

CHAPTER I

INTRODUCTION

1.1. Background

According to NIH (2020), the definition of *neoplasm* is The definition of *neoplasm* is an abnormal mass of tissue which appear because the unusual growth pattern of a cell. It can occur at any location inside our body. Neoplasm may be benign or malignant. Neoplasm can occur both on CNS and non-CNS organs. Meningioma, which has various grade starting from benign to malignant, is one example of CNS neoplasm. Furthermore, examples of non-CNS neoplasm include fibroadenoma mammae and breast cancer. The prevalence of breast cancer patients was 36% from total outpatient clinic cases (RSUD Dr. Soetomo, 2020). While the prevalence of meningioma patients in 2020 is 2,01% from total neurology outpatient clinic cases.

This research was conducted in Dr. Soetomo General Hospital, Surabaya. The sample was divided into two groups, the first one was patients with CNS neoplasm, and the second was patients with non-CNS neoplasm. Female patients with meningeal and breast neoplasm was chosen because of its high prevalence in Dr. Soetomo General Hospital. Neoplasm patients from outpatient clinics were chosen instead of inpatient clinics as it would be easier and more convenient for the patients to answer the questionnaire due to their body conditions that can still do more activities than those hospitalized. Neoplasm patients from inpatient clinics also usually suffer from dysfunctions that can forbid safe release home from the intense care inpatient clinical service; therefore needed to be moved to a post-intensive inpatient restoration facility (Fu, Raj, and Guo, 2017).

Neoplasm can alter various system in our body. It can also cause depression in some patients. As we all know, being diagnosed with neoplasm is such a life-changing experience. If someone does not have a good coping mechanism, it can lead to depression. Other than psychological changes that might happen after the patients got diagnosed, there are a lot of underlying factors of depression in neoplasm patients including psychosocial factors, tissue damage, medications, etc. Rates of depression in neoplasm patients are influenced by various elements, including the location of primary cancer, gender, age, and the disease's timeline (Smith, 2015). According to previous research conducted by Dauchy, Dolbeault, and Reich (2013), the prevalence of depression in malignant neoplasm patients is two to three times higher than in general populations. Depression may cause not only low mood but also the decrease one's ability to concentrate, memorizing or decide something.

This research will hypothesize that meningeal neoplasm has a higher impact on the severity rates of depression than in breast neoplasm female patients. Depression can occur as the side effect of cancer treatment, the impact of being diagnosed with cancer, etc. However CNS neoplasm is located in human's brain so it may also disrupt the neurocognitive function. Neurocognitive deficit can affect our mood, personality and brain functions thus causing memory loss. A previous study shows that memory loss was linked with depression (Goebel and Mehdorn, 2012). Therefore based on these reason, the quality of life of female meningeal neoplasm patients might become more inferior to the female breast neoplasm patients. We can try to increase the quality of life of the female meningeal and breast neoplasm patients by giving early assessment on depression, and then treating them immediately with some available options of treatments.

Based on studies above, the severity of depression in female with meningeal neoplasm might be higher than in female with breast neoplasm since the location of the tumor can disrupt the patient's neurocognitive function which eventually affect the mood and personality of the patients. The sample of this study was female patients with meningeal and breast neoplasm as their prevalence is the highest one on each group (CNS and non-CNS) in Dr. Soetomo General Hospital. This research hypothesizes meningeal neoplasm has a higher impact on the severity of depression than breast neoplasm. Therefore we need to conduct this research to find the answer to the problem formulation and hopefully the data obtained can help the experts to treat the patients better thus can increase the quality of life of the patients.

1.2. Problem Formulation

Is the severity of depression in female patients with meningeal neoplasm higher than those with breast neoplasm?

1.3. Research Objective

1.3.1. General Objective

To find that if the severity of depression in female patients with meningeal neoplasm is higher than in female patients with breast neoplasm

1.3.2. Specific Objective

1. To describe the characteristic and the proportion of depression in female patients with meningeal and breast neoplasm
2. To compare the severity of depression in female patients with meningeal and breast neoplasm

1.4. Benefit of Research

1.4.1. Academic Benefits

This research is expected to improve understanding about the effects of meningeal and breast neoplasm towards the severity of depression in female patients.

1.4.2. Practical Benefits

This research is expected to provide a better understanding and description of severity differences of depression within female patients with meningeal and breast neoplasm in RSUD Dr. Soetomo and hopefully the data can be used by the experts to find a better treatment for their physical and mental health, also to reduce the rate of depression in these patients.

1.5. Previous Research

Table 1.1. Previous Research

No	Study Design	Subject	Parameter	Results	Citation
1.	Present study	97 women with breast neoplasm; 73 malignant and 24 benign tumor	CES-D	28 patients with malignant neoplasm and 5 patients with benign neoplasm are suffered from depression	YEN, J.-Y., KO, C.-H., YEN, C.-F., YANG, M.-J., WU, C.-Y., JUAN, C.-H. and HOU, M.-F. (2006). Quality of life, depression, and stress in breast cancer women outpatients receiving active therapy in Taiwan. <i>Psychiatry and Clinical Neurosciences</i> , [online] 60(2), pp.147–153. Available at: https://onlinelibrary.wiley.com/doi/10.1111/j.1440-1819.2006.01479.x [Accessed 11 Jul. 2021].

2.	Prospective single center study	62 patients with meningioma	HADS	The prevalence of depression in postoperative and wait-and-watch group was 61% and 87% respectively	Kalasauskas, D., Keric, N., Abu Ajaj, S., von Cube, L., Ringel, F. and Renovanz, M. (2020). Psychological Burden in Meningioma Patients under a Wait-and-Watch Strategy and after Complete Resection Is High—Results of a Prospective Single Center Study. <i>Cancers</i> , 12(12), p.3503.
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