

# THE CORRELATION OF EDUCATIONAL LEVEL WITH THE BEHAVIOR OF ELDERLY IN THE MANAGEMENT OF RHEUMATOID ARTHRITIS AT SEUNUDDON HEALTH CENTER, NORTH ACEH

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## ABSTRACT

Rheumatoid arthritis is a chronic systemic disease that attacks connective tissue joints, muscles, tendons, and fibrous tissue. This disease tends to affect adults aged 40 years and over and is a chronic disabling condition that often causes pain and disability. This type of research is analytical with a cross-sectional study design. The population in this study was all elderly people with rheumatoid arthritis who sought treatment at the Seunuddon Community Health Center. The number of samples was 40 people determined by accidental sampling. The aim of this study was to identify the relationship between education level and elderly behavior in the management of rheumatoid arthritis. This research was conducted from 18 to 31 August 2022 at the Seunuddon Community Health Center, North Aceh Regency, using a questionnaire distribution method. The research instrument used was a questionnaire. The test used was chi-square. The results of the univariate analysis show that the education level of the elderly is mostly in the basic category, amounting to 20 people (50%). Additionally, the behavior of the elderly in the management of rheumatoid arthritis is mostly in the negative category, amounting to 27 people (67.5%). The results of the bivariate analysis show that there is a significant relationship between education level and elderly behavior in managing rheumatoid arthritis, with a p-value of 0.003. It is recommended that respondents maintain a healthy lifestyle to preserve their health by receiving appropriate treatment so that their rheumatoid arthritis does not worsen.

**Keywords:** Education, Behavior, Management of Rheumatoid Arthritis.

## 1. Introduction

Rheumatoid arthritis is a chronic systemic disease that affects connective tissue, joints, muscles, tendons, and fibrous tissue. It tends to affect adults aged 40 years and above and is a chronic disabling condition that often causes pain and disability. The prevalence of the disease varies between 0.3% and 1% and is more common in women in developed countries. Within 10 years, at least 50% of patients in developed countries are unable to maintain their employment (WHO, 2020).

Based on the Indonesian Health Profile in 2018, as age increases, physiological functions decrease due to the degenerative process (aging), so many non-communicable diseases appear in the elderly. One of the diseases suffered by the elderly is joint disease, which affects 18% (Ministry of Health, 2019).

According to Riskesdas (2018) suggests that the prevalence of rheumatoid arthritis disease, based on doctors' diagnosis, is Aceh is the highest with 13.26%. Meanwhile, data obtained from the North Aceh District Health Office (2018) shows that the number of elderly people aged 70 years and over, who are a high-risk group for rheumatoid arthritis, is 121,042 people.

Based on data from the Seunuddon Health Centre (2019), the number of elderly people experiencing rheumatoid arthritis is 413 people with 177 men who experience rheumatoid arthritis and 236 women affected. In 2020, the number of elderly people had rheumatoid arthritis, comprising 131 people with 69 men with arthritis and 62 women.

## **2. Literature Review and Hypothesis**

The level of education is a condition of the level of education possessed by a person through formal education established by the government and authorized by the education department. Categorized into never been to school, elementary to junior high school, high school, and university (Andy, 2014).

Behaviors are actions that can be observed. Behavior is a person's response or reaction to a stimulus from outside. Behavior is formed through an associative bond between stimulus and response. Human behavior is strongly influenced by a person's knowledge and attitude. A person's knowledge is influenced by the level of education they receive. Knowledge can be obtained formally (at school) or informally (for example, through counseling).

Rheumatoid arthritis is an autoimmune disease (a disease that occurs when the body is attacked by its own immune system) that results in prolonged inflammation of the joints. The disease affects joints and limbs (Hemayudi, 2017). Many people consider rheumatoid arthritis as a common thing experienced by the elderly, so they are late for treatment. One of the factors that influences behavior regarding the implementation of rheumatoid arthritis is education and information. Therefore, health workers need to provide / deliver health education to the community about the need to manage rheumatoid arthritis as early as possible to avoid worsening conditions and complications.

## **3. Research Method**

This research is analytical with a "cross-sectional" study design, where the independent variable (risk) and dependent variable (effect) are observed at the same time.

The population in this study were all elderly people suffering from rheumatoid arthritis in the working area of the Seunuddon Community Health Center, North Aceh Regency. The sampling technique was carried out using accidental sampling by taking respondents. There are 40 elderly people of all elderly who happened to seek treatment at the Seunuddon Community Health Center, North Aceh Regency.

## 4. Result and Discussion

### 4.1. Univariate Analysis

#### a. Educational Level

Tabel 4.1. Frequency Distribution of Elderly Education Levels

No	Educational Level	Frequency	%
1.	Advance	6	15
2.	Intermediate	14	35
3.	Basic	20	50
<b>Total</b>		<b>40</b>	<b>100</b>

From Table 4.1, it is known that the education level of the elderly at the Seunuddon Community Health Center in North Aceh Regency in 2020 was mostly in the basic category, with 20 people, accounting for 50% of 50%.

#### b. Elderly Behavior in the Management of Rheumatoid Arthritis

Tabel 4.2. Frequency Distribution of Elderly Behavior in the Management of Rheumatoid Arthritis

No	Elderly Behavior in the Management of Rheumatoid Arthritis	Frequency	%
1.	Positive	1	32,5
2.	Negative	3	52,5
<b>Total</b>		<b>4</b>	<b>1</b>

From table 4.2 shows that the behavior of the elderly in the management of rheumatoid arthritis at the Seunuddon Health Center in North Aceh Regency in 2020 was mostly in the negative category, with 27 people, accounting for a percentage of 52.5%.

## 4.2. Bivariate Analysis

Tabel 4.3. Correlation between Education Level and Elderly Behavior in the Management of Rheumatoid Arthritis

No.	Education Level	Elderly Behavior in the Management of Rheumatoid Arthritis				Jumlah		Kemaknaan	
		Positif		Negatif					
		f	%	f	%	f	%	$\alpha$	<i>p-value</i>
1.	Advance	5	83,3	1	16,7	6	100	0.05	0.003
2.	Intermediate	5	35,7	9	64,3	14	100		
3.	Basic	3	15	17	85	20	100		
<b>Total</b>		<b>13</b>	<b>32,5</b>	<b>27</b>	<b>67,5</b>	<b>40</b>	<b>100</b>		

From Table 4.3, it is shown that there is a significant relationship between the level of education and the behavior of the elderly in the management of rheumatoid arthritis, as evidenced by the p-value (p) of 0.003, which means  $p = \text{value} < 0.05$ .

## 5. Conclusion

- The majority of seniors' education level at the Seunuddon Community Health Centre in North Aceh Regency is elementary school (50%). For this reason, it is necessary to provide informal health education to the community, for example, through counseling to increase their knowledge.
- The majority of elderly individuals managing rheumatoid arthritis at the Seunuddon Community Health Center, North Aceh Regency, have negative behavior (52.5%). For this reason, it is necessary to change the behavior of the community by providing correct information related to rheumatoid arthritis.
- There is a significant correlation between education level and elderly behavior in managing rheumatoid arthritis, with a p-value of 0.003, which  $\alpha: 0.05$ . This means that immediate efforts need to be made for health workers to increase public knowledge about the importance of managing rheumatoid arthritis as early as possible.

## 6. Acknowledgement

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