

## Analysis of the utilization of posyandu for the elderly at the Ulin East Health Center in Banjarbaru City

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### ABSTRACT

It is important to take the use of elderly posyandu seriously since it is a component of a strategy to enhance the welfare of the elderly through preventative and promotional measures. Just 147 senior persons who utilize health services receive fewer visits from posyandu. This study aims to investigate the relationship between family support, health professional attitudes and knowledge, and accessibility to health services, and the usage of elderly posyandu at Puskesmas Landasan Ulin Timur, Banjarbaru City. A cross-sectional design was used for this investigation. The research subjects consisted of 174 senior adults. In data analysis, chi square and multiple logistic regression tests were employed. The results of the chi square analysis showed the p values for family support ( $p = 0.000$ ), healthcare professionals' attitudes ( $p = 0.000$ ), health resource accessibility ( $p = 0.001$ ), and knowledge ( $p = 0.000$ ). The knowledge variable and nurse performance had the strongest correlation ( $\text{Exp}(B)=4.456$ ). At Puskesmas Landasan Ulin Timur Banjarbaru City, the use of senior posyandu is associated with family support, health staff attitudes, knowledge, and the availability of health services. Understanding is the most crucial element.

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## INTRODUCTION

According to the World Health Organization (WHO), the elderly population in Southeast Asia reached 8% or around 142 million people, and in 2020 it is estimated to reach 11.34% of the total population (Organization, 2018). On the other hand, in Indonesia, the number of elderly people is estimated to reach 80 million people. According to Soewono, a country is said to have an old structure if the number of elderly people exceeds 7% of the adult population. This shows that Indonesia has entered the group of countries with an aging population (Kemenkes, 2019). One of the countries with the fastest aging population in Asia is Indonesia. In 2019, Indonesia had 23.66 million elderly people or 9.03% of the total population and is expected to increase to 100 million between 2020-2050 (Anggraeni & Nasution, 2019). However, it is estimated that in 2050, Indonesia

will be one of the 10 countries with the largest number of elderly people, which is around 10 million people (Rudnicka et al., 2020)(Keating, 2022).

The government is responsible for providing health services for the elderly. According to Article 138 of Law No. 36/2009, efforts to care for the elderly must be demonstrated by keeping the elderly healthy and productive socially and economically in accordance with human dignity. The existence of the elderly posyandu is one way to monitor the health of the elderly (Kusumawardani & Andanawarih, 2018). Government Regulation of the Republic of Indonesia Number 43 of 2004 concerning the implementation of efforts to improve the social welfare of the elderly is the basis for this elderly posyandu program. Therefore, the existence of the elderly posyandu is part of the approach to improving the welfare of the elderly through promotive and preventive efforts, the utilization of the elderly posyandu must receive serious attention. In old age, the human body experiences a decline in function, one of which is physical. As a result, they cannot utilize the facilities and infrastructure properly, and there are still many other factors that can influence how the elderly utilize the posyandu (Nifatna Sari, 2022)(Sumilah et al., 2022).

The number of elderly people in South Kalimantan reached 9% of the 3.4 million population, according to data from the Central Statistics Agency of South Kalimantan Province. Meanwhile, of the 24,671 people targeted, the indicator for achieving the Minimum Service Standards (SPM) of Banjarbaru City for 2022 has only reached 34.32%. Visits to the elderly posyandu in Liang Anggang (50.74%), Landasan Ulin (48.02%), South Banjarbaru (46.04%), Guntung Manggis (17.93%), and East Landasan Ulin (9.48%) were each below the target of 70% in 2023 (Statistik, n.d.).

Unlike other health centers in Banjarbaru City, elderly visits in the working area of Landasan Ulin Timur Health Center are the lowest in terms of achievement from the target of the Indonesian Ministry of Health. Seeing the urgency of the elderly health post in improving national health standards, the presence of elderly visits at the elderly health post in the working area of Landasan Ulin Timur Health Center must be increased. This prompted the author to conduct further research on the variables that influence the utilization of the elderly health post at the Landasan Ulin Timur Health Center, Banjarbaru City.

## RESEARCH METHOD

This analytical observational study used a cross-sectional survey method with a sample of 174 people using the total sampling method. The use of this sampling technique is based on the number of elderly people who visit the elderly health post in the working area of the Landasan Ulin Timur Health Center, Banjarbaru City during 2023. The inclusion characteristics are all elderly people registered in the working area of the Landasan Ulin Timur Health Center, Banjarbaru City, willing to be respondents, aged 60 years or older, and domiciled at the research location. The exclusion characteristics are elderly people who are not registered as targets and are not possible to be respondents. This study was conducted at the Landasan Ulin Timur Health Center, Banjarbaru City in June-August 2024. This study has obtained Ethical Clearance with No. 103/KEPK-FKIK-ULM/EC/VII/2024. Data were collected directly from respondents through questionnaires. Knowledge, accessibility of health resources, attitudes of health workers, and family support are independent variables, and utilization of the elderly health post is the dependent variable. The test used is multiple logistic regression test at 95% confidence level ( $\alpha = 0.05$ ). The instrument used is a closed questionnaire. The questionnaire is valid and reliable with Cronbach's Alfa value  $\geq 0.6$ .

The data analysis used is univariate analysis, bivariate analysis, and multivariate analysis. Univariate analysis is an analysis that describes the presentation of data on one variable that is carried out on the demographics of respondents. Bivariate analysis is a test that shows the relationship between two variables using the chi-square test. Multivariate analysis is an analysis that uses multiple logistic regression tests. The odds ratio (OR) value is a value used to measure the comparison between the prevalence of two different groups. Prevalence is the number of cases or

variables in a population at a certain time. OR is calculated by comparing the prevalence of conditions between different groups.

## RESULTS AND DISCUSSIONS

### Univariate Analysis

**Table 1.** Frequency distribution of respondent characteristics

Variables	Frequency	%
Gender		
Woman	101	58.0
Man	73	42.0
Age		
60-64	97	55.8
≥ 65	77	44.2
Level of education		
Elementary school equivalent	35	20.1
junior high school or equivalent	53	30.4
High school or equivalent	41	23.5
D3	30	17.4
S1	13	7.5
S2	2	1.1
Total	174	100

Source: Primary Data, 2024

Based on table 1, the respondents of this study were mostly female, aged between 60 years and had a final education of junior high school or equivalent. The results of the study conducted in the working area of the Landasan Ulin Timur Health Center, Banjarbaru City produced information on the utilization of elderly posyandu, knowledge, accessibility, attitudes of health workers, and family support related to the utilization of elderly posyandu

### Bivariate Analysis

**Table 2.** Relationship between knowledge, accessibility, attitudes, and family support towards the use of elderly integrated health posts at the Landasan Ulin Timur Health Center

Variables	Utilization of Health Services				Total		P Value
	Underutilization		Utilise		n	%	
	n	%	n	%			
Knowledge							
Not enough	73	75.3	24	24.7	97	100.0	0,000
Good	22	28.6	55	71.4	77	100.0	
Accessibility							
Difficult	51	69.9	22	30.1	73	100.0	0.001
Easy	44	43.6	57	56.4	101	100.0	
Attitude							
Not enough	59	71.1	24	28.9	83	100.0	0,000
Good	36	39.6	55	60.4	91	100.0	
Family support							
Bad	59	74.7	20	25.3	79	100.0	0,000
Good	36	37.9	59	62.1	95	100.0	
Total	95	54.6	79	45.4	174	100.0	

Source: Primary Data, 2024

Based on table. 2, a p value of 0.000 ( $p < 0.05$ ) was produced from the bivariate analysis with the Chi Square test, indicating that  $H_0$  was rejected. So it was concluded that in the Landasan

Ulin Timur Health Center there was a relationship between patient knowledge and the utilization of the elderly integrated health service post. Elderly people who had good knowledge about integrated health service posts were 10.6 times more likely to utilize them. The OR value of 10.6 shows that the utilization of health services for elderly posyandu who have less knowledge is 10.6 times more likely to utilize health services for elderly posyandu compared to the utilization of health services for elderly posyandu who have higher knowledge.

Researchers believe that the elderly do not utilize the integrated health service post because their physical condition has declined. Researchers conducted a study on the elderly over the age of 60, elderly at that age often experience decreased locomotor function and also suffer from diseases such as rheumatism and gout. This has an impact on the utilization of integrated health services for the elderly. In addition to poor physical condition, the activities at the integrated health service post for the elderly are too monotonous, only conducting health checks and not providing medicines, making many elderly feel lazy to come there. The elderly only have their blood pressure checked and do not undergo other examinations.

The p-value of 0.001 ( $p < 0.05$ ) was generated from the bivariate analysis with the Chi Square test, indicating that  $H_0$  was rejected. The accessibility of the Landasan Ulin Timur Health Center and ease of access to the elderly posyandu can be stated as related. The OR value of 3.0, elderly people who know about the elderly posyandu health services are 3.0 times more likely to use it compared to elderly people who have difficult accessibility. This shows that the use of elderly posyandu health services has a 3.0 times greater chance of using it compared to elderly people who have difficult accessibility.

In this study, accessibility is defined as the ease or difficulty of the elderly to get to the integrated health post. The proximity of the integrated health post will make it easier for the elderly to visit the integrated health post without experiencing fatigue or physical accidents due to loss of endurance or physical strength. Travel time is the most important component of geographic access because it is related to the distance from the residence to health services. Travel time, distance, and mode of transportation affect health utilization. Thus, the distance constraint can be overcome by providing easy access for the elderly to utilize the elderly integrated health post (Suriani et al., 2023).

The results of the bivariate analysis with the Chi Square test showed that  $H_0$  was rejected with a p value of 0.000 ( $p < 0.05$ ). Therefore, there is a relationship between positive attitudes and attitudes towards utilizing the elderly posyandu at the Landasan Ulin Timur Health Center. Elderly people with poor attitudes are 3.7 times more likely to utilize elderly posyandu health services compared to elderly people with good attitudes, as indicated by the odds ratio (OR) value of 3.7, indicating that the chances of utilizing elderly posyandu health services with poor attitudes are 3.7 times greater than elderly people with good attitudes.

According to the researcher's assumption, the respondent's attitude affects the frequency of visits to the integrated health post. Accepting, responding, appreciating, and being responsible are part of the elderly's response to the use of integrated health posts. This response is known as the elderly's attitude. One of the factors that influences the readiness or willingness of the elderly to participate in integrated health post activities is personal judgment or a good attitude towards officers. A good attitude makes the elderly tend to always be present or participate in activities held at the elderly integrated health post. A person's attitude reflects their readiness to react to an object, so this can be understood. Readiness is a person's tendency to react in a certain way when faced with a stimulus that requires a reaction.

The p-value of 0.000 ( $p < 0.05$ ) was generated from the bivariate analysis with the Chi Square test, indicating that  $H_0$  was rejected. Family support and utilization of the elderly posyandu at the Landasan Ulin Timur Health Center have a relationship. Elderly people with poor family support are 4.8 times more likely to utilize elderly posyandu health services compared to elderly people with good family support. This is indicated by the odds ratio (OR) value of 4.8,

indicating that elderly people with poor family support are 4.8 times more likely to utilize elderly posyandu health services compared to elderly people with poor family support (YUANA, 2021)(Djuari et al., 2024)(LENI, 2024).

Research shows that the elderly do not provide information about posyandu activities and do not remind the schedule of its implementation. Therefore, counseling is needed with the elderly's family to help parents utilize the elderly posyandu by providing information and emotional support.

The interview results also showed that most respondents did not receive incentives from their family members (Sedarmayanti et al., 2020)(Rusnoto et al., 2023)(Abdullah, 2023). In addition, respondents stated that they did not know the schedule and location of the elderly posyandu and family members could not take them there. As a result, respondents had difficulty accessing the elderly posyandu.

Family support aims to help the elderly in overcoming their problems, such as reminding them to do posyandu every month and getting information about posyandu activities from the family (Halimsetiono, 2021)(Latumahina et al., 2022)(Kurniasari & Mardikaningsih, 2024). The elderly are often not active in doing posyandu because they forget the schedule. In addition, family support can also be given by being willing to take parents to posyandu or motivating them to continue using posyandu for the elderly.

In addition, the results of the parents' examination can also be used to provide family support by asking about the parents' health developments or simply listening to their complaints (Fridolin et al., 2021).

### Multivariate analysis

**Table 2.** Relationship between knowledge, accessibility, attitudes, and family support towards the use of elderly integrated health posts at the Landasan Ulin Timur Health Center

No.	Variables	B	Wald	Sig	Exp(B)	95% CI
1	Knowledge	1,494	15,236	,000	4,456	2,104 - 9,435
2	Accessibility	0.853	4,610	,032	2,347	1,077 - 5,115
3	Attitude	0.947	6,177	,013	2,579	1,222 - 5,444
4	Family Support	1,147	8,282	,004	3,149	1,442 - 6,880

Based on Table. 3, the results of the multivariate test present a logistic regression analysis for four independent variables, namely knowledge, accessibility, attitude, and family support with the dependent variable. The results show that knowledge has a coefficient value of 1.494; accessibility has a coefficient of 0.853; attitude has a coefficient of 0.947; and family support is 1.147. The highest wald value is shown by the knowledge variable (15.236) followed by family support (8.282), attitude (6.177), and accessibility (4.610). All variables show a low level of significance, with the lowest values in knowledge (0.000), family support (0.004), attitude (0.013), and accessibility (0.032).

The independent variable that has the most dominant relationship with the utilization of elderly posyandu is the level of education ( $p=0.000$ ) with an Exponent Beta (Exp B) value of 4.4, which means that elderly people with good knowledge have a value of 4.4 times more utilization of elderly posyandu services compared to elderly people with less good knowledge.

The level of parental compliance with the posyandu program to maintain health can be an indication that the utilization of posyandu for parents is good. Factors such as family support, experience, and personal values of health workers contribute to the teaching and complexity of the program. All of these factors contribute to compliance. However, weighing more than eight times a year is considered regular (Rochka et al., 2019)(Aditianti et al., 2020)(Hidayati & KM, 2024).

Knowledge about the benefits of integrated health posts for the elderly can be obtained from personal experience in daily life, such as the elderly can participate in integrated health posts activities and receive guidance on how to live a healthy life. The knowledge obtained by the

elderly can shape their attitudes and can encourage them to always participate in integrated health posts activities (Siregar et al., 2023).

One of the weaknesses of this study is that there are still many variables that have not been studied, such as peer support variables and accessibility. In addition, researchers should use different methods to further explore other components related to the utilization of elderly posyandu.

## CONCLUSION

From the results of the bivariate analysis, there is a relationship between knowledge, attitude, accessibility, and family support with the utilization of the elderly integrated health post in the working area of the Landasan Ulin Timur Health Center, Banjarbaru City. The results of the univariate analysis stated that the analysis of factors related to the utilization of the elderly integrated health post in the working area of the Landasan Ulin Timur Health Center, Banjarbaru City obtained data on respondent characteristics based on gender, age, and education level. Bivariate analysis was used to determine the relationship between variables using the chi square test in accordance with the requirements of the chi square test. Based on the results of the multivariate analysis, the knowledge variable is the most dominant factor with the participation of the elderly integrated health post in the working area of the Landasan Ulin Timur Health Center, Banjarbaru City.

The suggestion that can be given is that it is important for the Health Center to socialize the benefits of the elderly posyandu so that the elderly know the urgency of the elderly posyandu. Meanwhile, health workers are expected to be able to create additional activities to improve friendship with the elderly.

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