

## FACTORS THAT AFFECT THE UTILIZATION OF ELDERLY POSYANDU AT THE HEALTH CENTER FOR CARE OF BLANGKEJEREN CITY. GAYO LUES ACEH PROVINCE

Sukri Mas \*, Indah Anggraini, Ramadhani Syafitri Nasution

Fakultas Kesehatan Masyarakat, Institut Kesehatan Helvetia  
Jalan Kapten Sumarsono No.107 Medan, Indonesia

### Abstract

The use of elderly posyandu plays an important role in improving the quality of life, but the level of use is still low. This study aims to analyze the factors that affect the use of elderly posyandu in the Working Area of the Blangkejeren City Care Health Center. The research method used a cross sectional design with a sample of 91 respondents selected through stratified random sampling from a population of 973 elderly people. Data were collected using a questionnaire in March–May 2025 and analyzed by chi-square test and logistic regression. The results showed that education ( $p<0.001$ ), attitude ( $p=0.001$ ), knowledge ( $p<0.001$ ), family support ( $p=0.016$ ), health worker support ( $p=0.016$ ), and health service facilities ( $p<0.001$ ) were related to the use of elderly posyandu, while age ( $p=0.010$ ) and distance ( $p=0.139$ ) were not related. The dominant variable was attitude ( $p=0.001$ ;  $\text{Exp}(B)=7.276$ ). It was concluded that increasing the use of elderly posyandu needs to pay attention to education, attitudes, and family support and health workers.

**Keywords :** Education, Age, Knowledge, Attitude, Family Support, Health Worker Support and, Health Service Distance Facilities, Utilization of Elderly Posyandu

### Introduction

Health is a balanced and dynamic state between the body and various factors that affect it. As life expectancy increases, the number of elderly people continues to increase from year to year. WHO (2019) noted that there are around 1 billion elderly people in the world, which is estimated to increase to 2.1 billion by 2050. A similar trend occurs in Indonesia, where in 2023 the number of elderly people will reach 29 million people (12% of the population), and is projected to increase to 50 million people (20% of the population) by 2045 (Ministry of Health, 2022). In Aceh, the number of elderly people also continues to increase, with BPS data in 2022 showing as many as 518,814 people, including 24,063 people in Blangkejeren City.

The increase in the number of the elderly requires integrated health service efforts. One form of service is the Elderly Posyandu, which functions as a forum for promotive and preventive efforts to monitor and improve the physical, mental, and social health of the elderly. However, the utilization rate of elderly posyandu is still low. In Blangkejeren City, of the 973 registered elderly people, only 34.6% are actively visiting, far below the national target of 70% (BPS, 2022).

The low utilization of elderly posyandu is influenced by various factors, including education, knowledge, attitudes, family support, health workers, service facilities, and distance. A preliminary study at the Blangkejeren City Treatment Health Center found that some elderly people lack health information, face obstacles in accessing transportation, and lack family support. Previous research has also shown that education level is related to the knowledge and attitudes of the elderly towards the use of health services (Sumartini, 2021).

Based on these conditions, research is needed to analyze the factors that affect the utilization of elderly posyandu at the Blangkejeren City Treatment Health Center, Gayo Lues Regency, Aceh Province, so that it can be the basis for planning interventions to improve services for the elderly.

## Method

Quantitative research with a cross-sectional analytical survey design (Azhari, 2024) was conducted in the Working Area of the Blangkejeren City Care Health Center (21 elderly posyandu) in September 2024–April 2025. Population 973 elderly; The sample of 91 respondents was determined by the Slovin formula and stratified random sampling. Primary data were collected using structured questionnaires (education, age, knowledge, attitudes, family support, health worker support, distance, facilities; and the use of posyandu). The instrument was tested on 20 elderly with valid ( $r$  count  $> 0.444$ ) and reliable (Cronbach's alpha 0.961–0.975). The analysis included univariate, bivariate (Chi-square/Fisher's Exact), and multivariate (logistic regression) to identify the dominant factors influencing the utilization of elderly posyandu.

## Research Results

### Respondent Characteristics

The majority of respondents were early elderly (71.4%), with a relatively balanced gender composition. The educational background is dominated by junior and senior high schools (63.8%), while universities are only 3.3%. More respondents are out of work (59.3%), which has the potential to affect access and motivation for services.

**Table 1. Characteristics of Respondents (n = 91)**

Characteristics	Category	f	%
Age	Early Elderly	65	71,4
	Middle-aged	26	28,6
Gender	Man	47	51,6
	Woman	44	48,4
Education	SD	30	33,0
	SMP	34	37,4
	SMA	24	26,4
	College	3	3,3
Work	Work	37	40,7
	Not working	54	59,3

### Univariate Analysis

Based on the characteristics of respondents (n=34), the majority of honorary health workers at the Lotu Health Center are women (70.6%), aged 25–29 years (50.0%), educated DIII (70.6%), married (85.3%), and have a working period of >5 years (55.9%).

**Table 2. Distribution of Research Variables**

Variabel	Category	f	%
Knowledge	Good	43	47,3
	Bad	48	52,7
Attitude	Positive	45	49,5
	Negative	46	50,5
Family support	Support	55	60,4
	Not supported	36	39,6
Healthcare worker support	Support	55	60,4
	Not supported	36	39,6
Service distance	Affordable	89	97,8
	Unaffordable	2	2,2
Means of service	Good	71	78,0
	Bad	20	22,0
Utilization of posyandu	Utilize	38	41,8
	Not taking advantage of	53	58,2

### Bivariate Analysis

There is a meaningful relationship between education, age, knowledge, attitudes, family support, health worker support, and facilities with utilization. Distance is meaningless, consistent with univariate findings that the majority feel the location is affordable.

**Table 3. Relationship of Independent Variables to Physician Performance**

Variabel	p-value	Information
Education	<0.001	Significantly related
Age	0,010	Significantly related
Knowledge	<0.001	Significantly related
Attitude	0,001	Significantly related
Family support	0,016	Significantly related
Healthcare worker support	0,016	Significantly related
Distance to health services	0,139	Unrelated
Health service facilities	<0.001	Significantly related

## Multivariate Analysis

In the initial model, education, age, and attitudes were significant. Knowledge and means are close to significant but fall at the simplification stage; support (family/health workers) and distance were not significant in the model after controlling for other variables.

**Table 4. Results of Multivariate Analysis of Factors Affecting Doctors' Performance**

Variabel	B	Sig.	Exp(B)	95% CI Exp(B) Lo	Upper
Education	1,872	0,000	6,499	2,879	14,675
Attitude	1,985	0,001	7,276	2,239	23,647

## Discussion

### 1. The Influence of Education on the Utilization of Elderly Posyandu

The results of the study showed that there was a significant relationship between the level of education and the use of the elderly posyandu. Respondents with higher education tend to have an easier time understanding health information, accept new ideas, and be more rational in making decisions to utilize health services. This finding is in line with the theory of Andersen and Newman (1960) which states that education is one of the predisposing factors in the behavior of using health services (Ekasari, 2023).

However, this study is not in line with the study of Norma (2022) which found that there is no relationship between education and the use of elderly posyandu. These differences may be influenced by contextual factors, such as the level of information availability, environmental support, or individual motivation. The majority of respondents in this study were poorly educated (elementary and junior high), so their knowledge about the benefits of the elderly posyandu was also limited. This low knowledge has an impact on the lack of awareness of the importance of routine health check-ups.

### 2. The Effect of Age on the Utilization of Elderly Posyandu

The results of the study show that age is significantly related to the use of elderly posyandu. Early elderly people (60–69 years old) tend to be more active in work, so they often cannot attend the posyandu because the implementation time clashes with work activities. On the other hand, the middle elderly (70–79 years old) have more free time, but the utilization of posyandu remains low due to psychological and social constraints, such as reluctance to leave the house, limited information, or negative perceptions about health services.

This finding is in line with Intarti's research which states that age is related to the use of elderly posyandu. The difference in needs and activity patterns between early and intermediate seniors suggests that the approach used to increase elderly participation must be adjusted to their age category (Nugroho, 2021).

### 3. The Influence of Knowledge on the Utilization of Elderly Posyandu

This study found that knowledge has a significant influence on the use of elderly posyandu. Elderly with good knowledge of the benefits of posyandu are more likely to take advantage of these services. This is in line with Notoadmodjo's theory which states that knowledge is a factor that affects a person's attitude and behavior in maintaining health.

However, this study is different from the findings of Nugroho (2020) which shows that there is no relationship between knowledge and the use of elderly posyandu. These differences can occur due to other factors, such as the elderly's personal beliefs, past experiences, or fear of knowing their health condition. Some elderly people choose not to attend the posyandu because they are worried about finding diseases that make them anxious.

#### **4. The Influence of Attitude on the Utilization of Posyandu for the Elderly**

The results of the study show that there is a relationship between attitudes and the use of elderly posyandu. Elderly people who have a positive attitude use posyandu more than those who have a negative attitude. This supports Berkowitz's theory in Notoadmodjo which states that a person's attitude towards health objects affects the decision to use health services.

However, Isnaini's (2021) research found different results, namely the absence of a relationship between attitude and the use of elderly posyandu. These differences may be caused by cultural variations, social conditions, or differences in posyandu facilities between regions.

The negative attitudes of the elderly in this study are generally influenced by misunderstandings, such as the assumption that posyandu is only intended for the elderly who are sick. Therefore, interventions in the form of education involving families, cadres, and the community are needed to change the perception of the elderly about the importance of routine health check-ups.

#### **5. The Effect of Family Support on the Utilization of Elderly Posyandu**

This study shows that family support has a significant effect on the use of elderly posyandu. The family plays a role as the main motivator who can remind, usher, and encourage the elderly to attend the posyandu. This is in accordance with research by Nganro (2021) which found a relationship between family support and the use of elderly posyandu.

However, some of the elderly in this study did not receive family support, especially those who lived alone or only with a partner. This condition has an impact on their low participation in posyandu. Therefore, the family as the smallest unit in society needs to be more empowered to support the regular use of elderly posyandu.

#### **6. The Effect of Health Worker Support on the Utilization of Elderly Posyandu**

The support of health workers has been proven to have an effect on the use of elderly posyandu. Health workers play an important role as educators, motivators, and companions for the elderly in maintaining health. This result is in line with Andersen's theory in Notoadmodjo which states that health workers play a major role in shaping the positive response of the elderly to health services (Anderson, 1995).

However, obstacles are still found in the form of limited number of health workers, tight work schedules, and lack of direct assistance, so that some elderly people feel that they do not receive optimal support. Therefore, it is necessary to increase the capacity of health workers both in terms of number and quality of services so that the elderly feel more cared for and motivated to attend the posyandu.

#### **7. The Effect of Health Service Distance on the Utilization of Elderly Posyandu**

The results of the study showed that the distance of health services did not have a significant effect on the utilization of elderly posyandu. This finding is consistent with the research of Muliawati (2020) which states that despite the affordable distance, the utilization of posyandu remains low.

Other factors that are more dominant are environmental conditions, physical limitations of the elderly, and psychosocial factors such as fear of walking alone or no one to escort them. Therefore, even though distance access is good, the support of families and cadres is still needed to ensure that the elderly are present at the posyandu.

#### **8. The Influence of Health Service Facilities on the Utilization of Elderly Posyandu**

This study found that health service facilities have a significant influence on the use of elderly posyandu. Complete, comfortable, and easily accessible health facilities increase the motivation of the elderly to attend. This is in accordance with Andersen's behavioral model which emphasizes the importance of enabling factors in the use of health services.

However, adequate facilities alone are not enough. Social factors such as family support, motivation of the elderly, and perception of the benefits of posyandu also affect the attendance rate of the elderly. Thus, the improvement of physical facilities must be accompanied by education and social empowerment to maximize the use of elderly posyandu (Wulandari, 2019).

## Conclusion

The use of the elderly posyandu in the Blangkejeren City Care Center Work Area is influenced by education, age, knowledge, attitude, family support, health worker support, and health service facilities, while distance has no effect. Predisposing factors (education, age), enabling (support and facilities), and need factors (knowledge and attitudes) have proven to play an important role in determining elderly visits. Efforts to increase the use of elderly posyandu need to be carried out comprehensively through education according to literacy levels, strengthening the role of families and health workers, and improving service facilities.

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