

FACTORS INFLUENCING THE OCCURRENCE OF RHEUMATOID ARTHRITIS (RA) IN THE ELDERLY IN THE REGION UPTD JAVA COMMUNITY HEALTH CENTER SIMALUNGUN DISTRICT YEAR 2020

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Abstract

Rheumatoid arthritis (RA) is a chronic systemic inflammatory disease with the main manifestation of progressive polyarthrititis and involving organs throughout the body involved joints in patients with Rheumatoid Arthritis occur after the disease has progressed according to its progress is the number two disease that attacks the elderly in Indonesia. The factors that affect the occurrence of rheumatoid arthritis (RA) in the elderly in the UPTD Puskesmas Tanah Jawa, Simalungun regency in 2020 are prone to occur at the age of 44 years to 59 years and the age of 60 years up to 70 year. Patients with rheumatoid arthritis (RA) in the elderly mostly occurred in women with a total of 79 respondents (79.8%). According to (Lukman and Ningsih 2014), the occurrence of rheumatoid arthritis (RA) is due to hormonal disturbances (Estrogen) in the body of 99 elderly people, namely work activity factors which reached 61 people (61.8 %) and genetic factors amounted to 39 people (39.4%)

Keywords: Rheumatoid Arthritis (RA), genetic, obesity, food, activity work, the elderly

INTRODUCTION

We are currently entering a period of aging population, where there is an increase in life expectancy followed by an increase in the number of elderly people. Indonesia has experienced an increase in the number of elderly people from 18 million people (7.56%) in 2010, to 25.9 million people (9.7%) in 2019 and is expected to continue to increase where in 2035 it will be 48.2 million people (15.77%). This situation is the impact of an aging population, namely the increasing proportion of elderly people to the population of a country. Indonesia is currently heading towards an aging population with an elderly percentage of 9.7%, while developed countries have exceeded 10% and even Japan has exceeded 30% (Ministry of Health Republic of Indonesia 2018).

In general, signs of the aging process begin to appear from the age of 45 and will cause problems around the age of 60. According to the World Health Organization (WHO), elderly include middle age (middle age) aged 45-59 years, elderly (elderly) aged 60-74 years, old elderly (old) aged 75-90 years, very old (very old). old) over 90 years of age. (Rusli, 2012 in Sampeangin, Pramesty 2019).

Adults aged between 25 and 60 years are still productive periods in their lives. Physical, biological, economic and social responsibility is urgently needed and closely related to their current health status. Many degenerative diseases that start from middle age

cause people's productivity to decrease and the old age later becomes less qualified. (Ketut ayu Manik Masyeni 2018)

Rheumatoid Arthritis is an autoimmune disease characterized by chronic and progressive systemic inflammation, in which the joints are the main target. Which is characterized by swelling, joint pain and destruction of synovial tissue accompanied by movement disorders followed by premature death (McInnes, 2011). The cause of this disease is not known with certainty but is thought to be related to genetic factors, old age, female gender, socioeconomic factors, hormonal factors, and several environmental factors such as smoking, and experiencing viral or bacterial infections, bone injuries and joint dislocations (Tobon et al. al 2009).

Patients with rheumatoid arthritis worldwide have reached 355 million people, meaning that 1 in 6 people in the world suffer from rheumatoid arthritis. It is estimated that this figure will continue to increase until 2025 with indications that more than 25% will experience paralysis. The World Health Organization (WHO) reports that 20% of the world's population suffers from rheumatoid arthritis. Where 5-10% are those aged 5-20 years and 20% are those aged 55 years (Zulipurnaw, 2011 in Yafrinal Siregar 2016).

Special purpose

1. To find out the genetic factors that influence the incidence of rheumatoid arthritis in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency, in 2020.
2. To find out whether there are obesity factors in the elderly with the occurrence of Rheumatoid arthritis in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.
3. To find out whether there are activity / work factors with the occurrence of Rheumatoid arthritis in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.
4. To find out whether there are lifestyle factors with the incidence of Rheumatoid arthritis in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

LITERATURE REVIEWS

Rheumatoid arthritis definition

The word arthritis comes from the Greek "arthon" meaning joint and "itis" which means inflammation. Literally, arthritis means inflammation of the joints. Meanwhile, Rheumatoid arthritis (RA) is an auto-immune disease in which the joints (usually the feet and hands) become inflamed causing swelling, pain and often causing damage to the inside of the joints (Febriana, 2015). This disease is the most common systemic inflammation characterized by an autoimmune disorder that causes chronic joint inflammation and

affects more than five joints (polyarthritis). The peak incidence between the ages of 40-60 years is more common in women than men with a ratio of 3:1 (Pradana, 2016).

Rheumatoid Arthritis is a chronic disorder in the form of stiffness, swelling, pain and redness in the joint area and surrounding tissue that attacks various organ systems. It is one of a group of diffuse connective tissue diseases that are mediated by immunity and have no known cause. In patients, progressive joint destruction usually occurs, although episodes of joint inflammation can experience periods of remission (recurrence) (Adelia, 2016).

Elderly definition

According to WHO, elderly include middle age (middle age), age 45-59 years, old age (elderly), age 60-70 years, old age (old), age between 75-90 years, very old age (very old), aged over 90 years. Medical management of patients with rheumatoid arthritis in the elderly depends on the stage of the disease when the diagnosis is made and which group is appropriate for the condition (Sutikno, 2011). Elderly is a condition characterized by a person's failure to maintain balance against physiological stress conditions, this failure is related to a decrease in the ability to live and an increase in individual sensitivity (Effendi, 2012). According to WHO, and law number 13 of 1998 concerning the welfare of the elderly in Chapter. I chapter 1, verse 2 mentions that the age of 60 years is the age of the beginning of old age. Aging is not a disease but a process that gradually results in cumulative changes, is a process of decreasing the body's resistance to stimuli from within and outside the body and ends in death. (Wahyudi Nugroho, 2012).

Currently, around the world, the number of elderly people is estimated at more than 629 million people (one in 10 people is over 60 years old), and by 2025, the elderly will reach 1.2 billion. But now, developing countries are starting to face the same problem. This phenomenon clearly brings a number of consequences, including the emergence of physical, mental, social problems, as well as the need for health and nursing services, especially degenerative disorders. (Wahjudi Nugroho, 2012).

METHODS

Types of research

This type of research uses cross sectional research. cross sectional is a study to study the dynamics of the correlation between risk factors and effects, by way of approach, observation or data collection at the same time (point time approach), (Notoatmodjo 2010).

This research was conducted with the aim of obtaining an objective description of the factors related to the occurrence of Rheumatoid arthritis in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Place and time of research

a. Research sites

The research location was carried out in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency.

b. Research time

The research is planned to be carried out in August – September 2020.

Population and sample

a. Population

The population is the entire research object or object under study determined by the researcher to study and then draw conclusions (Sugiyono, 2012). And the elderly population at the UPTD Tanah Jawa Health Center in Simalungun Regency totaled 329 respondents.

b. Sample

The research sample is a portion taken from the entire object studied and is considered to represent the entire population (Notoadmodjo, 2012). Then the formula used for sampling is:

$$n = 30\% \times N$$

Information :

n : Sample size

N : Population size

By using this formula, this research sample is obtained as much as: N
= 30% x 329 = 99

So the total sample is 99 elderly.

c. sampling

The technique used in sampling is simple random sampling. Where the entire population is given the opportunity to become a member of the sample.

According to Arikunto in Nugraha (2015), if the subject is greater than 100, it can be taken between 10 - 15%, using this formula, a total sample of 99 elderly people is obtained from a total population of 329 elderly people.

Instruments and methods of data collection

The data collection instrument in this study was by using a list of questions posed to respondents to be answered by giving a questionnaire or questionnaire. The questionnaire consists of 20 questions with yes and no answer choices, where if yes is given a value of 1, and if no is given a value of 0. So from the sum of these values, the highest possible score is 20, and the lowest score is 0.

Data type

- a. Primary data
Primary data in research that can be used directly through questionnaires directly to respondents adapted to the research objectives.
- b. Secondary data
Secondary data was taken from the UPTD area of the Tanah Jawa Health Center, Simalungun Regency, in 2020.

Data Collection Techniques

The data collection technique used is by using a questionnaire. The steps in collecting field data are that before carrying out data collection, the researcher must first ask permission from the Java Land Health Center to conduct research. The research data was obtained by the researcher by giving a questionnaire in the following way:

After obtaining permission from the UPTD Tanah Jawa Health Center, Simalungun Regency in 2020.

1. Researchers took samples with simple random sampling technique.
2. The researcher gave an explanation to the respondents about how to fill out the questionnaire.
3. The researcher gave the respondent time to fill out the questionnaire and gave the respondent the opportunity to ask questions if something was not clear.
4. After all the questionnaire questions were answered, the researcher collected and provided completeness of the data.

Data processing and data analysis.

1. Data processing consists of:
 - a. *Editing*
According to Notoatmodjo (2010), Editing is an activity to check and improve the contents of a form or questionnaire.
 - b. *coding*
Is an activity that converts data in the form of sentences or letters into numeric data or numbers. Entering data (data entry) or processing data, namely the answers from each respondent in the form of a code (numbers or letters).
 - c. *Cleaning*
If all data from each data source or respondent has been entered, it needs to be checked again to see the possibility of code errors or incompleteness (Notoatmodjo 2010).

Data analysis

Data analysis was carried out, all data collection and processing activities were completed, namely research data analysis using univariate and bivariate analysis.

a. Univariate analysis.

Univariate analysis is to explain or describe the characteristics of each research variable. This analysis is used to obtain factors that influence the occurrence of Rheumatoid arthritis (dependent variable frequency distribution) and independent (genetic, obesity / diet, activity)

b. Bivariate Analysis

Bivariate analysis was carried out on two related variables with the aim of seeing the relationship between the independent variables and the dependent variable. The analysis technique used is Chi-square analysis using 95% a 5% confidence, so that if the p-value (p-value) <0.05, the results of static calculations are not meaningful or there is no relationship between the dependent and independent variables.

RESULTS AND DISCUSSION

Bivariate Analysis

Performed on two related variables with the aim of seeing the relationship between the independent variables and the dependent variable.

Relationship of genetic factors with the occurrence of Rheumatoid arthritis (RA) To see whether there is a relationship between genetic factors and the occurrence of Rheumatoid arthritis (RA), can be seen in the table below:

Table of the relationship between genetic factors and the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

<i>genetics</i>	<i>Rheumatoid arthritis (RA)</i>						<i>P Value 0.01</i>
	<i>There isn't any</i>	<i>%</i>	<i>There is</i>	<i>%</i>	<i>Total</i>	<i>%</i>	
<i>There isn't any</i>	16	26,7	44	73,3	60	100	
<i>There is</i>	23	59.0	16	41.0	39	100	
<i>Total</i>	39	39,4	60	60,6	99	100	

Based on the table above genetic factors with the occurrence of Rheumatoid arthritis (RA) in the elderly were obtained from 99 respondents who did not have genetics

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as many as 16 respondents in the category with the incidence of Rheumatoid arthritis (RA) there were no 16 (26.7%) respondents. Those that affect genetic factors in the existing category obtain 23 respondents (59.0%), with the incidence of Rheumatoid arthritis (RA) obtaining 44 (73.3%) elderly, with a p-value = 0.01 So the results are based on statistical tests with chi-square if the p-value (p-value) <0.05 then Ho is rejected and Ha is accepted, which means that there are genetic factors that influence the occurrence of Rheumatoid arthritis (RA).

The relationship between obesity and the occurrence of Rheumatoid arthritis (RA) To see whether there is a relationship between obesity and the occurrence of Rheumatoid arthritis (RA), can be seen in the table below:

Table of the relationship between the obesity factor and the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Obesity	Rheumatoid arthritis (RA)						P Value 0.03
	There isn't any	%	There is	%	Total	%	
There isn't any	7	20.0	28	80.0	60	100	
There is	32	50.0	32	32.0	39	100	
Total	39	60	39	60	99	100	

Based on the table, it can be seen that the obesity factor with the occurrence of Rheumatoid arthritis (RA) in the elderly that of the 99 respondents who were not obese with the occurrence of Rheumatoid arthritis (RA). 7 respondents (20.0%) and obese on the incidence of Rheumatoid arthritis (RA). there were obtained as many as 32 (50.0%) respondents. Result p-value = 0.03. So based on the results of statistical tests with the chi-square test <0.05 with Ho rejected and Ha accepted, it means that there is a relationship that affects the obesity factor with the occurrence of Rheumatoid arthritis (RA) in the elderly.

The relationship between dietary factors and the occurrence of Rheumatoid arthritis (RA) To see whether there is a relationship between dietary factors and the occurrence of Rheumatoid arthritis (RA), can be seen in the table below:

Table of the relationship between dietary factors and the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Food	Rheumatic events			P
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	There isn't any	%	There is		Total		Value 0.02
There isn't any	13	25.0	39	75.5	52	100	
There is	26	55,3	21	44,7	47	100	
Total	39	60	39	60	99	100	

Based on the food factor table with the occurrence of Rheumatoid arthritis (RA) in the elderly, it was found that 99 respondents who did not eat foods containing purines obtained 13 respondents (25.0%) and those who consumed foods containing purines obtained as many as 26 (55.3%). with rheumatic events with categories there were 21 (44.7%) with a total of 47 and no 52 respondents, then the result of p-value = 0.02 with statistical test results with chi-square <0.05 so Ho was rejected and Ha accepted means that there is a relationship between dietary factors and the incidence of rheumatic arthritis in the elderly.

Relationship between activity/occupation factors and the occurrence of Rheumatoid arthritis (RA)

Table of the relationship between activity/occupation factors and the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Activity/work	Rheumatic events						P Value 0.01
	There isn't any	%	There is	%	Total	%	
There isn't any	7	18,4	31	81.6	38	100	
There is	32	52.5	29	47.5	61	100	
Total	39	39,4	60	60,6	99	100	

Based on the table between activity/work factors and the incidence of Rheumatoid arthritis (RA) in the elderly, it was found that 99 respondents who had light activities/work in the non-existent category obtained 7 (18.4%) respondents and 31 (81.6%) with a total of 38 (100%) respondents. Meanwhile, activities/heavy work in the existing category were obtained by 32 (52.5%) respondents. with the incidence of Rheumatoid arthritis (RA) as many as 29 (47.5%) with a total of 61 (100%) respondents. Then the result of p-value = 0.01 with the results of statistical tests with chi-square <0.05 then Ho is rejected and Ha is accepted, meaning that there is a relationship between activity/work and the incidence of Rheumatoid arthritis (RA) in the elderly.

Discussion

1. Gender

From the results of the study, it can be seen that out of 99 female respondents, 79 people (79.8%) had Rheumatoid arthritis (RA) more, compared to 20 men (20 people) in the elderly who had Rheumatoid arthritis (RA). 20.2 %. The incidence of rheumatoid arthritis (RA) is usually higher in women than in men. The incidence of rheumatoid arthritis, both in women and men, is highest at the age of 60 years and over. Regarding the history of live births, most studies have found that women who have never had children have a slightly increased risk for rheumatoid arthritis (Hungu 2007),

2. Age

From the results of research conducted in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020, that elderly who experienced Rheumatoid arthritis (RA) in the category, aged 44 years to 59 years, were 52 people (52%), aged 60 years to 70 years as many as 36 people (36%) with those aged 71 years to 80 years as many as 11 people (11%). As is well known, when you reach old age, your body's condition changes, where the protective coating on your joints begins to thin and bone fluids begin to thicken, so that your body becomes painful when you move it and increases your risk of Rheumatoid arthritis (RA).

3. Genetic factors that influence the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of Tanah Jawa Health Center, Simalungun Regency in 2020.

From the results of the analysis of research conducted in the UPTD area of the Tanah Jawa Community Health Center, Simalungun Regency in 2020, it shows that from 99 respondents, in terms of factors that affect genetics, the frequency obtained was 60 people (60.0%) and 39 people who were absent (39,4 %). Families who have family members affected by Rheumatoid arthritis (RA) have a higher risk and also have the same nature of complaints in sufferers with the same gene (Junaiadi, 2017)

In this study, several respondents who were affected by Rheumatoid arthritis (RA) in the elderly had genetic factors, in which this gene affected the aging process and the complaints they experienced would be the same as those felt in the genes of families who had been affected by Rheumatoid arthritis (RA).

According to research conducted by Unyun Nadliroh (2014) on genetic factors for the incidence of rheumatoid arthritis in the elderly, it shows that some respondents (70%) in the elderly have a family history of suffering from rheumatoid arthritis (RA). This is in accordance with the theory put forward by Junaidi that Rheumatoid arthritis (RA) is caused by genetic factors.

According to the authors' assumptions (2019) Rheumatoid arthritis (RA) can be caused by a hereditary history or is called genetic. But in fact this study shows that the prevalence of genetic influences, this means that most respondents suffer from Rheumatoid arthritis (RA) caused by genetic factors.

4. Obesity factors that influence the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

From the results of the research conducted, it was found that the elderly who were overweight with a frequency of 35 respondents (35.4%) and those who were not obese were 64 respondents (64.6%). Excessive body weight is associated with an increased risk of developing Rheumatoid arthritis (RA) for both women and men, with obesity it can also cause osteoarthritis (OA) in the joints due to excessive burdens (Junaidi, 2017).

The results showed that the obesity factor that influenced the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Community Health Center, Simalungun Regency in 2020 was 35 respondents (35.4%). This is influenced by the presence of supporting factors for the elderly suffering from Rheumatoid arthritis (RA) and the lifestyle of the elderly who are at risk of developing Rheumatoid arthritis (RA). In a study conducted in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency, in 2020, regarding the obesity factor, it was concluded that the obesity factor did not dominantly affect the occurrence of Rheumatoid arthritis (RA), but there were several respondents affected by Rheumatoid arthritis (RA) who were not overweight.

According to research conducted by Ayu on the identification of obesity factors for Rheumatoid arthritis (RA) in the elderly, it showed that 64 people (35.4%) of respondents who were overweight could also suffer from Rheumatoid arthritis (RA). According to the authors' assumptions (2020) Rheumatoid arthritis (RA) can be caused by obesity or obesity. However, in reality this study showed that the prevalence of obesity was high and partly affected, this meant that most of the respondents suffered from rheumatoid arthritis not caused by factors due to the problem of obesity but could be a trigger for the occurrence of Rheumatoid arthritis (RA).

5.4.5 Dietary factors that influence the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Based on the results obtained that of 99 elderly respondents who suffer from Rheumatoid arthritis (RA) in the UPTD Puskesmas Tanah Jawa, Simalungun Regency in 2020, in terms of dietary factors, that elderly who consume foods that do not contain purines are as many as 52 respondents (52.5%) , and the elderly who consumed foods containing purines were 47 respondents (47.5%). In connection with the fact that some respondents still consume a lot of foods that contain lots of purines that can cause crystallization in the joints, this is due to the habit of consuming foods that trigger the occurrence of Rheumatoid arthritis (RA) or recurrence of Rheumatoid arthritis (RA), it is assumed that food is an important factor in triggering the occurrence of Rheumatoid arthritis. arthritis (RA), such as Offal,

According to research conducted by Ayu on the identification of dietary factors for Rheumatoid arthritis (RA), in the elderly it showed that 47 people out of 100%, it was

concluded that food has an effect on rheumatic diseases, this is understandable because they consume foods that contain purines. Foods that process slowly in the digestive tract will experience fermentation, causing gas formation, bloating, headache, and various diseases. And toxic waste in the digestive tract can be absorbed into the blood vessels, thus potentially triggering the emergence of chronic diseases, such as Rheumatoid arthritis (RA), (Iskandar Junaidi, 2017).

According to the author's assumptions (2020) Rheumatoid arthritis (RA) can be caused by or dietary factors, and this study shows that the prevalence of dietary factors is high and affects the incidence of Rheumatoid arthritis (RA), this means that most respondents suffer from Rheumatoid arthritis (RA). , caused by food factors that contain lots of purines, meat and nuts.

5.5.5. Activity/work factors that influence the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Based on the results of the study that out of 99 respondents who had light activities/work, 38 respondents (38.4%), and activities/work weight obtained by 61 respondents (61.6%). The results of the research test showed that activity/work factors in the elderly in the UPTD Puskesmas Tanah Jawa, Simalungun Regency in 2020 really influenced or could be said to be very related to the occurrence of Rheumatoid arthritis (RA) or its recurrence. Activity factors with heavy workloads such as farming, construction laborers and other unskilled labourers, can exacerbate joints for a long time, are often a complaint felt by elderly respondents in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

Physical activity requires the use of joints such as the joints of the fingers, wrists and feet, so most people with Rheumatoid arthritis (RA) have difficulty doing activities that involve the joints, (IP Suikaro, 2012)

According to the authors' assumptions (2020), that genetic factors, obesity factors, food factors and activity/occupation factors can influence the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020. And this study also shows that the prevalence of these factors activity/occupation is the highest and has the highest influence on the incidence of Rheumatoid arthritis (RA), this means that most of the respondents are influenced by activity/occupation factors, where the research I conducted found that most of the respondents had heavy work such as farming and rough hunting which were the most dominant suffering from Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020.

CLOSING

Conclusion

Based on the results of the research and discussion, it can be concluded that the factors that influence the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency in 2020 are prone to occur at ages 44 to 59 years, and ages 60 to 70 years. With Rheumatoid arthritis (RA) sufferers in the elderly the majority occurred in women with a total of 79 0 people (79.8%), According to (Lukman and Ningsi 2014), the occurrence of Rheumatoid arthritis (RA) is due to hormonal (estrogen) disturbances in the body .

Several factors influence the occurrence of Rheumatoid arthritis (RA) including:

1. This genetic factor influences the occurrence of rheumatoid arthritis in the elderly at the Pematangsiantar Raya Health Center. The highest frequency had genetic factors that did not affect 60 (60.6%) respondents and the lowest frequency affected 39 (39.4%) respondents.
2. The obesity factor influences the occurrence of Rheumatoid arthritis (RA) in the elderly in the UPTD Tanah Jawa Community Health Center, Simalungun Regency in 2020 with obesity of 35 (35.4%) respondents. and the lowest were 64 people (64.6%) respondents, but it affected the incidence of rheumatoid arthritis in the elderly.
3. Dietary factors that influence the occurrence of Rheumatoid arthritis (RA) obtain the highest frequency with 52 respondents (52.5%) of respondents and the lowest frequency of 47 (47.5%) of respondents
4. Activity/work factors influence the occurrence of Rheumatoid arthritis (RA) in the elderly with the highest frequency of 61 (61.6%) respondents and the lowest of 38 respondents (38.4%).

Of all these factors, the most influential factor for the incidence of Rheumatoid arthritis (RA) in the UPTD Puskesmas Tanah Jawa, Simalungun Regency in 2020, out of 99 elderly people, namely activity/work factors which reached 61 people (61.8%) and genetic factors of 39 people (39.4%).

Suggestions and Acknowledgments (if any)

1. For the UPTD Tanah Jawa Health Center, Simalungun Regency
As input to find out what factors influence the occurrence of Rheumatoid arthritis (RA) in the elderly.
2. For Educational Institutions
As reading material and to increase knowledge for lecturers and students about the factors that cause Rheumatoid arthritis (RA) in the elderly
3. For further researchers
As input material and data sources for researchers who will examine problems related to Rheumatoid arthritis (RA) in the elderly in the UPTD area of the Tanah Jawa Health Center, Simalungun Regency, as well as in other places
4. For the general public or the elderly

To add and develop insight into the general public or the elderly about the factors for the occurrence of Rheumatoid arthritis (RA) wherever they are.

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