

DESCRIPTION OF THE CHARACTERISTICS OF BARRIERS TO PAIN COMFORT: SLEEP QUALITY IN ELDERLY WITH RHEUMATOID ARTHRITIS IN KENDAL REGENCY

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ABSTRACT

Someone who has reached the age of 60 years and over often appears various disorders, one of the disorders experienced by the elderly is joint pain or bone disease known as Rheumatoid arthritis. Joint pain caused by inflammation of the joints that are swollen or damaged has occurred, causing pain and making people with Rheumatoid Arthritis afraid to move so that it interferes with their activities. Barriers to pain comfort in the elderly with Rheumatoid Arthritis are characterized by sleep quality characteristics. This study aims the Characteristics Pain comfortf Barriers of sleep quality in the Elderly with Rheumatoid Arthritis in Gebanganom Village, Kendal Regency. The research design is a quantitative descriptive research. The study population was 49 elderly people. The research sample was 49 elderly people with total sampling technique. Data collection used a pain scale questionnaire, a PSQI (Pittsburgh Sleep Quality Index) questionnaire. The results of this study showed that the pain level was mild (8.16%), the majority of respondents had moderate pain level (73.47%), and severe pain level (18.37%), the majority of respondents had good sleep quality (71.43%), and poor sleep quality (28.57%),

Keywords: elderly; rheumatoid arthritis; pain; sleep quality

INTRODUCTION

Old age is the process of aging or someone who has reached the age of 60 years and over (Damanik & Hasian, 2019). Elderly is an age that experiences many changes including physical, social and psychological changes (Barus, 2013). The impact of increasing age is the emergence of various diseases, namely, reduced organ functions including the musculoskeletal system, nervous system, respiratory system, and cardiovascular system (Suryani, 2018). One of the disorders of the musculoskeletal system experienced by the elderly is joint pain or bone disease known as Rheumatoid arthritis (Doliarndo, 2018).

Data from the World Health Organization (2016) states that sufferers of Rheumatoid Arthritis worldwide have reached 335 million people, and it is estimated that the number of sufferers of this disease will always increase. The prevalence of rheumatoid arthritis in Indonesia in 2015 was 36.4%, in 2017 and in the following years it continues to increase (Devi, Parmin, Nadira, 2019). According to the Ministry of Health of the Republic of Indonesia (2019) states that the increase in the incidence of Rheumatoid Arthritis every year starting in 2015 was 72,675 people, in 2016 there were 84,665 people, in 2017 there were 91,098 people, in 2018 there were 98,679 people which is a disease that is ranked 3rd of the ten biggest diseases in Indonesia, and in 2019 there were 102,995 people. According to Riskedas (2018) the prevalence in Central Java is 6.78%.

Rheumatoid Arthritis is a joint disease or inflammation of the joints caused by an autoimmune process, usually there will be pain in the joints such as the knees, hands and fingers (Sopianto, 2019). Pain in Rheumatoid Arthritis that is felt by the elderly will have an important impact on

daily body functions or immobilization and psychologically, including making the elderly (elderly) feel uncomfortable, a very disturbing condition, often afraid to move for fear of severity so that it reduces productivity, because pain in the joints can also disrupt the body's balance, which is unstable so that it is at risk of falling, resulting in dependence on other people and can cause stress in sufferers (Yanti & Arman, 2018). Pertiwi (2021), explains that there is a relationship between Rheumatoid Arthritis and pain where the pain is caused due to inflammation in the joints which are swollen or damaged which causes pain and makes Rheumatoid Arthritis sufferers afraid to move so that it interferes with their activities. Nanda, (2018-2020) describes the barriers to comfort: pain is feeling uncomfortable, relieved, and perfect in the physical, psychospiritual, environmental, cultural, and/or social dimensions. Barriers to pain comfort in the elderly with Rheumatoid Arthritis are characterized by sleep quality characteristics. Sleep quality is a situation when a person experiences a change in the quality of his rest pattern which causes discomfort (Dariah, 2015). There is a relationship between pain intensity and quality of sleep in the elderly with Rheumatoid Arthritis, namely the elderly with Rheumatoid Arthritis often experience pain in the musculoskeletal area, the pain experienced in the elderly Rheumatoid Arthritis can disturb the sleep of the elderly (Dedi, 2022).

METHOD

The research design used descriptive research, namely research conducted to determine the value of the independent variable, either one or more variables without making comparisons. The research design is a quantitative descriptive research. The research sample was 49 elderly people with total sampling technique. Data collection used a pain scale questionnaire (Verbal Scale Rating), PSQI Questionnaire (Pittsburgh Sleep Quality Index).

RESULTS AND DISCUSSION

Tabel 1.

Frequency Distribution of Respondent Characteristics by Age (n=49)

Variable	Rate	Median	Modus	Min.	Max.
Usia	70	70	70	60	80

The results of the analysis in table 1 show that the average respondent in Kendal Regency is 70 years old.

Tabel 2.

Frequency Distribution of Respondent Characteristics based on Gender (n=49)

Gender	f	%
Male	11	22
Female	38	77,55

Based on table 2, the most respondents are female, namely 38 respondents (77.55%)

Tabel 3.

Frequency Distribution of Respondent Characteristics based on pain level (n=49)

Pain	f	%
No Pain	0	0,00
Mild Pain	4	8,16
Moderate Pain	36	73,47
Several Pain	9	18,37
Pain is very heavy	0	0,00

Based on table 3 it shows that the majority of respondents have moderate pain levels, namely 36 respondents (73.47%) and severe pain levels are 9 respondents (18.37%).

Tabel 4

Frequency distribution of Respondents' characteristics based on sleep quality (n=49)

Sleep Quality	f	%
Good	35	71,43
No good	14	28,57

Based on table 4, the majority of respondents have good sleep quality, 35 respondents (71.43%) and those who experience poor sleep quality are 14 respondents (28.57%)

Characteristics of Respondents by Age

The results of the study based on the age of elderly respondents with rheumatoid arthritis who experienced pain relief based on table 4.1 with a total of 49 respondents showed that the average respondent was 70 years old. The minimum age of the respondent was 60 years, while the maximum age of the respondent was 80 years. This study is in line with Simanjuntak (2014), that rheumatism predominates at the age of 60 years, because the causes of rheumatism are decreased estrogen hormones, lack of activity, aging process, lack of calcium intake, lack of morning sunlight and use of drugs that can accelerate rheumatism. Marlina (2015) said that increasing age reduces the volume/content of cartilage, decreases muscle strength, degenerative changes in the meniscus and joint ligaments and calcification of joint tissue narrows so that it can cause friction between the ends of the bones, this is what causes pain. The aging process is a natural process that everyone will definitely experience, in line with the increase in life expectancy, the health problems they face are increasingly complex. Naturally, body cells experience a decrease in their function due to the aging process (Putri, 2018).

As we get older, aging cannot be avoided and changes in physical, psychological and social conditions occur (Jahirin, 2020). In old age, degenerative processes in the body will occur with age, rheumatism is one of the common diseases in the elderly which will increase the risk of joint pain, joint pain experienced will reduce the physical activity of the elderly and have an impact on decreasing the range of motion of the joints (Gosana, 2020).

Characteristics of Respondents Based on Gender

The results of the research on the characteristics of respondents based on gender of elderly respondents with Rheumatoid Arthritis who experience barriers to pain comfort based on the table 4.2 with a total of 49 respondents, the most respondents were female, namely 38 respondents (22%), while the male sex was 11 respondents (77.55%). Likewise, research conducted by Chintyawati (2014) found that 76.9% of respondents with rheumatoid arthritis were women. Other studies are in line with research conducted by Sari (2018), the results of the study show the characteristics of the male gender in this study, namely 6 people with a percentage of 7.6% and for women there are 74 people (92.5%).

Research conducted by Marsiami (2023) showed that the sex of the respondents in the Pagelaran Health Center UPT work area was mostly female, namely 20 respondents (66.7%), while 10 respondents (33.3%) were male. The results of Wulandari's research (2014) also show that the majority of respondents are female, namely (69.7%). This is related to the presence of the female

hormone estrogen as a cause of joint inflammation which increases the incidence of Rheumatoid Arthritis more in women than men with a ratio of 2-3: 1 (William, 2020).

Pain

Based on table 4.3 it shows that the majority of respondents have moderate pain levels, namely 36 respondents (73.47%) and severe pain levels are 9 respondents (18.37%). According to the researchers' assumptions, it can be seen that the pain felt by the respondent is caused by poor blood circulation, which makes the joints swollen, stiff and causes pain. The results of this study are in line with Siregar's study (2015) the pain level of the majority of respondents was in the moderate pain category (41.7%) and severe pain (18.3%), that pain felt by the elderly can be caused by stiff joints, poor blood circulation. Rheumatoid Arthritis which is caused due to the aging process of a person because the bones begin to lose cartilage (cartilage tissue) which functions as a cushion between bones and joints, which then gets thinner causing pain in the joints due to mild inflammation that arises due to friction of the ends of the constituent bones joints, between these bones there is a layer of fluid called synovial fluid which functions as a lubricating material that prevents the ends of the bones from rubbing and eroding each other, this friction will make the layer thinner and will eventually cause pain (Kristanto, 2017). Pain in rheumatism sufferers occurs as a result of muscle spasm or pressure or pressure on the nerves in the affected joint area and excessive bone growth that stimulates the nerve roots when they leave the vertebrae (Trihartini, 2016).

Sleep Quality

Based on table 4.4, the majority of respondents have good sleep quality, 35 respondents (71.43%) and those who experience poor sleep quality are 14 respondents (28.57%). According to the researcher's assumption, if the respondent's pain intensity is good, the quality of sleep will be good, where moderate level pain can also affect the quality of sleep depending on how a person responds to the pain. This research is in line with research conducted by Iqrima (2022), that the majority of patients with Rheumatoid Arthritis experienced good sleep disturbances, namely 19 respondents (31.7%), while 6 respondents (10.0%) had poor sleep quality, pain in Rheumatoid Arthritis it is persistent or comes and goes, other complaints that the elderly feel are easily tired because they need high physical and emotional energy to deal with pain so that sleep time is disturbed. Patient with pain will make sleep problem that make obstruction of opioid. This pain will make the patient can not sleep (Waladani, 2022).

CONCLUSION

Age Characteristics of elderly respondents with Rheumatoid Arthritis who experience barriers to pain comfort, the average age of respondents is 70 years and the gender of women is 38 respondents (77.55%). Characteristics of respondents based on pain in elderly patients with Rheumatoid Arthritis with a total of 49 respondents showing the majority of respondents experiencing moderate pain levels, namely 36 respondents (73.47%) and severe pain levels of 9 respondents (18.37%). Characteristics of respondents based on the quality of sleep of elderly people with Rheumatoid Arthritis who experience pain comfort barriers with a total of 49 respondents showing the majority of respondents experiencing good sleep quality, namely 35 respondents (71.43%) poor sleep quality, namely 14 respondents (28.57%).

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