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THE EFFECT OF EDUCATIONAL BACKGROUND ON THE QUALITY OF LIFE OF THE PRE-ELDERLY POPULATION

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ABSTRACT

The quality of life of the pre-elderly population is the key to readiness to enter the stages of old age to realize a prosperous life. Previous research has extensively studied the condition of the elderly population in various scientific disciplines but still minimally examines the quality of life of the pre-elderly population, especially regarding educational background as an indicator of human resource development. This research aims to measure and analyze the influence of educational background on the quality of life of the pre-elderly population as they enter old age. This research method is quantitative with the instrument used being a questionnaire. This research population was residents in Timbangan Sub District, Ogan Ilir Regency aged 45-59 years. The sample calculation used the Isaac and Michael formula with a sampling error of 5% so that the sample size for this study is 310 residents. Data analysis used in this research is the independent sample median K test, Tukey test, and ordinal regression test using SPSS version 20 and STATA version 17 software. The results show that there is a significant influence between educational background and the quality of life of the pre-elderly population in Timbangan Sub District, Ogan Ilir Regency, it was 7.16%. Thus, educational background variables can contribute to improving the quality of life of the pre-elderly population in Timbangan Sub District, Ogan Ilir Regency.

ABSTRAK

Kata Kunci: pendidikan, penduduk pra lansia, kualitas hidup

Keywords:

quality of life

pre-elderly population,

education,

Kualitas hidup penduduk pra lansia merupakan kunci kesiapan memasuki tahapan usia lanjut demi terwujudnya kehidupan yang sejahtera. Penelitian terdahulu telah banyak mengkaji tentang kondisi penduduk lanjut usia di berbagai disiplin ilmu dan masih minim mengkaji kualitas hidup penduduk pra lansia, khususnya yang berkaitan dengan latar belakang pendidikan sebagai indikator pembangunan sumber daya manusia. Penelitian ini bertujuan untuk mengukur dan menganalisis pengaruh latar belakang pendidikan terhadap kualitas hidup penduduk pra lansia dalam memasuki kehidupan lanjut usia. Metode penelitian ini adalah kuantitatif dengan instrumen berupa kuisioner. Populasi penelitian adalah penduduk di Kelurahan Timbangan Kabupaten Ogan Ilir yang berusia 45-59 tahun. Perhitungan sampel menggunakan rumus Isaac dan Michael dengan sampling error 5% sehingga jumlah sampel penelitian ini adalah 310 penduduk. Analisis data yang digunakan dalam penelitian ini adalah uji median K sampel independen, uji tukey, dan uji regresi ordinal dengan memanfaatkan software SPSS versi 20 dan STATA versi 17. Hasil perhitungan menunjukkan bahwa terdapat pengaruh yang signifikan antara latar belakang pendidikan dengan kualitas hidup penduduk pra lansia di Kelurahan Timbangan Kabupaten Ogan Ilir sebesar 7.16%. Dengan demikian, variabel latar belakang pendidikan dapat memberikan kontribusi dalam meningkatkan kualitas hidup penduduk pra lansia di Kelurahan Timbangan Kabupaten Ogan Ilir.

INTRODUCTION

Indonesia is one of the countries that have entered the stage of population aging, known as the aging population, since 2021. The elderly population in Indonesia continues to increase every year. The ratio of the elderly population in Indonesia is one in ten residents (1). The category of the elderly population is the population born after the independence of the Republic of Indonesia.

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Figure 1. Percentage of the Elderly Population in Indonesia, Sumatra Selatan Province, and Ogan Ilir Regency.

percentage of the The elderly population in Indonesia in 2015 was 8.43% and increased to 10,82% in 2021. The increase in the elderly population also occurred in South Sumatra Province and Ogan Ilir Regency. However, the percentage of the elderly population in Ogan Ilir Regency is always above the average percentage for South Sumatra province. In 2021, the percentage of the elderly population in Ogan Ilir Regency will be 10.02%, while the percentage in South Sumatra province will be 9.21%. This shows that in 2021, the age structure of the population in Ogan Ilir Regency will have entered the population aging stage.

Becoming elderly is an event that occurs naturally and is experienced by everyone. Every human being will go through several stages of growth and development starting from being a fetus, baby, child, teenager, adult, and old (2,3). The stages from fetus to adolescence are stages of biological growth and development, then in the adult stage usually physical growth has stopped because the body has grown and developed perfectly. In the old stage, known as the elderly, the body's function usually has decreased and various diseases appear (3). This is in line with previous research which stated that entering the elderly stage will experience several problems including knowledge problems, and physical, knowledge, and psychosocial changes (4). Therefore, a person needs to prepare themselves both in terms of knowledge and health before entering the life of the elderly and needs motivation from the surrounding environment. Elderly age is the age that is above 60 years, while the preelderly age is the age with a range of 45-59 years (5,6)

Aging is a natural process that is a biological fact and is largely beyond human control. The World Health Organization (WHO) states that the human population increases annually by 1.7%, while the elderly population increases by 2.5% (7). Therefore, the relationship between age and a person's quality of life is very strong, so preparation is needed to adapt to conditions at a later stage and act independently (8).

The aging population of Indonesia can be a second demographic bonus opportunity for Indonesia. This was reinforced by previous research which stated that. to increase the second demographic bonus, it is necessary to describe the characteristics of the elderly at this time to improve the quality of human life (9). The demographic bonus will be good if the productive age population grows into qualified people, so they have high knowledge and insight. If the productive age is only dominated by people who are not qualified, then those who are no longer productive will become a burden in human resource development (10).

Demographic bonuses can be realized if all aspects of population quality can be optimally prepared, that is education, health, and income. Conversely, it will be a burden for Indonesia's development if the quality of the population is low. Changes experienced by the elderly, both physiologically, psychologically, and in socioeconomic status are vulnerable to being a burden of development (11). This happens because they are still considered elderly and will only depend on their family and the state until the end of their lives. The low quality of life, especially in the elderly, is caused by various factors including declining physical conditions such as the emergence of degenerative diseases, less prosperous socioeconomic conditions, lack of new skills, and opportunities to obtain information. This condition is the biggest challenge in development to improve the quality of human resources. The quality of human resources in terms of education still requires more attention. This is because education is still relatively low.

Education is a process of learning, developing, and increasing insight and knowledge to play a role in personal and social life. The level of formal education in Indonesia consists of three levels including, the basic level of, Elementary School (*Sekolah Dasar*/SD); second, the middle level, that is Junior High School (Sekolah Menengah Pertama/SMP), Senior High School (Sekolah Menengah Atas/SMA), and Vocational High School (Sekolah Menengah Kejuruan/SMK); third is high level, that is Diploma, Strata (Undergraduate, Graduate, Postgraduate) (12). The level of education is very influential for humans because education teaches how to information then absorb and provide information to others, implement it in life, and provide added value for individuals in selecting new things.

Education is an indicator of human development. Public awareness of the importance of education proves that education has an important role in improving the quality of life. Education is also seen as an opportunity to upgrade a person to a higher class. The level of population education will be directly proportional to health knowledge. Health education is the provision of health information to improve attitudes and knowledge about health to make it easier for humans to be healthy to improve their quality of life in the elderly (13).

Based on the Central Bureau of Statistics, it shows that the largest numbers of elderly people are in rural areas compared to urban areas, that is 61.17%. Ogan Ilir Regency is one of the districts in South Sumatra Province which has the highest percentage of pre-elderly people, which is 16.28%. Several districts and cities in South Sumatra Province show that the percentage of the pre-elderly population in Ogan Ilir Regency is the same as the average percentage at the provincial level (1).

This research was conducted because most previous studies only focused on the elderly population in various disciplines, while research that focused on the pre-elderly population was still minimal. Some previous studies focused on research on the elderly population, such as the effect of education and counselling on improving quality of life and reducing levels of depression in the elderly (14), quality of life comparison between elderly living in social Tresna Werdha institution in Jambi province with the elderly living with family who became a member in Integrated Services Post (Pos Pelayanan Terpadu/Posyandu) Jambi City (15) and the elderly in the bonus era demography (9).

Research on the pre-elderly population is still minimal, such as research on energy expenditure of the pre-elderly and elderly population (16), and the effectiveness of health, socioeconomic, and technology models on increasing knowledge and skills of preelderly and elderly (17). That research focuses on providing various methods to increase the knowledge of the pre-elderly and elderly population. Meanwhile, this research aims to determine the effect of educational background on the quality of life of the pre-elderly population entering old age in Timbangan Sub District, Ogan Ilir Regency, South Sumatra Province.

The benefits of this research consist of two things as follows, 1) Academically, it is hoped that it can become basic data for further research to take further action on the conditions of the pre-elderly population so that they are ready to face the future of old age; 2) Practically, it is hoped that the pre-elderly population can increase the knowledge obtained from various useful sources to prepare themselves for entering old age.

METHODS

The research method used is quantitative. This research method emphasizes accurate numerical data analysis, followed by appropriate statistics, and presents a significant relationship between the hypothesis and the statistical test results (18). In this study, the independent variable is the educational background of the pre-elderly and the dependent variable is the quality of life of the pre-elderly.

The reasons for using the Timbangan Sub-District, Ogan Ilir Regency as a sample are firstly, this area has the densest population in Ogan Ilir Regency. Second, residents in the Timbangan Sub-District have a diversity of educational backgrounds. Second, geographically the Timbangan Sub-District is located between urban and rural areas.

The population of this study was the pre-elderly population in Timbangan Sub-District, totaling 1,374 people. The research sample calculation used the Isaac and Michael formula with a sampling error of 5% (19), so the total sample in this study was 310 respondents.

This research procedure includes three stages, namely preparation, data collection, and data processing. In the preparation stage, a preliminary study was carried out to collect population data according to age groups in the field. After conducting an initial study, the problem is formulated and research objectives are set. This research aims to determine the effect of educational background on the quality of life of pre-elderly people. After formulating the problems that occur in the field, instruments are prepared according to the problem formulation in the field to collect research data.

The data collection instrument used in this study was a questionnaire sheet in the form of a Likert scale consisting of five classifications of respondents' quality of life levels. This research instrument is guided by the indicators compiled in the Older People Quality of Life Questionnaire (OPQOL-35) instrument (20). This instrument aims to measure and determine the quality of life of the pre-elderly population based on the educational background of the respondents. Next, the process is to determine the number of research samples, print the questionnaire, and prepare for the field.

The second stage is data collection which is carried out by giving a designed questionnaire to the specified respondents. The third stage is data processing. At this stage, data processing is carried out from the questionnaire results. The data analysis techniques used are descriptive statistical analysis, ordinal regression test, the median test of k-independent samples, and the Tukey test. In this study, researchers used the median test of k-independent samples because the data did not meet the normality test, but fulfilled the homogeneity test. Data analysis in this study used Statistical Program for the Social Sciences (SPSS) software version 20 to test the median k-independent samples. Then, the Tukey test and Statistics and Data Analysis (STATA) software version 17 was used for the ordinal regression test. Then, the data were interpreted according to the results of data processing, so as to answer the hypothesis and draw conclusions in this research.

RESULTS

The results of this study contain the effect of educational background on the quality of life of the pre-elderly in Timbangan Sub-District, Ogan Ilir Regency. The results of this study were taken using a questionnaire sheet consisting of eight aspects and 57 indicators. First, the quality of life felt by the respondents; second, health and social relationships; third, independence, freedom, and control of life; fourth. home and neighborhood; fifth. psychology and emotions; sixth, finance; seventh, leisure and activities; and eighth, technology. This questionnaire sheet aims to determine the quality of life of pre-elderly life to enter quality elderly life.

| Table 1. Description of Research Sample Data |
|--|
|--|

| Description | Category | Total | % |
|-----------------------|------------------------------------|-------|-------|
| Gender | Male | 151 | 48.71 |
| | female | 159 | 51.29 |
| Level of Education | Not Passed Elementary School | 10 | 3.23 |
| | Elementary School | 101 | 32.58 |
| | Junior High School | 66 | 21.29 |
| | Senior High School | 87 | 28.06 |
| | Diploma | 11 | 3.55 |
| | Undergraduate | 28 | 9.03 |
| | Graduate | 7 | 2.26 |

The description of the data based on sample size can be seen in Table 1. Based on the description of sample data in Table 1, it shows that the sample in this study amounted to 310 respondents. The sample in this study included the pre-elderly population aged 45-59 years. In the gender category, it shows that men and women have the same contribution, namely almost 50%. In the education level category, it shows that respondents have the highest percentage at elementary, middle school, and high school education levels. Meanwhile, the level of diploma, bachelor, and non-primary school graduates is below 10%. The description of the data on the quality of life of the pre-elderly population is shown from the total scores obtained for each aspect, which can be seen in Table 2.

Table 2. Percentage Quality of Life of the Pre-Elderly Population

| Indicator | Score (%) |
|----------------------------|-----------|
| Health | 69.61 |
| Social Relationships | 75.35 |
| Independence, Freedom, and | 77.10 |
| Life Control | |
| Home and Neighborhood | 77.03 |
| Psychology and Emotions | 74.76 |
| Finance | 62.80 |
| Leisure and Activities | 74.34 |
| Technology | 67.32 |
| Quality of Life | 72.29 |

Based on the description of the data in Table 2, it can be seen that the average quality of life score of the pre-elderly population in entering a quality life in the elderly is in the high category. The description of the educational background data of the pre-elderly population in the Timbangan Sub-District, Ogan Ilir Regency shows that the respondents have diverse educational backgrounds. The educational background of the pre-elderly population in the Timbangan Sub-District, Ogan Ilir Regency is mostly at the elementary, middle, and high school levels. The strata's educational background is still relatively small as well as the educational background who did not finish elementary school.

The research data obtained was then analyzed using the Median Test of Independent Samples to see whether the educational background factor of the population has a significant difference in the quality of life of the pre-elderly population. Furthermore, the Tukey test was carried out to determine the group's level of educational background. Then an ordinal regression test was carried out to determine the effect of educational background on the quality of life of pre-elderly people in Timbangan Sub-District, Ogan Ilir Regency.

The first data analysis carried out was the normality test. This normality test aims to determine whether the sample data are normally distributed. The results of the normality test for the quality of life of the preelderly population can be seen below.

| Table | 3. Results | of | the N | orm | ality | Test for the |
|-------|------------|----|-------|-----|-------|--------------|
| | Quality | of | Life | of | the | Pre-Elderly |
| | Populati | on | | | | |

| Ν | α | P Value (Sig.) | Hypothesis |
|-----|------|-------------------|-------------|
| 310 | 0.05 | 0.018 | H1 Accepted |

Based on the results of the normality test in Table 3, it shows that the data on the quality of life of the pre-elderly population have a p-value (significance in SPSS software version 20) using Kolmogorov-Smirnov of less than 0.05. This shows that the working hypothesis (H1) is accepted, so the data on the quality of life of the pre-elderly population do not follow the normal distribution pattern.

Second, the homogeneity test analysis. The homogeneity test was carried out using the Levene test. The homogeneity test aims to find out two or more variables that have been taken from populations that have the same variance. The results of the quality of life of the preelderly population homogeneity test with educational background factors can be seen in Table 4.

Table 4. Homogeneity Test Results of QualityofLifePre-ElderlyPopulationDataonEducational Background Factors

| Ν | α | p value (Sig.) | Hypothesis |
|-----|------|-------------------|-------------|
| 310 | 0.05 | 0.0227 | H0 Accepted |

Based on the results of the normality test in Table 4, it is revealed that the data on the quality of life of the pre-elderly population with an educational background have a p-value (significance in SPSS software version 20) using the Levene test greater than 0.05. This shows that the working hypothesis (H1) is rejected, then the quality of life of the preelderly population with a homogeneous population background.

Third, median test analysis for kindependent samples. The median test for independent samples was carried out because the data on the quality of life of the pre-elderly population and the data on the educational background factors of the population did not meet the assumption of normality, but did meet the assumption of homogeneity. The results of the median test for k-samples of data on the independence of quality of life for the educational background factor of the pre-elderly population can be seen in Table 5.

 Table 5. Median Test Results for Independent

 Samples

| Ν | α | p-value (Sig) | Hypothesis |
|-----|------|---------------|-------------|
| 310 | 0.05 | 0.000 | H1 Accepted |

Based on the results of the median test of k-independent samples in Table 5, it shows that the data on the quality of life of the prepopulation on the educational elderly background factor of the pre-elderly have a pvalue (significance in SPSS software version 20) less than 0.05. This shows that the working hypothesis is accepted so that the educational background of the pre-elderly population has a significant difference in the quality of life of the pre-elderly population for quality of life in the elderly. Then do the Tukey test aims to determine the level of quality of life of the preelderly population toward the educational background. Tukey test results for pre-elderly education background factors can be seen in Table 6.

 Table 6. Tukey Test Results for Educational Background Factors

| Level of | | Gro | up | |
|---------------|------|------|------|------|
| Education | 1 | 2 | 3 | 4 |
| Not Pass in | | | | |
| Elementary | 60.3 | | | |
| School | | | | |
| Elementary | | 68.5 | | |
| School | | 68.5 | | |
| Junior High | | 71.4 | | |
| School | | /1.4 | | |
| Senior High | | | 74.0 | |
| School | | 74.9 | | |
| Diploma | | | 78.4 | |
| Undergraduate | | | | 80.9 |
| Graduate | | | | 81.8 |

Based on the Tukey test results in Table 6, the educational background factors are divided into four groups. Categories in the same group mean that they have the same level of quality of life for the pre-elderly population, even though the average Tukey test scores are different. Group 1 is an education category of "didn't finish elementary school" with an average Tukey quality of life test of 60.3 indicating that the pre-elderly background factor on population quality of life has the lowest category. Group 2 is an education category "Elementary School and Junior High" that are in the same group. Group 3 is an education category " Senior High School and Diploma" which is in the same category with an average quality of life above 70. Group 4 is an education category "Undergraduate and Graduate" which are in the same category and have an average quality of life tall one. Group 4 shows that the educational background factors of Undergraduates and Graduates have the highest pre-elderly population quality of life category.

Fourth, ordinal regression analysis. Ordinal regression analysis aims to determine the effect of educational background on the quality of life of the pre-elderly population. This analysis was carried out using Statistic and Data (STATA) software version 17. Two assumptions in ordinal regression analysis must be met including the simultaneous test (pvalue is smaller than the 5% error value) and partial test (p-value of each independent variable). The ordinal regression test aims to obtain the coefficient and odds ratio in the ordinal regression model. The results of the ordinal regression analysis of the effect of background on the quality of life of the preelderly population can be seen in Table 7.

Table 7. Results of Ordinal RegressionAnalysis of the Effect of Background on theQuality of Life of the Pre-elderly Population

| Factor | Coef. | p- value | Odd Ratio |
|-------------------------------|-------|-------------|--------------|
| Elementary School/ (X1.1) | 1.22 | 0.071 | 3.39 |
| Junior High School/ (X1.2) | 1.55 | 0.025 | 4.70 |
| Senior High School/ (X1.3) | 2.19 | 0.001 | 8.95 |
| Diploma/ (X1.4) | 2.57 | 0.005 | 13.01 |
| Undergraduate/ (X1.5) | 3.81 | 0.000 | 45.36 |
| Graduate/ (X1.6) | 3.22 | 0.001 | 24.94 |
| Constant_1 | -2.52 | - | - |
| Constant_2 | -1.29 | - | - |
| Constant_3 | 0.93 | - | - |
| Constant_4 | 3.64 | - | - |
| Probability (p_value) | | 0.0000 | |
| Pseudo R ² | | 0.0716 | |

Based on the results of the ordinal regression analysis in Table 7, the overall results of the ordinal regression analysis show that the p-value is less than 0.05. This means that the ordinal regression model is valid. The results of the ordinal regression analysis show a Pseudo R2 value of 0.0716 or 7.16%, meaning that the pre-elderly education background variable can improve the quality of life by 7.16%.

Based on Table 6, the Elementary School level (X1.1) does not meet the ordinal logistic regression model. This is because the P-value is greater than 5%., while other levels of education meet the ordinal logistic regression model. The ordinal logistic regression model based on the odd ratio value for the Junior High School level (X1.2) has an odds ratio of 4.70, meaning that a junior high school educational background can improve the quality of life of the pre-elderly population by 4.70 times better than other levels of education. The Senior High School level (X1.3), has an odds ratio of 8.95 meaning that a high school educational background can improve the quality of life of pre-elderly as much as 8.95 times better than other levels of education. The levels Diploma (X1.4) with an odds ratio of 13.01, which means that a educational background a can diploma improve the quality of life of pre-elderly as much as 13.01 times better than other levels of education.

The Undergraduate level (X1.5) with an odds ratio of 45.36, means that the educational background of a bachelor's degree can improve the quality of life of pre-elderly as much as 45.36 times better than other levels of education. The Graduate level (X1.6) with an odds ratio of 24.94 which means that the Graduate's educational background can improve the quality of life of pre-elderly as much as 24.94 times better than other levels of education. Thus, it can be concluded that the higher the level of education, the quality of life of the pre-elderly in Timbangan Sub-District, Ogan Ilir Regency can be improved.

DISCUSSION

The results of the study on the effect of educational background on the quality of life of the pre-elderly in Timbangan Sub-District, Ogan Ilir Regency, were obtained through a questionnaire sheet. The questionnaire sheet consisted of eight aspects that were assessed. The subjects in this study were a group of preelderly residents aged 45-59 years who were in the Timbangan Sub-District, Ogan Ilir Regency. The sample selection technique in this study was purposive sampling with a total sample of 310 pre-elderly residents. The average score of the questionnaire sheet shows that the quality of life of the pre-elderly population to enter old age (elderly) life is in the high category of 72.29%. The description of the educational background data of the preelderly population in Timbangan Sub-District, Ogan Ilir Regency, shows that the educational background of the pre-elderly population is mostly elementary, junior high, and high school Undergraduates, while the number of Undergraduates and not elementary school Undergraduates strata is still relatively small.

The results of the data analysis in this study used samples from populations that were distributed not normally but met а homogeneous variance. So the next analysis uses the median K test of independent samples. The results of the median test of k-independent samples show that there is a significant difference in the quality of life of the preelderly population for quality of life in entering old age (elderly) life. Then the next step is to do the Tukey test analysis.

Based on the results of the Tukey test, it shows that there are four groups of preelderly population quality of life levels based on educational background factors. Group 4 also called the group with the highest average level of quality of life is Undergraduate at 80.94 and Graduate at 81.81. Group 3 is the second highest group, that is Diploma. Group 2 is Junior High School and Elementary School. Group 1 with the lowest average quality of life is not having finished elementary school at 60.31. The quality of life in the elderly is still the world's biggest challenge because there is a tendency for poor health status and knowledge in the elderly. Therefore, an appropriate strategy is needed to increase pre-elderly knowledge to have a good quality of life in old age (21). This is reinforced by relevant research which states that there is a significant relationship between the knowledge possessed by the pre-elderly and the quality of life of the elderly (4). The results of this research were also reinforced by previous research which explained that education can show human

resources. If education can develop higher and be able to influence society, it will produce quality human resources (22).

Further research carried out regression analysis and because the variables are in the form of ordinal categories, the type of regression analysis used is ordinal logistic regression analysis. Ordinal regression determines the effect of educational background on the quality of life of preelderly. The results of the ordinal regression show that the p-value is less than the 5% error value so the regression model can be categorized as valid, while the Pseudo R2 value obtained is 7,16%.

Based on testing the ordinal regression model, it shows that the criteria for the working hypothesis are accepted, so there is an influence of educational background on the quality of life of pre-elderly people in Timbangan Sub-District, Ogan Ilir Regency. This means that the educational background factor of the pre-elderly population provides quality of life to enter the stages of life for the elderly (elderly) of the pre-elderly population in Timbangan Sub-District, Ogan Ilir Regency, by 7.16% and the rest is influenced by other factors.

The results of this study are reinforced by relevant previous research, that is several factors influence the quality of life of the preelderly, namely gender, education, marital status, employment, and income (23). First, is the gender factor. The Ministry of Health of the Republic of Indonesia states that there are more elderly women than male elderly. This proves that the highest life expectancy is for females. The female sex has a high quality of life because it is influenced by hormones in productive elderly women in which the hormone estrogen acts as a protector, causing the life expectancy of women to be higher, whereas in men this hormone is very small (21).

Second, is the educational factor. Education has a very important role in shaping one's knowledge. The higher the level of education one has, the more rational the response given will be to the various information received. Higher education tends to provide a more rational response than those with low education. However, the level of education does not always affect the quality of life of the elderly. This is because education is not only found in schools or known as formal education but is also obtained from a positive environment such as family, community, and other media (21).

Third, marital status. Marital status is one of the factors that support the quality of life of pre-elderly. According to the results of empirical research in America, it shows that individuals who are married have a better quality of life than individuals who are not married or divorced. This is due to individuals who are not married have a lack of assistance, and no cooperation in life to overcome difficulties in managing the household (23).

Fourth, jobs and income. These factors are interrelated with one another. Older people tend to be unemployed because, firstly, due to age restrictions or what is called retirement and getting pension income money to support their family in old age, and secondly, their health does not allow them to do work so they have no income and hope for help from their children and other people. However, there are not a few elderly people who are still working due to strong physical and mental reasons. The economy is a means of fulfilling basic needs (primary) and secondary needs. A family with good economic status will find it easier to meet their needs than those with low economic status. It can be concluded that the economy can affect the knowledge possessed by a person. The advantage of this research is that pre-elderly population the knows the importance of quality of life of the prepopulation knowledge to enter life in the elderly is very important to be able to prepare themselves to be able to live an elderly life independently without burdening others (21).

This is reinforced by previous research which states that the level of education that has been attained by the community proves that the community has an awareness of the importance of education. Previous researchers stated that the higher the level of education the community takes, the better the quality of life of the community will be (24).

CONCLUSIONS AND SUGGESTION

Conclusion

Based on the results of the data analysis, the conclusions of this study are that there is an influence of educational background on the quality of life of the preelderly population to enter old age (elderly) life. Thus, the educational background factor contributed to improving the quality of life of the pre-elderly population in the Timbangan Sub-District, Ogan Ilir Regency by 7.16%.

Suggestion

Education is one of the factors that influence the quality of life of the pre-elderly population, so it is appropriate to raise awareness for family members to continue their education as high as possible. Through education, a person will have many choices to live their life better. If the population can make good use of their productive age, then in old age they will become independent and resilient citizens.

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REFERENCES

- 1. Central Bureau of Statistics. Statistik Penduduk Lanjut Usia 2022. Jakarta: Badan Pusat Statistik; 2022.
- 2. Ajhuri KF. Psikologi Perkembangan : Pendekatan Sepanjang Rentang Kehidupan [Internet]. Institut Agama Islam Negeri Ponorogo; 2019. Available from: <u>https://repository.iainponorogo.ac.id/48</u> <u>9/</u>
- Yunita J, Nurlisis N, Sari W. Determinants of the Quality of Life among Pre-Elderly and Elderly Population. Int J Public Heal Sci [Internet]. 2019;8(3):340–4. Available from: <u>http://doi.org/10.11591/ijphs.v8i3.2024</u>

6

- 4. Putri DE. Hubungan Fungsi Kognitif dengan Kualitas Hidup Lansia. J Inov Penelit [Internet]. 2021;2(4):1147–52. Available from: https://doi.org/10.47492/jip.v1i4.835
- 5. Solhi M, Pirouzeh R, Zanjari N. Middle-Aged Preparation for Healthy Aging: A Qualitative Study. BMC Public Health [Internet]. 2022;22(274):1–8. Available from: https://doi.org/10.1186/s12889-022-12715-x
- 6. Yunita J, Nurlisis N, Sari W. Determinants of the Quality of Life among Pre-Elderly and Elderly Population. Int J Public Heal Sci [Internet]. 2019;8(3):340–4. Available from: <u>http://doi.org/10.11591/ijphs.v8i3.2024</u>6
- 7. Shokry AE, Adel MR, Rashad AEA. Educational Program to Improve Quality of Life among Elderly Regarding Oral Health. Futur Dent J [Internet]. 2018;4(2):211–5. Available from: <u>https://doi.org/10.1016/j.fdj.2018.07.00</u>

- Dewi SK. Level Aktivitas Fisik dan Kualitas Hidup Warga Lanjut Usia. Media Kesehat Masy Indones [Internet]. 2018;14(3):241–50. Available from: <u>https://doi.org/10.30597/mkmi.v14i3.46</u> 04
- Cicih LHM, Agung DN. Lansia di Era Bonus Demografi. J Kependud Indones. 2022;17(1).
- Central Bureau of Statistics of South Sumatra. Analisis Profil Penduduk Provinsi Sumatera Selatan. Sumatera Selatan: Badan Pusat Statistik Provinsi Sumatera Selatan; 2020.
- Oktaviani E, Prastia TN, Dwimawati E. Faktor-Faktor uang Berhubungan dengan Kejadian Hipertensi pada Pra Lansia di Puskesmas Bojonggede Tahun 2021. Promot J Mhs Kesehat Masy [Internet]. 2022;5(2):135–47.

Available from: https://doi.org/10.32832/pro.v5i2.6148

- 12. Kristiningsih K. Tingkat Pendidikan Formal dan Pengaruhnya Terhadap Kesadaran Masyarakat dalam Melaksanakan Pembangunan di Desa Ngembat Padas Sragen. J Kebhinekaan dan Wawasan Kebangs [Internet]. 2022;2(1):30–9. Available from: https://doi.org/10.30998/jagaddhita.v2i 1.1499
- Sari DK, Ulfah B, Wulandatika D. Improving the Quality of Life for the Elderly through Health Education for Elderly Companion Herbal Plants. OMNICODE J [Internet]. 2021;1(1):29–32. Available from: https://doi.org/10.55756/omnicode.v1i1 .70
- 14. Nyandra M, Kartiko BH, Susanto PC, Supriyati A, Suryasa W, Susanto PC. Education and Training Improve Quality of Life and Decrease Score Depression in Elderly Population. Eurasian J Anal Chem [Internet]. 2018;13(2):371–7. Available from:

https://ssrn.com/abstract=3394858

15. Gultom HW, Damayanti N, Syauqy A. Perbandingan Kualitas Hidup Lansia Di Panti Sosial Tresna Werdha Provinsi Jambi dengan Lansia yang Tinggal Bersama Keluarga yang Menjadi Anggota di Posyandu Puskesmas Putri Ayu Kota Jambi. J Psikol Jambi [Internet]. 2020;5(1):1–11. Available from:

> https://doi.org/10.22437/jpj.v6iJuli.126 26

- Djamhari AA, Layyinah A, Ramdlaningrum H. Sejahtera di Masa Lansia: Aspirasi Bantuan Iuran Jaminan Sosial Ketenagakerjaan. Jakarta: Prakarsa Policy Brief; 2021.
- Luthfiani R, Lina N, Maywati S.
 Pengaruh Penyuluhan dengan Menggunakan Media Video terhadap Pengetahuan Pra Lansia Mengenai

Hipertensi (Studi di Posbindu Melati IV Dusun Pasir Peuteuy Desa Pawindan Kecamatan Ciamis Kabupaten Ciamis Tahun 2020). J Kesehat komunitas Indones [Internet]. 2021;17(2):329–38. Available from: <u>https://doi.org/10.37058/jkki.v17i2.389</u> <u>1</u>

- Priadana S, Sunarsi D. Metode Penelitian Kuantitatif. Tangerang Selatan: Pascal Books; 2021.
- 19. Sugiyono. Statistik untuk Penelitian. Bandung: Alfabeta; 2017.
- International Longevity Centre UK. International Longevity Centre UK.
 2019. Older People's Quality of Life Questionnaire (OPQOL-35); 2019.
- Mazloomymahmoodabad S, Masoudy G, Fallahzadeh H, Jalili Z. Education Based on Precede-proceed on Quality of Life in Elderly. Glob J Health Sci [Internet]. 2014;6(6):178–84. Available from:

https://doi.org/10.5539/gjhs.v6n6p178

- Adriana T. Pengaruh Tingkat Kesehatan, Tingkat Pendidikan, dan Produktivitas Terhadap Kemiskinan di Kalimantan. J Ekon Drh [Internet]. 2020;8(2). Available from: <u>https://jurnal.untan.ac.id/index.php/JED</u> <u>A2/article/view/43796</u>
- 23. Ardiani H. Faktor-Faktor yang Berhubungan dengan Kualitas Hidup Mugarsari Lansia di Kelurahan Kecamatan Tamansari Kota Tasikmalaya Tahun 2014. Healthc Nurs J [Internet]. 2019;1(1):42–50. Available from: https://journal.umtas.ac.id/index.php/he

altcare/article/view/301

24. Ramadhana B, Meitasari I. Kajian Tingkat Pendidikan terhadap Kualitas Hidup Masyarakat. J Penelit Pendidik Geogr [Internet]. 2023;8(2):38–45. Available from: https://doi.org/10.36709/jppg.v8i2.1