The Influence of Family Support and Family Status on the Level of Stress Occurrence in Elderly in the West Arso District, Keerom Regency

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ABSTRACT

Background: Elderly people require special attention because of their physical and psychological decline. Environmental attention is crucial for the elderly to achieve good quality of life. Research

Objective: To determine the extent of the influence of family support and status on the level of stress occurrence in the elderly in West Arso District, Keerom Regency.

Methods: This was an analytical, quantitative study. It falls into the category of causal associative research, as it aims to determine the influence of independent variables on the dependent variable by using the chi-square test. The population of this study included all elderly individuals in the West Arso District, Keerom Regency, who are registered in the elderly integrated health service posts (posyandu) in 2021. The total number of registered elderly individuals in the West Arso District posyandu programme was 741. The sample size for this study was 260 individuals, using a non-probability sampling technique, specifically, accidental sampling.

Research Findings: There is an influence of family support on the level of stress occurrence in the elderly in the West Arso District, Keerom Regency, as indicated by the chi-square value of 63.111, p-value of 0.000, Odds Ratio (OR) of 12.128, and 95% Confidence Interval (CI) of (6.217 - 23.257). There is also an influence of family status on the level of stress occurrence in the elderly in the West Arso District, Keerom Regency, with a chi-square value of 8.715, p-

value of 0.003, Odds Ratio (OR) of 3.055, and 95% Confidence Interval (CI) of (1.490 - 6.264).

Keywords: Family Support, Stress, Elderly, West Arso District

INTRODUCTION

Almost three out of ten (29.52%)households in Indonesia are inhabited by elderly people. This information is highly significant, considering the elderly welfare programs that employ a household-based approach and the elderly's strong reliance on the support of those living with them¹. Family support serves as a form of interpersonal relationship that shields individuals from severe stress. Strong familial bonds can help address the challenges faced by the elderly, as the family serves as a vital source of social support that holds immense importance in the lives of the elderly 2 .

According to Law Number 13 of 1998 on Elderly Welfare, the elderly (lansia) are those above the age of 60 (sixty). Direja (2011) defines the elderly as a steady loss in the network's ability to heal itself and retain its normal structure and function, leaving it unable to tolerate insults (including infections) and repair the damage sustained³.

There is a progressive deterioration in physical and psychological capacities in the aged, which can cause stress in certain senior people. Emotional instability, being quickly offended, feeling easily belittled, disappointment, sadness, emotions of loss, and sentiments of worthlessness are some of the symptoms found in the elderly. Although the particular incidence rates of psychosocial problem each specified, the explanation implies that changes in the elderly might lead to other difficulties, which are frequently accompanied by changes in self-concept⁴. Low quality of life in the elderly is frequently connected with family function and social support, including support from a spouse, family support, and community support. Family support is the most important factor in assisting persons in resolving challenges. Family support boosts self-esteem and drive to overcome problems, as well as promotes life happiness⁵.

Between 2015 and 2050, the percentage of the global population aged 60 and up is expected to rise from 12% to 22% of the total global population. The worldwide senior population is expected to reach 2 billion by 2050. Globally, 15% of the older population suffers from mental diseases, with stress being one of the most common, impacting 10% to 55% of the population. The frequency of stress and anxiety among the elderly is progressively rising and is anticipated to more than double in the next decade⁶.

In 2021, the senior population in Indonesia will number 29.3 million, accounting for 10.82% of the total population¹. According to Riskesdas 2018, the prevalence of emotional mental illnesses among the population aged 65 and above in Indonesia is 53,432 people⁷. According to data from the Ministry of Home Affairs (Kemendagri), the proportion of senior people in Papua in 2021 will be 6.8% of the overall elderly population in Indonesia⁸. Meanwhile, the old population in Keerom Regency accounts for 7.53% of the total population in 2020⁹.

According to researchers and psychology experts, stress in the modern era is mainly bv numerous changes individuals must face, demanding rapid adaptation and adjustment. Achieving and implementing these changes is not easy for everyone, which can potentially lead to stress¹⁰. The elderly population is no exception, as they often experience stress due to various problems and events in their daily lives. One of the issues they face is where they live. Some elderly individuals choose to live with their families because they worry or fear being alone and not having anyone to help them in case of emergencies¹¹.

The research conducted by Kaunang et al. in 2019 on the Description of Stress Levels in the Elderly shows that out respondents, there were 47 elderly individuals who experienced mild physical stress, accounting for 92.2%. This aligns with the statement made by the American Psychological Association (APA) that the elderly experience stress, but the level of stress in the elderly tends to be lower compared to other age groups, with a 62% stress level⁴.

In life, humans always need the presence of others to fulfill their needs, both physically and psychologically. Family support is expected to create a sense of comfort for the elderly and reduce mental health complaints that arise from the feeling of losing their roles as parents and breadwinners in the family.

Given the importance of this issue, the researcher is motivated to conduct research on the "Influence of Family Support and Family Status on the Level of Stress Occurrence in the Elderly in West Arso District, Keerom Regency."

MATERIALS & METHODS

This study is quantitative analytical research. It falls under the category of causal associative research because its aim is to determine the influence of independent variables on the dependent variable. Specifically, it aims to investigate the

influence of family support and family status on the level of stress occurrence in the elderly in West Arso District, Keerom Regency.

This research was conducted in West Arso District, Keerom Regency, specifically at the elderly integrated service posts (Posyandu Lansia) in the villages within the administrative area of West Arso District. The research was conducted in May - June 2023.

The population in this study is all the elderly individuals in West Arso District, Keerom Regency, who were registered at the elderly integrated service posts (Posyandu Lansia) during the year 2021. The total number of registered elderly individuals Posyandu program in West Arso District is 741 people. The sample size in this study, using the Slovin formula, is 259.77, which is rounded up to 260 individuals. This research used a non-probability sampling technique, specifically accidental sampling, which means that the sampling was done at the moment, resulting in the sample obtained being the individuals present during the data collection in the field for a period of one month.

STATISTICAL ANALYSIS

The statistical test used in this study is the chi-square (χ^2) test, to determine the partial influence of the independent variables on the dependent variable. In this research, the focus is on examining the influence of the family support variable and family status variable on the level of stress occurrence in the elderly.

RESULT

1. Univariate analysis

Univariate analysis is a data processing process to see the frequency distribution of a variable based on observational data obtained in the field. Univariate analysis in this study was obtained from data on family support, family status, and the level of stress occurrence. The distribution of the variables analyzed is as follows:

Table 1: Frequency distribution of respondents based on family support, family status, and the level of stress occurrence in the Elderly in West Arso District, Keerom Regency in the Year 2023.

Variables	n	%
Family support		
Good	199	76.54
Poor	61	23.46
Family Status		
Living with family procreation	224	86.15
Living with family orientation	36	13.85
The Level of Stress Occurrence		
Normal - Mild stress	181	69.62
Moderate - Severe stress	79	30.38
TOTAL	260	100.00

Source: Primary data, 2023

Table 1 provide information about family support, family status, and the level of stress occurrence in the Elderly in West Arso District, Keerom Regency. Most of the elderly have good family support (76.54%), living with family procreation (86.15%), and have normal to mild stress (69.62%).

2. Bivariate analysis

Bivariate analysis in this study was conducted to determine the relationship between the dependent variable and the independent variable.

2.1 The Influence of Family Support on the Level of Elderly Stress

This research was conducted to determine the influence of family support on the level of stress in the elderly in West Arso District, Keerom Regency. The types of family support examined include informational support, appraisal support, instrumental support, and emotional support. The results of family support are considered good if the questionnaire score is less than 50% of the total score, and it is considered poor family support if the questionnaire score is equal to or greater than 50% of the total score. The level of stress will be displayed in Table 2, with indicators of psychological symptoms and physical symptoms divided into two categories: normal - mild stress, moderate stress - severe stress.

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Table 2: The Influence of Family Support on the Level of Elderly Stress in West Arso District, Keerom Regency, 2023.

Family support	Level of Stress				Total	%
	Normal - Mild stress		Moderate - Severe stress			
	n	%	n	%		
Good	164	82.41	35	17.59	199	100
Poor	17	27.87	44	72.13	61	100
TOTAL	181	69.62	79	30.38	260	100
$\chi^2 = 63.111$; p-value = 0.000 < 0.05; odds ratio = 12.128; CI 95% = (6.217 – 23.657)						
Source: Primary data, 2023						

Table 2 shows the results of the analysis. It is found that out of 199 elderly individuals with good family support, 164 people (82.41%) have a normal to mild stress level, while out of 199 elderly individuals with good family support, 35 people (17.59%) have a moderate to severe stress level. Furthermore, out of 61 elderly individuals with poor family support, 17 people (27.87%) have a normal to mild stress level, and out of 61 elderly individuals with poor family support, 44 people (72.13%) have a moderate to severe stress level.

The statistical chi-square test results show that p-value = 0.000 < 0.05. This indicates that family support has an effect on the stress level in the elderly in West Arso District, Keerom Regency. The Odds Ratio (OR) for family support on the stress level is 12.128 with a Confidence Interval (CI 95%) of 6.217 - 23.657, where 12.128 > 1 (OR > 1). This means that family support has a

positive relationship with the stress level in the elderly. It implies that elderly individuals with good family support are 12.128 times more likely to have a normal to mild stress level compared to those with poor family support.

2.1. The Influence of Family Status on the Level of Elderly Stress

This research was conducted to determine the effect of family status on stress levels in the elderly in the West Arso District, Keerom Regency. The family status studied was living with a procreative family (husband/wife/biological child) and living with an orientation family (grandchildren/other people). The stress level will be displayed in table 3, with indicators of psychological symptoms and physical symptoms which are divided into three categories namely, mild stress, moderate stress and severe stress.

Table 2: The Influence of Family Status on the Level of Elderly Stress in West Arso District, Keerom Regency, 2023.

Family status	Level of Stress				Total	%	
	Normal - Mild stress		Moderate - Severe stress				
	n	%	n	%			
Procreative family	164	73.21	60	26.79	224	100	
Orientation family	17	47.22	19	52.78	36	100	
TOTAL	181	69.62	79	30.38	260	100	
$\chi^2 = 8.751$; p-value = 0.003 < 0.05; odds ratio = 3.055; CI 95% = (1.490 – 6.264)							
Source: Primary da	ta 2023						

Table 3 shows that of the 224 elderly living with procreative families, 164 people (73.2%) have normal stress levels – mild stress; and 60 people (26.8%) had moderate to severe stress levels; whereas of the 36 elderly living with orientation families, 17 people (47.2%) had normal – mild stress levels, and 19 people (52.8%) had moderate – severe stress levels. The results of the chi square statistical test showed that the p-value was 0.003. This right shows that family status affects the stress level of the

elderly in the West Arso District, Keerom Regency. Odds Ratio (OR) for family status to stress level is 3.055 with a Confidence Interval (CI 95%) 1.490 – 6.264, where 3.055 > 1 (OR >1) which means that family support has a positive relationship with stress levels in the elderly. This means that the elderly who live with a procreative family are 3.055 times likely to cause normal – mild stress levels in the elderly compared to living with an orientation family.

DISCUSSION

1. The Influence of Family Support on the Level of Elderly Stress

Family functions to maintain the health condition of its members in order to ensure high productivity. In addition, the role of the family in the field of health includes the ability to recognize health issues, make decisions to address health problems, care for sick family members, and modify the environment to keep the family healthy and optimal, as well as utilize available healthcare facilities in their surroundings¹². Family support is the most important element in helping individuals to solve problems. Family support can increase selfconfidence and motivation challenges and improve life satisfaction5. Family support is expected to create a sense of comfort for the elderly and reduce mental health complaints that arise from feelings of loss of role as parents or breadwinners in the family¹³.

The results of this study show that good family support for the elderly is 76.5%, which is 199 out of 260 elderly individuals in Arso Barat District, Keerom Regency. This is in line with a study conducted by Zakia (2018), regarding the Relationship between Family Support and Quality of Life of Elderly Individuals with Hypertension in the Working Area of Mandalle Community Health Center, Pangkep Regency, which indicates that over half of the elderly respondents have good family support, namely 51 respondents (55%)¹⁴.

In the elderly population, there is a process of aging, which is characterized by the failure maintain balance against to physiological stress conditions. resulting failures often include a decline in the ability to live independently and an increase in individual sensitivity¹⁵. The decline that occurs serves as a reason for the elderly to become dependent on others, withdraw from community activities, and experience anxiety due to retirement¹⁶.

The results of statistical tests showed that there was an effect of family support on stress levels in the elderly in the West Arso District, Keerom Regency.

This research is consistent with the study conducted by Ady and Deris (2017) on the Relationship between Family Support and Quality of Life of the Elderly in RW 10 Kelurahan Cisarua, Puskesmas Sukabumi Kota Sukabumi, which states that family support has a significant relationship with the quality of life of the elderly, as indicated by a p-value of 0.000^{17} . Family support for the elderly is very necessary as long as the elderly can understand the meaning of such family support as a supporter or pillar of their life².

Good family support to the elderly through the family's concrete actions of care and attention can reduce the level of stress in the elderly. Psychosocial/emotional stress can be triggered by various factors such as marriage, work, family support, interpersonal relationships, and others. Stress is caused by changes, including cultural values, changes in physical conditions, societal systems, work, and the tension between idealism and reality. Increased stress in life can disrupt the mental and emotional balance, which although it does not directly cause death, it disrupts productivity and makes a person's life inefficient. Social support functions as a prevention strategy to reduce stress and its negative consequences¹⁸.

2. The Influence of Family Status on the Level of Elderly Stress

There are two kinds of families in terms of status. First, there is the biological family, also known as the procreative family or family of reproduction in Bossard and Boll's definition. There is a blood link between the father, mother, and offspring in this form of family that cannot be broken. They still have a blood link even if they live far away or even divorce. Second, there is the orientation family, which is based more on the influence and impact of its members, particularly in the desire for guidance from parents by children. Unlike the biological family, which has strong and permanent

relationships, the orientation family has more flexible and readily changed bonds. Because of the depth of their ties and the different psychological aspects that shape their relationships, this family is also known as the interactive family or psychological family¹⁹.

This is in line with data from BPS (2021), which states that nearly three out of ten (29.52%) households in Indonesia are inhabited by elderly individuals. This information is crucial, considering many elderly welfare programs that utilize a household approach, as well as the fact that the elderly greatly rely on support from those living with them¹.

The statistical test results showed that there is an influence of family status on the level of stress in the elderly in Arso Barat District, Keerom Regency.

The results of this research are in line with the cultural principles of Ketimuran embraced by Indonesian society, which emphasize that taking care of parents is a duty of children as a sign of filial piety. This principle is also embodied in NKKBS, which stands for Norma Kecil Keluarga Bahagia Sejahtera (Small Norms for a Happy and Prosperous Family). By taking care of parents, a child can show respect to them without excessive protection. By taking care of parents, a child can pour their love and affection towards their parents or elderly²⁰.

CONCLUSION

Based on the results and discussion of research conducted in West Arso District, Keerom Regency in 2023, it can be concluded as follows:

- 1. Most of the elderly are aged 60 to 69 years, while the education of the elderly is mostly not going to school and the work of the elderly is mostly farmers/breeders.
- 2. Elderly with good family social support at 76.5% and elderly with poor family social support at 23.5%.
- 3. Elderly who live with their procreative family or biological family are 86.2%,

- and who live with their orientational family or psychological family are 13.8%.
- 4. Elderly who experiences normal stress levels light stress that is equal to 69.6%, while the elderly who experience moderate stress severe stress is 30.4%.
- 5. There is an effect of family support on stress levels in the elderly in West Arso District, Keerom Regency (p-value = 0.000 <0.05, Odds Ratio (OR) = 12.128, and 95% confidence interval (CI) = (6.217 23.257)).
- 6. There is an effect of family status on stress levels in the elderly in West Arso District, Keerom Regency (p-value = 0.003, Odds Ratio (OR) = 3.055, and 95% confidence interval (CI) = (1.490 6.264)).

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REFERENCES

- 1. Central Bureau of Statistics. 2021. Statistics of the Elderly Population for 2021. (https://www.bps.go.id/publication/2021/12/21/c3fd9f27372f6ddcf7462006/statistik-penduduk-untung-usia-2021.html accessed on 20 March 2023).
- Felpina, J. D., Wiyono, J., Ardiyani, V. M. 2016. The Relationship between Family Support and Elderly Independence in Fulfilling Daily Needs at the Elderly Posyandu Permadi, Tlogomas Village, Malang City. Nursing News, Volume 2, Number 3, 2017.
- 3. Direja, A. H. S. 2011. Textbook of Mental Nursing Upbringing. Nuha Medika, Yogyakarta.
- 4. Kaunang, V. D., Buanasari, A., & Kallo, V. (2019). Gambaran Tingkat Stres Pada Lansia. *Jurnal Keperawatan*, 7(2). https://doi.org/10.35790/jkp.v7i2.24475
- 5. Pratiwi, Y. 2015. The Effect of Social Support on the Quality of Life of the Elderly at the Family Compensation Center (PUSAKA) in Pancoran District, South Jakarta.

- (http://repository.uinjkt.ac.id/dspace/handle/123456789/31977 accessed on 22 March 2023).
- 6. WHO, 2017. Mental health and the elderly. Geneva. (https://www-ncbi-nlm-nih-gov.translate.goog/pmc/articles/PMC71224 45/? accessed March 21, 2023).
- 7. Riskesdas, 2018. Main Results of Riskesdas 2018. Ministry of Health RI. Jakarta. (https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-risksdas-2018_1274.pdf accessed on 23 March 2023).
- 8. Kusnandar, V. B. 2022. Number of Elderly Population by Province (2021). (https://databoks.katadata.co.id/datapublish/ 2022/05/30/ada-30 million-residents-elansia-di-indonesia-pada-2021. accessed on 21 March 2023).
- 9. Central Bureau of Statistics. 2021. Keerom Regency Figures 2021. https://keeromkab.bps.go.id/publication/202 1/02/26/f42810c3daa47513b2bac171/kabup aten-keerom-dalam-angka-2021.html
- 10. Gunarsa, S.D., et al. 2008. Psychology of Child and Adolescent Development. BPK Gunung Mulia, Jakarta.
- Rahman, S. 2016. Factors Underlying Stress in the Elderly. Indonesian education university.
 (https://media.neliti.com/media/publications /124302 ID-factors-which-underlies-stress-on.pdf accessed on 22 March 2023).
- 12. Setiadi. 2008. Concepts and Writing of Nursing Research. Science Graha, Yogyakarta.
- 13. Yenni, R. (2011). Family Support and Social Life Experienced by the Elderly Living with Family. Scientific Journal of Batanghari University, Jambi, 11(1), 31-44.
- 14. Zakia. (2018). The Relationship between Family Support and Quality of Life for Elderly People with Hypertension in the Working Area of the Mandalle Health

- Center, Pangkep Regency. Scientific Journal of Nursing, 4(2), 309-323.
- 15. Turana, Y., Soenadi, I., & Januraga, P. P. (2013). The role of adiponectin in the pathogenesis of type 2 diabetes in the elderly compared with middle-aged patients. Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 7(1), 8-13.
- Kaunang, P. M. J., Sembel, D. T., & Lumolos, T. (2019). Social support, life satisfaction, and depression among elderly in Southeast Minahasa. Journal of Psychology, 17(1), 42-53.
- 17. Ady, M. P., & Deris, E. N. (2017). Relationship between family support and quality of life for the elderly in RW 10, Cisarua Village, Sukabumi Health Center, Sukabumi City.
- 18. Permana, A. T. (2013). The Effect of Social Support on Stress Levels in Schools. Journal of Wahana Inovasi, 2(1), 41-52.
- 19. Mardiya. 2021. Family, Position and Role as the successor of culture. (https://pemberdayaan.kulonprogokab.go.id/detil/1332/keluarga-kedudukan-dan-perannya-dalam-pembangunan accessed on 23 March 2023).
- 20. Nurrohmi, S. L. (2020). The Influence of Eastern Culture on the Implementation of Children's Obligations in Caring for Parents in Javanese Society: A Tacky Study of Conditions in Grobogan District, Central Java. Journal of Social and Political Sciences, 24(2), 123-130.

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