

The relationship of health workers availability & accessibility with the utilization of health services in the working area of Nambo health center and Soropia health center (case study: Urban and rural coastal health center) southeast Sulawesi province, Indonesia, 2023

Rahman ^{1,*}, Listy Handayani ¹, Kamrin ³, Farit Rezal ¹, Muhammad Al Rajab ² and Noviani Munsir ²

¹ Public Health Department, Public Health Faculty, Halu Oleo University, Indonesia.

² Study Program of Hospital Administration, Pelita Ibu Institute of Health Science, Indonesia.

World Journal of Advanced Research and Reviews, 2024, 21(01), 560–566

Publication history: Received on 26 November 2023; revised on 03 January 2024; accepted on 06 January 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.21.1.0026>

Abstract

The level of public health is starting to improve, but it has not yet reached the entire population. This condition is caused by the capacity of health workers, the maternal referral system, and the management of maternal and child health services, as well as reproductive health services, which have not run optimally because the distribution of health workers, especially doctors, is not yet available in all Community Health Centers. Data from the Health Human Resources Information System, in 2022 there will still be 4.0% of Community Health Centers without doctors. Apart from that, the community's ability to reach health service facilities is the cause of low health service coverage. This research aims to determine the relationship between the availability of health workers and accessibility with the utilization of health services in the working areas of the Nambo Health Center and Soropia Health Center, Southeast Sulawesi Province in 2023.

Method: The type of research used is descriptive quantitative with a cross-sectional study approach, namely looking for the relationship between the availability of health workers and accessibility and the utilization of health services in the working areas of the Nambo Health Center and Soropia Health Center (case study: Urban Coastal and Rural Coastal Health Centers). The number of samples in this research was 1,040 people consisting of 535 urban coastal respondents and 505 rural coastal respondents. The sampling techniques are purposive sampling and accidental sampling.

Result: The research results show that there is a significant relationship between the availability of Health Personnel in Health Facilities and the utilization of Health services with a pvalue (0.000) <0.05 and there is no significant relationship between accessibility and the utilization of Health services with a pvalue (0.175>0.05).

Conclusion: There is a significant relationship between the availability of health workers and there is no significant relationship between accessibility and utilization of health services in the coastal areas of the Nambo Health Center and Soropia Health Center, Southeast Sulawesi Province. Therefore, the Health Service needs to consider policies regarding placement, workload analysis and even distribution of health workers so that the workload of officers is not too high and can provide maximum health services and increase public knowledge by carrying out health promotions or providing health education to the public regarding services. available at the Community Health Center.

Keyword: Availability; Health Workers; Accessibility; Utilization; Health Services.

* Corresponding author: Rahman

1. Introduction

A community health center is a health service facility that carries out public health efforts and first-level individual health efforts, by prioritizing promotive and preventive efforts, to achieve the highest level of public health in its working area. First level Community Health Efforts (CHE) are any activities to maintain and improve health as well as prevent and overcome the emergence of health problems targeting families, groups and communities. First level Individual Health Efforts (IHE) are an activity and/or a series of health service activities aimed at improving, preventing, curing disease, reducing suffering due to disease and restoring individual health [1]

Based on service capacity, community health centers are divided into two categories, namely inpatient health centers and non-inpatient health centers. The number of inpatient health centers over the last five years has continued to increase, namely 3,623 units in 2018, then increasing to 4,302 units in 2022. Non-inpatient health centers tend to experience a decrease in the number of health centers based on status in 2018, namely 6,370 and in 2022 as many as 6,072[2].

Based on data from the Health Human Resources Information System, Community Health Centers have 9 (nine) types of appropriate health personnel, namely: (1) doctors or primary care doctors; (2) dentist; (3) nurse; (4) midwife; (5) public health workers; (6) environmental sanitation personnel; (7) medical laboratory technology expert; (8) nutrition workers; and (9) pharmaceutical personnel in 2022 will reach 56.1%. A health center is said to be sufficient or adequate if there is at least 1 (one) person from each type of health worker. This shows an increase of 7.3% from the previous year. Meanwhile, in Southeast Sulawesi Province, the percentage of community health centers that have 9 types of health workers reached 44.1%, still far from the national average target of 56.1% [2]

The level of public health is starting to improve, but it has not yet reached the entire population. This condition is caused by the capacity of health workers, the maternal referral system, and the management of maternal and child health services, as well as reproductive health services, which have not run optimally because the distribution of health workers, especially doctors, is not yet available in all Community Health Centers. Based on data from the Health Human Resources Information System (SISDMK), in 2022 there will still be 4.0% of Community Health Centers without doctors [2].

The ratio of Community Health Centers per 30,000 residents of Southeast Sulawesi Province in 2022 is 3.32, meaning that every 30,000 residents in Southeast Sulawesi Province are served by at least 3 (three) Community Health Centers, almost the same as in previous years. Even though the total number of community health centers increased by 3 units from the previous year, the population also increased, so the relative ratio did not change. If viewed based on numbers alone, the ratio of public health centers to the total population in Southeast Sulawesi Province can be considered sufficient, however, calculating the ratio of public health centers to the total population is not appropriate to the conditions in Southeast Sulawesi Province because of the large area, the population is spread unevenly and geographical conditions, some of which are relatively difficult. So it is more appropriate to use the ratio of community health centers based on sub-districts, namely 1 (one) sub-district has at least 1 community health center. If we use this reference, with 296 community health centers compared to 222 sub-districts, a ratio of 1.31 is obtained. This means that every sub-district in Southeast Sulawesi Province has at least 1 (one) community health center, and even in 1 sub-district there are 2 (two) community health centers. This is in accordance with Minister of Health Regulation no. 43 of 2019 concerning Community Health Centers which states that 1 (one) sub-district can establish more than 1 (one) community health center [3].

Outpatient visits and inpatient visits at Community Health Centers and Hospitals are not much different. This shows that the picture of individual health services which includes observation, diagnosis, treatment and medical rehabilitation in both basic and referral health facilities is adequate both in terms of facilities and personnel. When compared with previous years, the coverage of outpatient visits at community health centers is always higher than at hospitals. In other words, health services, the availability of facilities and infrastructure, the availability of health workers at the Community Health Center are capable of providing first aid to individual basic health services, or the Community Health Center has a basic level health service function on the front line while the Hospital acts as a referral health service from the service facility health below [3]

Based on Minister of Health Regulation Number 43 of 2019 concerning Community Health Centers in article 10 it is stated that Community Health Centers must meet staffing requirements. In article 17, Requirements for health personnel referred to in Article; 10 paragraph (4) includes doctors and/or primary care doctors, dentists, other health workers and non-health workers. The number and types of health workers at the Southeast Sulawesi Provincial Health Center in 2022 will be 15,090 workers. With a total of 296 Community Health Centers in Southeast Sulawesi in 2022,

only 134 (45.52%) Community Health Centers have met the availability of 9 types of health workers and there are still 162 (55.47%) Community Health Centers that have not met the availability of 9 (nine) types of Health Workers Strategic. This is due, one of the reasons, to the unequal distribution of health workers, the presence of other types of health workers is still very lacking in Southeast Sulawesi Province, such as medical technicians and physical therapy workers [3]

Referring to the Regulation of the Minister of Health of the Republic of Indonesia Number 43 of 2019 concerning Community Health Centers, in general several types of health workers have reached the ideal ratio, in reality there are still several community health centers whose staff are not yet in line with real needs, resulting in a shortage of certain types of professions, but excess staff for other professions, due to unequal power distribution. The largest number of health professionals working in community health centers are midwives and nurses, this is related to the basic function of community health centers as community health service centers at the forefront, where the needs of most people for health services are still limited to curative aspects. The following is the ratio of midwife workforce to the number of villages in Southeast Sulawesi Province in 2018-2022[3]

The ratio of midwives to the number of villages in Southeast Sulawesi Province has increased quite significantly in the last year. In 2022 there will be an increase of 2.13, which means that every village in Southeast Sulawesi Province is served by around 2 midwives, but this data is not necessarily considered to represent the real situation, because in fact in the field one midwife is still found who is responsible for more than 1 village. This is due to the unequal placement of midwives, and also because not all qualified midwife staff placed in community health centers carry out the main duties and functions as midwives, but rather often carry out administrative and other non-health tasks such as treasurer, administration, or other structural positions [3]

In general, the problem regarding the adequacy of staff in primary level health care facilities is that there are health officers/workers who are still burdened with multiple responsibilities, so that many health workers have the potential to carry out their main duties and functions while also carrying out administrative tasks (reporting and accountability). financial answers, personnel administration, etc.). It often happens that health workers are more focused on completing their administrative work, which is an additional task, rather than providing optimal health services, which should be their main task and function.

2. Method

The type of research used is descriptive quantitative with a cross-sectional study approach, namely looking for the relationship between the availability of health workers and accessibility and the utilization of health services in the working areas of the Nambo Health Center and Soropia Health Center (case study: Urban Coastal and Rural Coastal Health Centers). The number of samples in this research was 1,040 people consisting of 535 urban coastal respondents and 505 rural coastal respondents. The sampling techniques are purposive sampling and accidental sampling. According to Sugiyono (2016) purposive sampling technique is a sampling technique with certain considerations by determining criteria that must be met by the research sample so that it is more representative [4]. Data analysis consists of univariate analysis and bivariate analysis. Univariate analysis describes the characteristics of each research variable [5].

3. Results and Discussion

3.1. Respondent Characteristics

Based on the table above, it shows that the majority of respondents were 736 women (70.77%) and 304 men (29.23%). Of the 1040 respondents, there were 529 (50.87%) people who had low education and 511 people (49.13%) who had high education. Of the 1040 respondents, the majority worked in the non-formal sector (non-government sector) as many as 981 people (94.33%) and in the formal sector as many as 59 people (5.67%). Of the 1040 respondents, the majority had low income (below minimum wage) amounting to 820 people (78.85%) and high income reaching 220 people (21.15%).

Table 1 Distribution of Respondents based on Gender, Education, Employment and Income

Respondent Characteristics	Number	Percentage
Gender		
Male	304	29.23%
Female	736	70.77%
Total	1040	100
Education		
High	511	49.13%
Low	529	50.87%
Total	1040	100
Employment		
Formal	59	5.67%
Non Formal	981	94.33%
Total	1040	100
Income/ Month		
High	220	21.15%
Low	820	78.85%
Total	1040	100

Source: Primary Data, 2023

3.2. Univariate Analysis

Based on table 2, it shows that the majority of respondents utilized the Community Health Center Health services as many as 899 respondents (86.44%) while those who did not utilize them were 141 respondents (13.56%). The majority of respondents stated that the Health Center had available health workers as many as 1016 respondents (97.69%) while those who stated that they were not available were 24 respondents (2.31%). From the aspect of accessibility, some respondents stated that it was easier to access health services, 790 respondents (75.96%) and 250 respondents (24.04%) who found it difficult.

Table 2 Distribution of Respondents based on Health Service Utilization, Availability of Health Personnel and Accessibility

Variable	Number	Percentage
Utility Health Care		
Yes	899	86.44%
No	141	13.56%
Total	1040	100
Availability of health workers		
Available	1016	97.69%
Not available	24	2.31%
Total	1040	100
Accessibility		
Easy	790	75.96%

Difficult	250	24.04%
Total	1040	100

Source: Primary Data, 2023

3.3. Bivariate Analysis

Table 3 shows that of the 899 who used health facilities, the majority of them had health workers available, 885 (98.44%) and 14 respondents (1.56%) who did not. Meanwhile, of the 141 respondents who did not utilize health facilities, 131 respondents (92.91%) had some health workers available and 10 respondents did not (7.09%).

Table 3 Relationship between the availability of health workers and the use of health services

Availability of Health Workers	Utility Health Facility				Total		p-value
	Yes		No		n	%	
	n	%	n	%			
Available	885	98.44	131	92.91	1016	97.69	0.000
Not available	14	1.56	10	7.09	24	2.31	
Total	899	100	141	100	1040	100	

Source: Primary Data, 2023

The statistical test results show that the ρ value (0.000) is <0.05 , which means there is a significant relationship between the availability of health workers in health facilities and the utilization of health services. The more available health workers are in health facilities, the more people will use health service facilities. [6] One of the factors that identifies and has the potential to influence someone to utilize health services is the availability of health workers. Health facilities that have adequate availability of health personnel can influence the public's willingness to utilize health services. This is in line with research that there is a significant relationship between the availability of health workers and the utilization of Tegal Gundil Health Center services in Bogor City in 2020. From the results of the analysis, an OR value of 6.385 is obtained, meaning that respondents who stated that there were no health workers available would be 6.385 times more likely to utilize the health services of Tegal Gundil Health Center compared to by stating the availability of health workers [7].

The results of this study are in line with research that there is a significant relationship between the presence of health workers and the utilization of health centers. Human resources or health workers at the Community Health Center play the role of implementing health services so that this role is expected to be in accordance with their main duties and functions, education and skills. There is a significant relationship between respondents who state that there is availability of health workers and respondents who state that there is no availability of health workers and the utilization of health services at the Community Health Center. Respondents who stated that there was no availability of health workers were 2.875 times more likely to not utilize health services compared to respondents who stated that health workers were available [8][9].

Availability of health workers in this case is the presence of health workers at the Puskesmas when serving patients, because even though all the health workers at the Puskesmas are there, sometimes they are not there when the patient needs them, this is due to various activities, including; training, meetings and so on, so it is necessary to further evaluate the duties and functions of existing personnel and take wise steps to overcome this. Apart from that, there are still many people who don't know the profession of each health worker so they don't know their main duties at the health center.

The availability of health facilities and facilities is one of the factors that can motivate people to undertake treatment efforts. Even though people have the intention to seek treatment at a health center, if health facilities are not available, they will choose to seek treatment at another health facility or choose to stay at home without receiving treatment. [8,9] There is a relationship between the availability of health workers and the utilization of health center services. The human resources or health workers at the community health center have carried out their main duties and skill functions.

Table 4 shows that of the 899 respondents who used health facilities, the majority had easy access to health services, 676 (75.19%) and 223 respondents (24.81%) had difficulty accessing health services. Meanwhile, of the 141

respondents who did not use health facilities, there were 114 respondents (80.85%) who had easy access and 27 respondents (19.15%) who had difficulty accessing health services. The statistical test results show that the p value is (0.175>0.05), which means that there is no significant relationship between accessibility and the use of health services. Difficult access is not a barrier for people to use health facilities. The level of community need for facilities as a place to seek health services and treatment is the main alternative in seeking health services.

This is not in line with research that there is a significant relationship between accessibility and utilization of the Tegal Gundil Health Center, Bogor City in 2020. From the results of the analysis, an OR value of 7.250 was obtained, meaning that respondents who stated that accessibility was difficult would be 7.250 times more at risk of not utilizing the services of the Tegal Gundil Health Center compared to those who states easy accessibility [7].

Table 4 Relationship between Accessibility and Utilization of Health Services

Accessibility	Utilization of Health Facilities				Total		p-value
	Yes		No		n	%	
	n	%	n	%			
Easy	676	75.19	114	80.85	790	75.96	0.175
Difficult	223	24.81	27	19.15	250	20.04	
Total	899	100	141	100	1040	100	

Source: Primary Data, 2023

The results of this research show that 223 or 24.81% of respondents stated that accessibility was difficult but still utilized health services. Accessibility has no relationship with the use of health services at the Community Health Center because of the community's perception of the importance of receiving treatment at a health facility, easy access to information which can influence community knowledge and perception, the existence of private vehicles to get to the Community Health Center and the existence of public transportation such as motorbike taxis which can be used as transportation general.

This research is in line with research that there is no significant relationship between accessibility and utilization of health services. The results of the analysis show that accessibility does not have a significant relationship with the utilization of health services in the Sumber Rejo sub-district, in this case because although public transport rarely passes through the Sumber Rejo Community Health Center, it is not a problem because the majority of people use private vehicles to reach the Community Health Center, besides that there are many motorcycle taxi transportation that can be used as a substitute for public transportation. Meanwhile, the results of Hayati's research (2002) are not in line with this research, namely that they found a significant relationship between distance (accessibility) to the Community Health Center and service utilization, especially antenatal care services [10]

4. Conclusion

There is a significant relationship between the availability of Health workers in Health Facilities and the utilization of Health services and there is no significant relationship between accessibility and the utilization of Health services in the coastal areas of Nambo Health Center and Soropia Health Center, Southeast Sulawesi Province. Therefore, the Health Service needs to consider policies regarding placement, workload analysis and even distribution of health workers so that the workload of officers is not too high and can provide maximum health services to the community in accordance with their profession and education. The community is expected to increase awareness of health so that they are more active in utilizing health services provided by the government, namely first-level health service facilities. Community Health Centers as providers of first level health services strive to continue to improve health services, increase public knowledge by carrying out health promotions or providing health education to the community regarding the services available at Community Health Centers.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

Reference

- [1] Regulation of the Minister of Health of the Republic of Indonesia. Regulation of the Minister of Health of the Republic of Indonesia Number 75 of 2014 concerning Community Health Centers. Jakarta; 2014.
- [2] Indonesian Ministry of Health. Indonesian Health Profile [Internet]. Pusdatin.Kemkes.Go.Id. Jakarta; 2022. Ministry of Health of the Republic of Indonesia. Available from: <https://www.kemkes.go.id/downloads/resources/download/pusdatin/profil-kesehatan-indonesia/Profil-Kesehatan-2021.pdf>
- [3] Southeast Sulawesi Provincial Health Service. Southeast Sulawesi Province Health Profile. Kendari; 2022.
- [4] Sugiyono. Quantitative, Qualitative Research Methods, R & D. In Bandung: IKAPI; 2016.
- [5] Notoatmodjo S. Health Research Methodology. In Jakarta: Rineka Cipta; 2010.
- [6] Notoatmodjo S. Health Promotion and Health Behavior. In Jakarta: Rineka Cipta; 2012.
- [7] Zaini R, Parinduri SK, Dwimawati E. Factors Associated with the Utilization of Health Services at the Tegal Gundil Community Health Center, Bogor City in 2020. Public Health Student Journal. 2022;5(6):481–90.
- [8] Rivka Ivana S. Analysis of the Utilization of Basic Health Services at Community Health Centers by Poor Families Participants in the Poor Community Health Care Guarantee (JPKMM) in the Warung Kondang District Area, Cianjur Regency, Year 2005.2006.
- [9] Handayani L et al. The Role of Health Workers as Implementers of Community Health Center Health Services. Health Systems Research Bulletin. Surabaya. 2010.
- [10] Panggantih A, Pulungan RM, Iswanto AH, Yuliana T. F Factors Related to the Utilization of Health Services by National Health Insurance (JKN) Participants at the Mekarsari Community Health Center in 2019. 2019