ORIGINAL ARTICLE

LEVEL OF FATIGUE AMONG MALE PATIENTS WITH CANCER

I Komang Leo Triandana Arizona[1*], Tintin Sukartini[2], Ferry Efendi[3]

1 **Magister Student Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia**
2 **Department Medical-Surgical Nursing, Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia**
3 **Department of Mental Health and Community Health Nursing, Faculty of Nursing, Universitas Airlangga, Surabaya**
* **Correspondence: i.komang.leo.triandana-2017@fkp.unair.ac.id**

Abstract

Cancer-related fatigue (CRF) is one of the symptoms commonly experienced by cancer patients and has an impact on decreasing quality of life. The study aimed to explore the characteristics of cancer patients who experience cancer-related fatigue. The study involved 15 cancer patients using purposive sampling. The research instrument used a questionnaire characteristic of the research subjects and the Brief Fatigue Inventory. Descriptive data analysis using percentages and numbers. The results showed that most cancer patients experienced moderate fatigue, in the age range of the early elderly, stage III and received combination therapy. Fatigue in cancer patients is a symptom caused by multi factors. Cancer stage and type of treatment is one aspect that appears in the severity of perceived fatigue. CRF can occur in all phases of the disease, age, and type of treatment. Patient education about CRF needs to be done especially related to the management of fatigue that can be done both before and after treatment.

Keywords: cancer-related fatigue, weakness

International Journal of Nursing and Health Services (IJNHS), December 2019, Volume 2, Issue 4; Page 280-284
Received: 19 June 2019; Revised: 09 July 2019; Accepted: 19 July 2019
DOI 10.35654/ijnhs.v2i4.134

Introduction

Fatigue is one of the symptoms commonly experienced by cancer patients (1). Fatigue associated with cancer known as Cancer-related Fatigue (CRF) is one of the symptoms that are often felt by cancer patients in all phases of the disease and often causes functional disorders and negative impacts on quality of life significantly (2,3). CRF is often not reported by patients, so it gets less attention (4,5).

The prevalence of CRF ranges from 70% to 100% during active treatment (4) and about 30% of patients will experience post-treatment fatigue (2). Severe fatigue is more common in patients receiving chemotherapy (6,7).

Fatigue in cancer patients can be caused by underlying treatment or tumor disease or with a potential genetic predisposition, accompanying physical or mental illness, or behavioral and environmental factors (8). CRF can occur before treatment and can increase during cancer treatment, including treatment with radiation, hormonal and biological

therapy (4,9,10). Factors that contribute to the occurrence of CRF are medication, pain, anemia, level of activity, combination, nutrition, sleep disturbances, emotional distress (11). Risk factors affecting the severity of CRF are stage cancer, undergoing chemotherapy and receive management with a combination of surgery, radiotherapy, and chemotherapy, either with or without hormone therapy (7).

Fatigue is a personal experience that can affect everyone, both men and women (4,12). Attention to the health of men and women will be very important in overcoming the global epidemic of non-communicable diseases such as cancer (13). Compared to women, health inequalities in men have received little attention in recent years (14).

Objectives

The study aimed to describe level of fatigue among male patients suffering from cancer.

Methods

A descriptive study to describe level of fatigue among male patients suffering from cancer. Fifteen samples were selected based on the inclusion criteria. The patients should has diagnosed for a minimum of 6 months by the physician. The instrument used in this study was the participant characteristic questionnaire and the Indonesian version of the Brief Brief Fatigue Inventory questionnaire with the Cronbach alpha test value of 0.956 (15). Data collection was conducted in February - May 2019 at the East Java Indonesian Cancer Foundation Branch. The analysis in this study was carried out descriptively using percentages and numbers. This research has been declared ethical conduct by the Ethics Commission of the Faculty of Nursing, Airlangga University with the number 1280-KEPK.

Results

Demographic characteristic

Table 1 described the demographic characteristic. The finding showed that most of patients age between 36 to 65 years old. Majority of patients did not work (93.33%). Only 6.67% patients were still working. Regarding stage of cancer, more than 50% patients has been diagnosed as stage III of cancer (53.33%), while 40% patients were stage II of cancer. Concerning of type of therapy, 53.33% patients used a combination therapy and 40% patients used only chemotherapy. Details of explanation were summarized in table 1.

Table 1. *Demographics and characteristics of participants (N=15)*

Characteristics	N	%
Age		
17-25 years	1	6.67%
26 – 35 years	0	0%
36 – 45 years	4	26.67%
46 – 55 years	5	33.33%
56 – 65 years	4	26.67%
>65 years	1	6.67%
Occupational status		
Work	1	6.67%
Doesn't work	14	93.33%

Characteristics	N	%
Cancer staging		
Staging I	0	0%
Staging II	6	40.00%
Staging III	8	53.33%
Staging IV	1	6.67%
Type of treatment		
Surgery	1	6.67%
Chemotherapy	6	40.00%
Radiotherapy	0	0%
Nuclear therapy	0	0%
Combination cancer therapy (surgery/chemotherapy/radiotherapy/nuclear therapy)	8	53.33%

Level of fatigue among male patients with cancer

Table 2 showed the level of fatigue among male patients with cancer. The findings showed that. 60% of patients were moderate fatigue. Only 20% patients had been diagnosed as mild and severe fatigue related cancer. Details of explanation were summarized in table 2.

Table 2. *Level of fatigue (N=15)*

Level of Fatigue	N	%
Mild fatigue	3	20%
Moderate fatigue	9	60%
Severe fatigue	3	20%

Discussion

This study was conducted to describe the characteristics of cancer patients related to fatigue and will be described in the order of characteristics; age, work status, stage of cancer, and type of treatment. The results showed that most patients experienced moderate fatigue. Compared to the fatigue experienced by healthy individuals, CRF is more severe and less likely to recover just by resting (16). The energy level of cancer patients never returns to a state before diagnosis and treatment (17).

The age of patients in this study was mostly in the age range of the early elderly. The higher levels of fatigue occur in older individuals (18). This is related to the presence of comorbid anemia, which is. Low hemoglobin (Hgb) often occurs in older people and its incidence increases with age (19). CRF that occurs in the early elderly is caused by the aging process and a decrease in physical function with age.

Most participants are not working. Not working this includes stopping work or temporary leave. CRF has a very negative impact on the patient's quality of life, functional status and daily activities (6,20). All of these things will end in decreasing the quality of life of patients (6). This is because of the physical limitations of the patient in carrying out activities and having difficulty in thinking, concentration, and creativity so that this will make the patient reduce the patient's ability to work.

Most stages of cancer in participants are in stage III. Stage of cancer is one of the risk factors that affect the severity of cancer-related fatigue (7). In advanced cancer and among long-term cancer patients, fatigue is a symptom that usually lasts long after chemotherapy or radiotherapy. Fatigue is more severe in those who suffer from end-stage disease than those who suffer from the early stages of the disease (21). Stage of cancer becomes an important aspect in

the event of patient fatigue because it is related to the development of the disease, the higher the stage of the patient will lead to the increased complexity of health problems experienced.

The type of treatment that patients undergo in this study is mostly combination therapy. Treatment-related fatigue can be directly induced by the drug or indirectly mediated by specific toxicity (4). Cancer treated with chemotherapy can accelerate the mechanism associated with the stress response. This is related to allostasis which refers to the body's adaptation to stress. Excessive stress can accelerate aging and can cause the failure of the body's hormonal responses, worsening psychological stress, and decreased physical and mental function (3). Combination therapy is given by using more than one type of treatment, which can be surgery, radiotherapy and chemotherapy, nuclear therapy where this treatment can interfere with the process of forming blood cells in the bone marrow so that the potential for anemia. Anemia is co-morbid in the event of fatigue in cancer patients.

Conclusions

Fatigue in cancer patients is related to age, work status, stage of cancer and the type of treatment that is undertaken. Fatigue in cancer patients is more common in patients receiving combination therapy, both chemotherapy, radiotherapy and or nuclear therapy. It is necessary to educate patients about CRF especially concerning the management of fatigue that can be done both before and after treatment.

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