



ANALYSIS OF FACTORS RELATING TO THE UTILIZATION OF *POSBINDU* FOR THE ELDERLY IN THE WORKING AREA OF BAITURRAHMAN HEALTH CENTER, BANDA ACEH CITY

Nila Kusma¹, Meutia Zahara², Ira Puspita Sari³, Asnawi Abdullah⁴, Irwan Saputra⁵

¹Public Health Masters Student, Muhammadiyah University of Aceh

^{2,3}Master of Public Health, Muhammadiyah University of Aceh.

^{4,5}Department of Public Health, Faculty of Medicine, Syiah Kuala University, Banda Aceh, Indonesia
fns100@ums.ac.id

Abstract

The increase in the elderly population impacts the population growth rate. The elderly are more at risk of experiencing degenerative diseases. Posbindu is one of the closest alternative places that the elderly can use to get health services. However, utilisation of posbindu services in the Baiturrahman Community Health Center working area in Banda Aceh city is still low. This research was conducted to determine factors related to using posbindu for the elderly. This research is a quantitative study with a cross-sectional approach. The research sample consisted of elderly people aged >60 years, totalling 208 people. The sampling technique was purposive sampling. Data was collected using questionnaires, and the results of elderly posbindu examinations were recorded. Data analysis used multiple logistic regression tests with a confidence level of 95%. The research results show that factors related to the use of posbindu for the elderly in the Baiturrahman Community Health Center area are knowledge, health status, NCDs and reasons for having free time. The most dominant factor related to using posbindu for the elderly in the Baiturrahman Community Health Center working area is the reason for having free time (OR=10.22; 95%CI=1.21 – 86.07; p-value = 0.032). It is hoped that the elderly will take part in posbindu activities for the elderly and increase their knowledge about the importance of posbindu by following counselling and suggestions from cadres for taking part in posbindu activities. Apart from that, it is hoped that families will take the time to accompany the elderly during posbindu activities and support them in attending elderly posbindu visits.

Keywords: *Utilisation of posbindu, reasons for visiting posbindu utilisation, knowledge, NCDs, health status*

@Jurnal Ners Prodi Sarjana Keperawatan & Profesi Ners FIK UP 2025

✉ Corresponding author :

Address : Jl. Muhammadiyah no. 91 Batoh, Kec Lueng Bata, Kota Banda Aceh 23123

Email : fns100@ums.ac.id

BACKGROUND

Population ageing is a trend that has changed the age structure of a region's Population in recent years (Heryanah, 2015). By 2030, it is estimated that at least 1 in 6 of the world's Population will be elderly (WHO, 2022). Worldwide, the number of residents aged 60 and over is expected to increase from 1.4 billion in 2020 to 2.1 billion in 2050 (Widayanti et al., 2021).

Since 2021, Indonesia has entered an ageing Population structure, where around 1 in 10 residents are elderly. The percentage of elderly people has increased by at least 3 per cent for over a decade (2010-2021) to 10.82 per cent. Data from the March 2022 National Socio-Economic Survey (Susenas) shows that 10.48 per cent of the Population is elderly, with an elderly dependency ratio of 16.09. This means that every elderly person is supported by around six people of productive age (aged 15-59 years) (Central Statistics Agency, 2022).

In Aceh province, the percentage of the elderly Population was 8.10% in 2020, increasing to 8.55 million people in 2022 (Central Statistics Agency, 2022). Nationally, Indonesia has experienced an increase in elderly people until 2021. There has also been an increase in the development of elderly people in Aceh Province. The increase in the number of elderly people must be accompanied by increased services for the elderly so that the elderly can be efficient and independent in the future. One thing the elderly should not forget is that they are getting older and their immune system is decreasing, so services, especially in the health sector, have become essential.

Specific challenges posed by the continuing increase in the number of elderly people in the health sector are degeneration and the emergence of non-communicable diseases (NCDs) such as diabetes, high blood pressure (hypertension), as well as mental health disorders, namely depression, dementia, anxiety, difficulty sleeping. If this disease is not treated or preventive measures are not taken, it can cause problems because it becomes a chronic and multi-pathological disease (Evitassari & Kisworo, 2020).

The elderly's problem must receive serious attention from various parties in government, community institutions, and society. Government Regulation Number 43 of

2004 concerning the implementation of efforts to improve the welfare of the elderly is one form of government attention to the elderly's problems (Government of the Republic of Indonesia, 2004). This is a form of serious attention to the elderly, namely the implementation of elderly services through the activities of the Elderly Posbindu at the Community Health Center (Turkheimer, 2019).

Community health centres should be able to take action in promotive, preventive, remedial and basic-level recovery efforts for the elderly. The management of services for the elderly at community health centres must be carried out professionally and with quality, complete, and coordinated without stopping, with an emphasis on the perspective of the elderly (Andesty et al., 2018). However, to bring health services closer to the elderly, the government and society have developed the concept of community-sourced health efforts. Posbindu for the elderly and integrated development post (posbindu) for non-communicable diseases (NCD) is one of the roles of public health efforts, which plays a role in providing health services to the elderly group (Infodatin, 2022). According to Information (2022), the number of posbindu in Indonesia will reach 107,993 units in 2021. Aceh is in first place with a ratio of 9.5 posbindu per 1000 elderly, which means there are at least nine posbindu among 1000 elderly (Infodatin, 2022).

Many things can influence the elderly to utilise the health services available at the posbindu. One is the access distance to the posbindu (Vinsur & Sutiarsih, 2019). Apart from that, other factors that are also related to the use of posbindu health services include knowledge (Mengko, 2015), family and cadre support (Intarti & Khoriah, 2018; Zakir, 2017; SULENTHIA, 2019), motivation of the elderly (Ariyanto et al., 2021) and characteristics (distance, gender, and occupation) (FRIDOLIN et al., 2021; Intarti & Khoriah, 2018).

Based on a preliminary survey of the posbindu in the Baiturrahman working area, Banda Aceh City, the coverage of elderly visits to the Posbindu at the Baiturrahman Community Health Center, Banda Aceh City did not reach the minimum coverage of 50%. Based on the data above, it can be seen that compared to the number of elderly people in

Baiturrahman District, Banda Aceh City, which is 6,017 people, only 538 people visited the Posbindu or 8.94%.

Posbindu for the elderly is one of the closest alternative places that the elderly can use to get health services. However, utilisation of posbindu services for the elderly in the Baiturrahman Community Health Center working area in Banda Aceh City is still low. Many factors cause elderly people not to use health services, one of which is the reason why elderly people use posbindu for elderly people only to get Supplementary Food (PMT). Apart from that, health problems and lack of support from the family also have an impact on the use of posbindu for the elderly. However, the family often puts aside these factors to help the elderly make regular posbindu visits. Is this factor one of the causes of the lack of utilisation of posbindu services for the elderly? Or are there other factors related to using posbindu for the elderly? This research was conducted to analyse factors associated with using posbindu for the elderly in the Baiturrahman Community Health Center, Banda Aceh City, working area.

RESEARCH METHODS

Research Design

This type of research is quantitative research with a descriptive-analytical nature with a cross-sectional study approach to determine the relationship between characteristic factors (age, gender, education, employment, income), supporting factors (distance to *posbindu*, family support, the role of cadres), health belief factors (knowledge, attitude, motivation), elderly needs factors (health status, NCDs and reasons for using *posbindu*) with the use of elderly *posbindu* services in the Baiturrahman Community Health Center working area, Banda Aceh City. The location of this research was the working area of the Baiturrahman Community Health Center, Banda Aceh City

Research Population and Sample

This study included 6,017 elderly people in the Baiturrahman Community Health Center working area in Banda Aceh City. The sample in this study was 208 elderly people aged ≥ 6 . The sampling technique was purposive sampling. The inclusion criteria for respondents include elderly people who live in the working area of the Baiturrahman Community Health Center, Banda Aceh City,

can communicate well and correctly, and are willing to be respondents.

Method of collecting data

Data collection was carried out by conducting direct interviews with respondents using a questionnaire and checking the elderly examination book to find out the results of the diagnosis of NCDs. Ten enumerators, cadres for each village, assisted in data collection. Before collecting data, enumerators were given a briefing on how to fill out the questionnaire.

Data analysis

The data was analysed using the STATA (Statistics and Data) statistical program for Windows. The analysis used a multiple logistic regression test with a 95% confidence level to determine the most dominant factors for using *Posbindu* services for the elderly.

Research result

Table 1 shows that the average age of respondents is 69.34 years, with a standard deviation of 7.04. The male gender was 101 (48.56%). The last level of education of respondents in the primary category was 89 (42.79%). Respondents who did not work were 115 (55.29%). Family income in the <UMR category was 170 (81.73%).

The average distance between the house and the *posbindu* is 298.94 meters, with a standard deviation of 306.56. The distance between home and *posbindu* category was 63 (30.29%). The average family support score is 18.86, with a standard deviation of 4.64. Suppose family support is considered less supportive, 82 (39.42%). The average cadre role score is 16.49, with a standard deviation of 3.97. If the role of cadres is categorised as having less of a role, there are 93 (44.71%).

The average knowledge score is 9.26, with a standard deviation of 1.62. Respondents with low knowledge were 66 (31.73%). The average attitude score is 11.57, with a standard deviation of 1.30. Respondents with negative attitudes were 111 (53.37%). The average motivation score is 45.85, with a standard deviation of 3.72. Respondents with poor motivation were 84 (40.38%).

The number of respondents with unhealthy health status was 179 (86.06%), the number of respondents who had NCDs was 181 (87.02%), and the number of respondents who came to receive PMT for the elderly was 6 (2.88%). The number of respondents who

did not utilise *posbindu* was 158 (75.96%).

The results of Table 1 also show no significant characteristic factors or supporting factors related to the use of *posbindu* in the Baiturrahman Community Health Center working area. The health belief factor significantly related to *posbindu* utilisation is low knowledge (OR=2.57; 95%CI=1.16 – 5.67; p-value=0.019). Elderly people with low knowledge are 2.57 times less likely to utilise *posbindu* than those with high knowledge.

Factors needed by the elderly that are significantly related to *posbindu* utilisation are unhealthy health status (OR=9.07; 95%CI=3.84 – 21.39; p-value=0.000), NCDs (OR=3.61; 95%CI=1.56 – 8.34; p-value=0.003), and reasons for free time (OR=12.19; 95%CI=1.61 – 91.86; p-value=0.015). Elderly people with unhealthy health status are 9.07 times less likely to utilise *posbindu* compared to elderly people with healthy health status. Elderly people with NCDs are 3.61 times less likely to utilise *posbindu* compared to elderly people who do not have NCDs. Elderly people with free time are 12.19 times less likely to use *posbindu* than elderly people who need regular check-ups.

Table 1. The Most Dominant Factors Associated with the Utilization of *Posbindu* for the Elderly in the Baiturrahman Community Health Center Working Area

No	Variabel	Model 1		Model 2	
		AOR (95% CI)	p-value	AOR (95% CI)	p-value
1	Knowledge				
	- High				
	- Low	2,70 (1,21 – 6,05)	0,015	2,40 (0,9 – 6,00)	0,060
2	Attitude				
	- Positive	1,29 (0,67 – 2,49)	0,442	1,11 (0,5 – 2,34)	0,781
3	Motivation				
	- Good				
	- Less Good	1,95 (0,96 – 3,92)	0,061	1,26 (0,5 – 7 –	0,558

No	Variabel	Model 1		Model 2	
		AOR (95% CI)	p-value	AOR (95% CI)	p-value
				2,79)	
4	Health Status				
	- Healthy				
	- Unwell			9,22 (2,58 – 23,73)	0,000
5	NCD disease				
	- No.				
	- Yes			3,64 (1,35 – 9,83)	0,011
6	Reasons for visiting Posyandu			10,22 (1,21 – 86,07)	0,032
	- Need for regular check-ups				0,254
	- Because there is free time			4,24 (0,35 – 50,83)	
	- To get PMT for the elderly				
Pseudo R ²		0,0470		0,2214	

Model 1 was used to analyse the most dominant health belief factors related to *posbindu* utilisation. The analysis results show that the most dominant factor related to *posbindu* utilisation is low knowledge (OR=2.70; 95%CI=1.21 – 6.05; p-value = 0.015). When other variables are constant, elderly people with low knowledge are 2.70 times less likely to utilise *posbindu* than those with high knowledge. Model 1 can only explain 4.70% of the factors related to the use of *posbindu* among the elderly in the Baiturrahman Health Centre working area.

Model 2 was carried out to analyse the health belief factors and elderly needs factors most dominantly related to the use of *posbindu*. The analysis results show that the most dominant factor related to *posbindu* utilisation is the reason for having free time (OR=10.22; 95%CI=1.21 – 86.07; p-value = 0.032). Elderly people, for reasons of having free time, are 10.22 times less likely to utilise *posbindu* than elderly people, who need regular check-ups when other variables are

constant. Model 2 can explain 22.14% of the factors related to the use of *posbindu* among the elderly in the Baiturrahman Health Centre working area.

DISCUSSION

The research results show that the health belief factor related to the use of *posbindu* for the elderly is low knowledge (OR=2.75; 95%CI=1.16 – 5.67; p-value=0.019). The higher the elderly's knowledge about *posbindu*, the more they will use it to check their health. On the other hand, the lower the knowledge, the less elderly people will use it.

This research is in line with several studies conducted in several regions in Indonesia, which show that there is a relationship between knowledge and the use of *posbindu* for the elderly (Zakir, 2017; Sesanti et al., 2022; Sebayar, 2022; Dewi et al., 2022; Kristiana et al., 2019).

Knowledge results from "knowing.g" and occurs after one smells or feels something with all five senses. Sensing occurs through the five human senses: sight, hearing, smell, taste, and touch (Notoatmodjo, 2014). According to the WHO World Health Organization) theory, a person's health level can be described by knowledge obtained from personal experience (Yulianti & Wijayanti, 2016).

The knowledge that the elderly understand about *posbindu* will increase their interest in using it. Elderly people can have regular check-ups every month. If the results of an examination show that an elderly person has a severe illness, the health worker on duty at the *posbindu* activities will refer the elderly person to the health centre.

Apart from that, the results of this study also show that factors related to the use of elderly people are unhealthy health status, having NCDs (and reasons for having free time).

In contrast to the research of Kurnianingsih et al. (2019), which shows that there is no relationship between the health history of the elderly and the use of elderly *posbindu*. Healthy humans can carry out all their management functions on this earth. Indicators of a naturally healthy person are those with a healthy mental condition, healthy behaviour, healthy eating and exercise habits. People with the above indicators are not considered to be in good health. Therefore,

such people can also be called sick people or people who need medical support, both mental and physical (Santosa & Zafar, 2012).

Health conditions include a person's general condition but with total psychophysiological capacity, which are actions that directly or permanently influence the possibility of all material consequences for the better (Setyawati & Hartini, 2018).

Yusuf believes that a healthy body is a lifestyle that requires attention to several factors that can influence health conditions, including diet and exercise patterns that can be applied to everyday life. A person who is healthy in his life can escape from illness, both mental and physical (Yusuf et al., 2015).

The research results show that free time is the most dominant factor in *posbindu* utilisation. Some elderly people do not visit *posbindu* regularly because they have to do other activities, such as farming or work, to meet their daily needs. In almost all the *posbindu* where the research was conducted, most of those who visited the *posbindu* were women. However, sometimes elderly women also do not visit *posbindu* because they have to do activities at home. It is common for elderly people to say they must look after their grandchildren, so they do not have free time to visit the elderly *posbindu*.

Characteristic factors and supporting factors (distance, family support, and cadre role) showed no significant relationship with *posbindu* utilisation. This is in line with research by Napitupulu (2018), which shows that there is no significant relationship between the distance factor and the use of health services. The distance between the house and the *posbindu* is not too far, so the elderly can access the *posbindu* easily. Apart from that, family support and the role of cadres in the Baiturrahman community health centre area are also excellent, thus supporting the elderly in visiting *Posbindu* every month. Cadres also conduct home visits for elderly people without a check-up at the *posbindu* long.

CONCLUSION

Factors related to the use of *posbindu* for the elderly in the Baiturrahman health centre working area are knowledge (OR=2.57; 95%CI=1.16 – 5.67; p-value=0.019), unhealthy health status (OR=9.07; 95%CI=3.84 – 21.39; p-value=0.000), having

NCDs (OR=3.61; 95%CI=1.56 – 8.34; p-value=0.003) there is free time (OR=12.19; 95%CI=1.61 – 91.86; p-value=0.015). The most dominant factor related to using *posbindu* for the elderly in the Baiturrahman health centre working area is the reason for having free time (OR=10.22; 95%CI=1.21 – 86.07; p-value = 0.032).

It is hoped that the elderly will increase their knowledge about the importance of *posbindu* by following counselling and suggestions from cadres for participating in *posbindu* activities. Apart from that, it is hoped that families will take the time to accompany the elderly during *posbindu* activities and support them in attending elderly *posbindu* visits by providing free time when elderly *posbindu* activities are carried out. Cadres and health workers also never stop reminding the elderly to visit the *posbindu* by making announcements the day before the *posbindu* activities are carried out and providing maximum service with love to the elderly.

BIBLIOGRAPHY

- Andesty D., Syahrul F., Epidemiologi D., Masyarakat F. & Airlangga U., Hubungan interaksi sosial dengan kualitas hidup lansia di unit pelayanan terpadu (UPTD) Griya Werdha kota Surabaya tahun 2017, *The Indonesian Journal of Public Health*, 2018;13(2):169-180.
- Ariyanto A., Fatmawati T.Y. & Chandra F., Pendidikan, Jarak Rumah dan Dukungan Keluarga terhadap Pemanfaatan Posyandu Lansia, *Jurnal Akademika Baiturrahim Jambi*, 2021;10(2):267-273.
- Badan Pusat Statistik. STATISTIK PENDUDUK LANJUT USIA 2022, Jakarta: Badan Pusat Statistik; 2022.
- Dewi N., Dewi E.R. & Purba E.M., Hubungan Pengetahuan Dan Sikap Lansia Dengan Pemanfaatan Posyandu Lansia Di Desa Ujung Labuhan Kecamatan Namorambe Kabupaten Deli Serdang Tahun 2021, *Jurnal Riset Rumpun Ilmu Kesehatan (JURRIKES)*, 2022;1(2):160-169.
- Evitasari L. & Kisworo B., Analisis Tugas Pekerja Sosial Dalam Memberdayakan Lanjut Usia Di Wisma Lansia Husnul Khatimah Semarang, *Jendela PLS*, 2020;5(2):88-99.
- FRIDOLIN A., Huda S. & Suryoputro A., Determinan perilaku terhadap keaktifan kunjungan lansia ke posyandu lansia: literatur review, *Jurnal Ilmu Keperawatan Dan Kebidanan*, 2021;12(2):263-269.
- Heryanah H., Ageing Population dan Bonus Demografi Kedua di Indonesia, *Populasi*, 2015;23(2):1-16.
- Infodatin. Lansia Berdaya, Bangsa Sejahtera, Jakarta: Pusat Data dan Informasi Kementerian Kesehatan RI; 2022.
- Intarti W.D. & Khoriah S.N., Faktor-faktor yang mempengaruhi pemanfaatan posyandu lansia, *JHeS (Journal of Health Studies)*, 2018;2(1):110-122.
- Kristiana A.L.A., Martini N.K. & Diaris N.M., Hubungan Pengetahuan Lansia Terhadap Pemanfaatan Posyandu Di Wilayah Kerja Uptd Puskesmas Selemadeg Barat Kabupaten Tabanan, *Jurnal Kesehatan Terpadu*, 2019;3(2):67-70.
- Kurnianingsih K., Dharminto D., Winarni S. & Mawarni A., Faktor-Faktor Yang Berhubungan Dengan Tingkat Pemanfaatan Posyandu Lansia Di Kelurahan Bandarjo Kecamatan Ungaran Barat, Kabupaten Semarang Tahun 2019, *Jurnal Kesehatan Masyarakat (Undip)*, 2019;7(4):573-580.
- Mengko V.V., Pemanfaatan posyandu lansia di wilayah kerja puskesmas teling atas kota manado, *Jikmu*, 2015;5(5).
- Napitupulu I.K., Hubungan Antara Jarak Tempuh Dan Penilaian Kesehatan Dengan Pengambilan Keputusan Keluarga Dalam Pemanfaatan Puskesmas, *Jurnal Kesehatan*, 2018;9(2):141-147.
- Notoatmodjo S., Pendidikan dan Perilaku Kesehatan, Jakarta: Rineka Cipta; 2014.
- Pemerintah RI, Peraturan Pemerintah Republik Indonesia Nomor 43 Tahun 2004 tentang Pelaksanaan Upaya Peningkatan Kesejahteraan Sosial

- Lanjut Usia, *Jakarta: Pemerintah Republik Indonesia*, 2004.
- Santosa G. & Zafar S.D., *Ilmu Kesehatan Olahraga, Bandung: RosdaKarya*, 2012.
- Sebayang A.P., Hubungan Pengetahuan Dan Sikap Dengan Pemanfaatan Posyandu Lansia Di Puskesmas Kota Pinang, *Journals of Ners Community*, 2022;13(5):560-567.
- Sesanti N.W., Berliana N. & Sugiarto S., Hubungan Pengetahuan, Sikap, Dukungan Keluarga, dan Dukungan Kader Terhadap Pemanfaatan Posyandu Lansia di Wilayah Kerja Puskesmas Sungai Duren, *Journal of Healthcare Technology and Medicine*, 2022;8(2):924-930.
- Setyawati V.A.V. & Hartini E., *Buku ajar dasar ilmu gizi kesehatan masyarakat: Deepublish*; 2018.
- SULENTHIA A., Hubungan dukungan keluarga pada lansia terhadap peningkatan interpersonal melalui komunikasi aktif di wilayah kerja puskesmas rasima ahmad Kel. Bukit Apit Puhun Posynndu Gladiol Bukittinggi tahun 2019: UNIVERSITAS PERINTIS INDONESIA; 2019.
- Turkheimer E., Waldron M. Peraturan menteri kesehatan Republik Indonesia nomor 25 tahun 2016 tentang rencana aksi nasional kesehatan lanjut usia tahun 20162019, *Psychological Bulletin*, 2019;126(1):21.
- Vinsur E.Y.Y. & Sutiyarsih E., Analisi Faktor yang Mempengaruhi Lansia datang ke Pelayanan Kesehatan, *Jurnal Ners dan Kebidanan (Journal of Ners and Midwifery)*, 2019;6(2):189-196.
- WHO. Ageing and health 2022. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
- Widayanti C., Kristiningrum W., Asminiwati A., Naeko R. & Nilawati N., editors. Penyuluhan Perilaku Hidup Sehat yang mempengaruhi Gizi Seimbang pada lanjut usia Di RT 11 Kelurahan Mekar Sari Kota Balikpapan. Call For Paper Seminar Nasional Kebidanan; 2021.
- Yulianti T.S. & Wijayanti W.M.P., Hubungan tingkat pendidikan dan tingkat pengetahuan tentang kesehatan jiwa dengan sikap masyarakat terhadap pasien gangguan jiwa di RW XX Desa Duwet Kidul, Baturetno, Wonogiri, *KOSALA: Jurnal Ilmu Kesehatan*, 2016;4(1).
- Yusuf A., Fitryasari PK R. & Nihayati H.E., *Buku ajar keperawatan kesehatan jiwa: Salemba empat*; 2015.
- Zakir M., Faktor-Faktor yang Berhubungan dengan Pemanfaatan Posyandu Lansia Kencana, *Jurnal Ilmiah Keperawatan Sai Betik*, 2017;10(1):64-69.