AISCH 2022
The 3rd Al Insyirah International Scientific Conference on Health

ANALYSIS OF FATIGUE LEVELS OF ELDERLY SURVIVORS OF THE CORONAVIRUS DISEASE 2019 IN PEKANBARU CITY

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ABSTRACT

Long covid is a term used to describe an illness experienced by survivors of Covid-19 where they still feel the long-term effects of the Coronavirus much longer than expected. long covid symptoms are easy fatigue, shortness of breath, sore throat, cough, chest pain, joints, difficulty concentrating and problems with memory or brain fog, insomnia. Fatigue is the most common symptom experienced by elderly survivors of covid 19 after fever and shortness of breath which occurs in 30% of all elderly survivors of covid 19. The purpose of this research is to determine the level of fatigue of elderly survivors of covid 19 which will be associated with characteristics including the level of symptoms experienced. felt by the elderly. The methodology used is simple and descriptive so that it can see the level of fatigue of the elderly survivors of Covid 19 in the city of Pekanbaru. The sample used was 40 elderly people at least 14 days after Covid 19 and showed negative test results. The results of this study were no fatigue for 6 people (15%), mild fatigue for 22 people (55%), moderate fatigue for 10 people (25%), and very fatigue for 2 people (5%). It is hoped that health workers who treat COVID-19 patients, especially the elderly, can anticipate the impact, especially fatigue, by conducting an assessment after completing isolation so that later they can carry out appropriate nursing interventions.

Keyword : Older Adult; Covid 19 Survivor; Fatigue

INTRODUCTION

In addition to physical problems, sufferers of Covid 19 experience psychological problems due to stress caused by negative news, lack of social support, subjective experience, and the effects of self-isolation. [2], stated that the Coronavirus had a great impact on individual psychosocial, due to intense independent isolation, high mortality rates, unable to meet close family, and social distancing, which can increase feelings of boredom, boredom, frustration, anxiety, and even panic from an individual, especially those aged 60 years and over. Research conducted by [3], in China shows that the elderly have higher levels of stress due to Covid-19. This is due to the extraordinary effects of the Coronavirus coupled with the physiological conditions of the elderly which can increase the tendency to experience stress and depression (Centers for Disease Control

and Prevention, 2020). Therefore, the elderly need a lot of positive support because it can help increase the body's immunity and speed up the healing process.

The description of Lanai's condition which is quite complex, both physically and psychologically when suffering from Covid 19, makes the process of healing and returning to health very difficult to do. Furthermore, the problem that makes the prognosis worse is that the elderly survivors of Covid 19 are likely to experience Long Covid. Previous research in 2021 stated that long covid is a term used to describe an illness experienced by survivors of Covid-19 where they still feel the long-term effects of the Coronavirus much longer than expected [4]. In the same year, the United Kingdom's National Health Service stated that the symptoms of long Covid were easy fatigue, shortness of breath, sore throat, cough, chest pain, joints, difficulty concentrating, problems with memory or brain fog, and insomnia. This is what drives fatigue in elderly survivors of Covid 19.

Fatigue is the most common symptom experienced by elderly survivors of covid 19 after fever and shortness of breath which occurs in 30% of all elderly survivors of covid 19 [4]. If it is related to the current research problem, namely the elderly survivors of Covid 19, it can be seen that the elderly are experiencing physical and mental fatigue. Physical fatigue is a condition of fatigue caused by physical activity or limbs and is felt as a result related to the functioning of the body's organs. Physical fatigue can be lost by getting enough rest and improving food consumption. Second, mental fatigue is caused by psychological factors due to unresolved psychiatric problems and causes psychological stress. In the condition of Covid 19 patients, this fatigue occurs due to the boredom of undergoing independent isolation or long treatment at the hospital, then the burden of thinking if the elderly are the head of the family and the most important thing is the support of families whose are very far away. This is a result of the prevention and management of Covid-19 patients which requires that human social interactions be decided [12].

RESEARCH METHODS

This research is quantitative research with a simple descriptive research type. This study aims to look at the fatigue level of elderly survivors of Covid 19 in Pekanbaru City. This research was conducted in the work area of the Pekanbaru City Health Office, this is because the city of Pekanbaru has the most elderly in the Riau province. The population in this study were all elderly living in Pekanbaru City based on the 2017 BPS as many as 93,314 elderly people. In this study, the sampling method used was multistage random sampling. By using population hypothesis test sample counting, the minimum sample size is 40 elderly [WU3] survivors of

Covid-19, where the sample inclusion criteria are 14 days post-Covid-19 which is stated with negative test results.

The measuring tool used in this study is the Fatigue Severity Scale (FSS). The data analysis used is univariate data analysis, namely: Gender, Age, Education Level, degree of covid 19, and fatigue level of elderly survivors of covid 19.

RESULTS AND DISCUSSIONS

Table 1 Characteristics of Respondents Based on Gender

Gender	F	%
Men	18	45
Women	12	55
Total	40	100

The table above shows that of the 40 respondents, the most gender was female with 22 respondents (55%).

Table 2 Characteristics of Respondents Based on Education Level

Level of education	F	%
SD	6	15
SMP	8	20
SMA	16	40
SI	4	20
S2	2	5
Total	40	100

Based on the table above, it shows that of the 40 respondents, most of them had high school education as many as 16 respondents (40%).

Table 3 Characteristics of Respondents by Age

Age	**F**	**%**
Elderly (60-70 Tahun)	25	63
Older age (71-75 Tahun)	12	30
Very old elderly Tua (> 75 Tahun)	3	7
Total	40	100

Based on the age category, most of the respondents were in the early elderly category, with 25 respondents (63%)

Table 4 Characteristics of Respondents Degree of Covid 19

Covid-19 Degrees	**F**	**%**
Mild Degree	8	20
Moderate degree	27	67.5
Degree of Weight	5	12.5
Total	40	100

Based on the Covid-19 degree category, most of the respondents were in the moderate degree category, as many as 27 respondents (67.5%).

Table 5 Distribution of Fatigue Levels of Elderly Covid 19 Survivors

Fatigue Level	F	%
No Tired	6	15
Light Tired	22	55
Moderately Tired	10	25
Very Tired	2	5
Total		100

Distribution of Fatigue Levels of Elderly Covid 19 Survivors Based on the table above, it shows that of the 40 respondents, most of them experienced mild fatigue, namely 22 respondents (55%). From the results of this study, it is known that most of the elderly Covid survivors experience mild, moderate, and very tired fatigue. Only 6 elderly (15%) did not experience fatigue. This is in line with research conducted by Huang et al (2020) which stated that after 6 months of hospitalization 63% complained of fatigue. Recent research states that 156 survivors of Covid 19 with a post-infection duration range of 82-457 days found symptoms of fatigue in 82% or 128 people (Tabacof et al, 2022).

This is especially experienced by the elderly. Decreased function and the presence of comorbidities (comorbidities) can increase the fatigue felt by the elderly. The description of the elderly's condition which is quite complex both physically and psychologically when suffering from Covid 19 makes the process of healing and returning to health very difficult to do. Furthermore, the problem that makes the prognosis worse is that the elderly survivors of Covid 19 are likely to experience Long Covid.

Fatigue is the most common symptom experienced by elderly survivors of covid 19 after fever and shortness of breath which occurs in 30% of all elderly survivors of covid 19 [4].

Risk factors for someone experiencing fatigue include Age, Gender, BMI, Occupation, Physical activity, Psychological Conditions, and Comorbidities (Farhana, 2022). From the results of this study, it can also be seen from 40 elderly people with moderate degrees of Covid, namely as

many as 27 people. Of the 27 people, they are at the level of mild fatigue and moderate fatigue. This may be due to the fact that the elderly who suffer from Covid-19 are experiencing more severe symptoms of Covid-19 and need more rest so they need more medication. This makes the elderly do less physical activity and focus on the symptoms they feel.

Fatigue is an indicator to assess daily functional abilities and health-related quality of life in individuals (Baek et al., 2020). Complaints related to fatigue include physical and mental aspects so these symptoms are usually difficult to disappear even when resting and can have an impact on long-term health conditions (Hulme et al., 2018). Various factors can trigger and exacerbate fatigue, such as age, gender, BMI, occupation, physical activity, and psychological conditions. Fatigue is most commonly found and associated as a result of respiratory tract infections, anemia, drug side effects, depression, or other mental disorders (Bates in Galland-Decker, Marques-Vidal, and Vollenweider, 2019).

Fatigue in survivors is a chronic condition that can be caused by various factors and mainly as a prolonged symptom acquired as a result of infection with SARS-CoV-2. Worse, some post-infection symptoms can last for months. One of the intended symptoms is fatigue. A 1-year follow-up study conducted on Covid-19 survivors after being discharged from the hospital showed that out of 94 Covid-19 survivors, 39.36% complained of fatigue symptoms and the percentage predominates among several other sequelae, such as insomnia, joint pain, headaches, joint pain, chest pain and others (Zhang et al., 2021; Zhao et al., 2021). Persistent fatigue symptoms were significantly associated with gender, with women experiencing more of these complaints, comorbidities, and the number of symptoms experienced during hospitalization (Fernández-de-las-Peñasa et al., 2022).

Covid-19 survivors are certainly full of cardiorespiratory problems, and it turns out that there is a statistically significant relationship between fatigue levels and oxygen saturation (SpO2), hypertension, and ischemic heart disease (ISLAM et al., 2021). In addition, individuals with low hemoglobin levels are associated with an increased risk of fatigue. However, C-reactive protein, d-dimer, and serum ferritin levels are acute markers of COVID-19 infection and are biomarkers of fatigue experienced by individuals infected with SARS-CoV-2 and still complaining of these symptoms even though they are negative for infection (Vaucher et al; Cho et al; and Townsend et al; in Islam et al., 2021)**.**

CONCLUSION

The characteristics of the elderly survivors of Covid-19 that were examined were that most sex was female as many as 22 respondents (55%), most of them had high school education as many as 16 respondents (40%), most of the respondents were in the early elderly category as many as 25 respondents (63%)) and most of the respondents were in the moderate degree category as many as 27 respondents (67.5%). For the results of the level of fatigue: No fatigue in 6 people (15%), Mildly fatigued in 22 people (55%), Moderately fatigued in 10 people (25%), and very fatigue in 2 people (5%).

SUGGESTION

It is hoped that health workers who treat or monitor the health of Covid patients, especially the elderly, can anticipate symptoms of long Covid, especially the level of fatigue so that they can determine appropriate nursing interventions to overcome and prevent this.

ACKNOWLEDGMENT

We thank you to:

a. Ministry of Education and Culture for the research funds provided
b. Hang Tuah University, Pekanbaru
c. Pekanbaru City Health Office
d. Pekanbaru city health center which facilitated the implementation of this research

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