the informants felt more excited than before being diagnosed with the disease. All treatment efforts have been given over to God. Informants also realized that cancer is a condition with a high rate of death. As a result, purely God's miracle might save them. Similarly, when faced with financial hardships while having cancer treatment. Most of the informants prayed to God to decrease their financial burden.

CONCLUSION

This study reveals that cancer patients referred to Makassar, particularly at Hasanuddin University Teaching Hospital, experience significant financial hardship and psychological distress during treatment. Quantitative findings show that 63% of respondents (117 individuals) faced high financial hardship, while 37% (68 individuals) experienced moderate hardship. These challenges arise from out-of-pocket costs such as transportation, accommodation, and uncovered medical expenses, exacerbating the financial burden of patients undergoing treatment. Qualitative interviews further highlight how financial strain is compounded by loss of job productivity, debt accumulation, and emotional stress, as reported by patients across various cancer types, including breast, cervical, lung, and prostate cancer.

Religiosity emerges as a crucial coping strategy for managing the dual burden of financial and psychological hardship. Cancer survivors reported that increased religious practices and spiritual reliance offered emotional strength, reducing levels of depression and anxiety. This finding aligns with the biopsychosocial approach to cancer care, emphasizing the importance of addressing not only physical health but also psychological and spiritual well-being.

The study's findings respond directly to the research objective by illustrating the significant role of religiosity as a coping mechanism. At the same time, they emphasize the importance of integrated support systems, such as improved healthcare policies to expand National Health Insurance (BPJS) coverage for non-medical costs, hospital-based spiritual counseling programs, and community-driven financial and emotional support initiatives.

From an academic perspective, this research addresses a gap in understanding the intersection of financial hardship, psychological stress, and religious coping strategies, particularly in the Indonesian context. The findings are relevant to other resource-limited settings where cultural and religious values play a significant role in patients' coping mechanisms. The study highlights the need for further research to evaluate the long-term impact of religious coping on treatment adherence, survival rates, and overall quality of life among cancer patients. Comparative studies across different regions and cultures would also help identify both universal and context-specific patterns in coping strategies.

The results demonstrate that a holistic and culturally sensitive approach to cancer care is essential in addressing the financial, emotional, and spiritual challenges faced by patients. Religious coping serves as a meaningful pathway to strengthen the resilience and psychological well-being of cancer survivors, particularly in contexts with limited resources and strong cultural ties to religious practices.

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