



Health Service Seeking Behavior in Suburban Communities

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Abstract

Health problems in Indonesia today include the low health status of the community, among others, marked by high maternal mortality rates and infant mortality rates. On the other hand, health service is vital in determining health, influenced by geographical, economic, and social aspects. The study aims to analyze the relationship between health service access factors and the determination of family health services in suburban communities in Java and outside Java. The method uses a quantitative approach and is supported by qualitative data. The instrument consists of a questionnaire related to access to health services (geographic access, economic access, social access) and the choice of health services. The population is families in the suburban areas of Semarang and Gorontalo. Samples were taken using the accidental sampling technique, as many as 100 families. The data was analyzed with univariate, bivariate, and multivariate analysis. The study obtained significant differences in health services decision determination between the suburban communities of Semarang (Java) and Gorontalo (Outside Java), with a t-value of 4.284 and a sig value of 0.000. The difference lies in economic access. The health services decision determination in suburban families in Java is more oriented towards choosing medical services such as hospitals and community health centers. In other lands, many families still rely on traditional medicine as health services.

INTRODUCTION

The utilization of health services is a vital factor in determining health, which has particular relevance as a health and community development issue, especially in low-income countries. The current health problem in Indonesia is the low public health status, among others, marked by high maternal mortality rates (MMR) and infant mortality rates (IMR), which are still below the target achievement (Zahtamal et al., 2016; Laksono et al., 2013). Based on the 2007 Basic Health Survey, IMR in Indonesia is still 228 per 100,000 live births. Likewise, IMR is still in the range of 26.9 per 1,000 live births.

The utilization of health services is the use of health service facilities provided either in outpatient care, inpatient care, home visits by health workers, or other forms of activities from the utilization of these health services. Factors that influence the determination of health services by the community are factors from health service providers such as service facilities, service costs, and distance, while factors from the community using health services are education factors, socio-economic status of the community including payment methods (Hermawan et al., 2023). Cultural factors related to habits, community environment, and existing values can also

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determine health care patterns and health services chosen (Handayani et al., 2020; 2021). Independent health payments cause a heavy economic burden for families.

Access to health services is vital in improving physical and mental health and quality of life. Access to health facilities is classified into availability, accessibility, affordability, acceptability, and accommodation, which can be distinguished geographically, economically, and socially. Similar studies have concluded that several barriers to accessing health services include geographic location, travel time, availability of transportation, and access to referrals. Ease of access is often a priority in location considerations where the location convenience is viewed geographically, ease of obtaining other public facilities, and proximity to the community are vital points for ease of access to health services (Nugroho et al., 2023; Rieke Cahya et al., 2023).

According to the Indonesian Ministry of Health (2021), Indonesia has around 3,133 hospitals, with uneven distribution across regions. Most hospitals (around 1,968 or 62.8%) are on the island of Java. There are around 10,134 community health centers (Puskesmas) in Indonesia. But, remote areas such as Papua only have 372 community health centers, compared to Java, which has more than 3,000 community health centers. Additional data from research from Health Policy and Planning (2021) mentioned 53% of residents in rural areas need more than 30 minutes to reach the nearest health facility. In urban areas, this figure drops to only 22%. As many as 60% of rural residents in Indonesia have limited access to specialist services in hospitals, compared to 90% of urban residents with easier access to specialist services.

People in areas with limited resources are vulnerable to health services (Nelson et al., 2020). Social integration related to social support in the form of family ties, environmental communities, and culture can determine the decision to seek health services (Melissa et al., 2022). The choice of health services for the community is vital in determining the health of individuals and the community. Some barriers to accessing health services include geographic location, travel time, availability

of transportation facilities, access to referrals, aspects of accurate diagnosis and availability of drugs, and shortage of health workers, where ease of access is often a priority in considering the health services chosen (Yilin et al., 2022; Siqin et al., 2021; Michael et al., 2022; Jean et al., 2020; Desire & Neha, 2021).

The novelty in this study is that it will analyze factors related to determining the search for health services that are typical in Indonesia with a geography that is an archipelagic country with a heterogeneous culture, namely in Java and outside Java. The geographical conditions of Indonesia, which has many regions with diverse characteristics, face its challenges in providing health services. Some public health problems that have not been solved are access problems (Mubasyiroh et al., 2016). Many studies state that the high incidence of AKI and AKB is due to one of the factors being difficult access to health services. Indonesia is also an archipelagic country with a heterogeneous society, so the problem of access to health services is vital to consider to provide quality services to the community, which will determine the decision to choose health services by the community. The purpose of this study is to analyze how the relationship between health service access factors (geographical aspects, economic and social aspects) to the determination of decisions to choose health services for their families in suburban communities in Java and outside Java, which are geographically different.

METHOD

The research was conducted on Java Island (Semarang suburban area) and outside Java Island, namely on Sulawesi Island (in Gorontalo suburban area), considering the geographical location of the region, cultural differences, the same public health problems related to MMR and IMR, and considerations of the possible reach of the Research Team. The activity is a research with a quantitative approach supported by qualitative data. The instrument consists of a questionnaire regarding access to health services (geographic access, economic access, social access) related to health service choices.

The independent variables are geographic, economic, and social access,

and the dependent variable is the choice of health services. Operational definition: 1) Geographical, can be described as the ease of reaching health services measured by distance, travel time, type of transportation, and road infrastructure. 2) Economic access is the ability of the community to allocate their financial capabilities to reaching health services. 3) Social access is related to communication, culture, friendliness, and service satisfaction (Laksono, 2016). The population is families in the Sub-urban Semarang and Sub-urban Gorontalo areas. The number of samples was taken using the accidental sampling technique. Samples were taken from as many as 100 families (50 families from the suburban Semarang area, 50 families from the suburban Gorontalo) who met the requirements, namely 1) residing in the suburban Semarang/Gorontalo area, 2) having been married for at least 5 years, 3) willing to be involved in the study. Data analysis is done by conducting univariate analysis, chi-square test, and t-test.

RESULTS AND DISCUSSIONS

Based on the data obtained in the suburban area of Semarang, the results of the frequency distribution are as follows: 1) in terms of geographic access, the most respondents gave the assessment category of

supporting health services as many as 26 people or 56.5%, 2) in terms of economic access, the most respondents gave the assessment category of very supporting health services as many as 28 people or 60.9%, 3) in terms of economic access, the most respondents gave the assessment category of supporting as many as 30 people or 65.2%, 4) the frequency distribution of the habits of the community seeking health services by respondents was mostly medical as many as 44 people or 95.7%, 5) the frequency distribution of the most qualified places of treatment according to the community of respondents was mostly medical treatment as many as 25 people or 54.3%, 6) the frequency distribution of the determination of health service decisions according to respondents was mostly medical treatment as many as 41 people or 89.1%. Based on the data obtained in the suburban area of Semarang, it is concluded that the results of the frequency distribution are as follows: 1) in terms of geographic access, the most respondents gave the assessment category of supporting health services as many as 26 people or 56.5%, 2) the economic access of the respondents gave the most category of assessment that strongly supports health services as many as 28 people or 60.9%, 3) the economic access of the respondents gave the most category of assessment that supports as

Table 1. The Relationship between Geographic Access and Health Service Decision Determination

Geographic Access	Health Service Decision Determination				Total	Percentage	Sig.
	Medical	Percentage	Traditional Treatment	Percentage			
Fairly Support	1	2,20%	0	0,00%	1	2,20%	0,526
Support	22	47,80%	4	8,70%	26	56,50%	
Highly Support	18	39,10%	1	2,20%	19	41,30%	
Total	41	89,10%	5	10,90%	46	100,00%	

Table 2. The Relationship between Economic Access and Health Service Decision Determination

Economic Aspect	Health Care Decision Determination				Total	Percentage	Sig.
	Medical	Percentage	Traditional Treatment	Percentage			
Fairly Support	1	2,20%	1	2,20%	2	4,30%	0,165
Support	14	30,40%	2	4,30%	16	34,80%	
Highly Support	26	56,50%	2	4,30%	28	60,90%	
Total	41	89,10%	5	10,90%	46	100,0%	

Table 3. The Relationship between Social Access and Health Service Decision Determination

Social Aspect	Health Service Decision Determination						Sig.
	Medical	Percentage	Traditional Treatment	Percentage	Total	Percentage	
Not Support	1	2,20%	0	0,00%	1	2,20%	0,343
Fairly Support	2	4,30%	1	2,20%	3	6,50%	
Support	26	56,50%	4	8,70%	30	65,20%	
H i g h l y Support	12	26,10%	0	0,00%	12	26,10%	
Total	41	89,10%	5	10,90%	46	100,00%	

many as 30 people or 65.2%, 4) the frequency distribution of the habits of the community seeking health services of the respondents was mostly medical as many as 44 people or 95.7%, 5) the frequency distribution of the most qualified places of treatment according to the community of respondents was mostly medical treatment as many as 25 people or 54.3%, 6) the frequency distribution of the determination of health service decisions according to respondents was mostly medical treatment as many as 41 people or 89.1%.

The results of cross-tabulation of geographic access with Health Service Decision Determination obtained the most is geographic access in the supportive category and health service decisions choose medical treatment as many as 22 people or 47.8%. The results of the chi square test obtained a sig value of $0.526 > 0.05$, so it was concluded that there was no significant relationship between geographic access and Health Service Decision Determination in Semarang.

The results of cross-tabulation of economic access with the Determination of Health Service Decisions obtained the most were economic access in the very supportive category, and health service decisions chose medical treatment for as many as 26 people, or 56.5%. The results of the chi-square test obtained a sig value of $0.165 > 0.05$, so it was concluded that there was no significant relationship between economic access and the Determination of Health Service Decisions in Semarang.

The results of cross-tabulation of social access with Health Service Decision Determination obtained the most is economic access in the very supportive category and health

service decisions choose medical treatment for as many as 26 people or 56.5%. The chi-square test obtained a sig value of $0.343 > 0.05$, so there was no significant relationship between social access and Health Service Decision Determination in Semarang. The results of the frequency distribution show the following: 1) in terms of geographic access, most respondents gave a fairly supportive assessment category of 23 people or 38.3%, 2) economic access, most respondents gave a very supportive assessment category of 33 people or 55.0%, 3) social access, most respondents gave a very supportive assessment category of 36 people or 60.0%, 4) the frequency distribution of the community's habits in seeking health services for respondents was mostly medical, 50 people or 83.3%, 5) the frequency distribution of the most qualified places of treatment according to the community respondents was mostly traditional medicine, 33 people or 55.0%, 6) the frequency distribution of health service decision-making according to respondents was mostly medical treatment, 33 people or 55.0%.

The results of cross-tabulation of geographic access with Health Service Decision Determination obtained the most is geographic access in the fairly supportive category and health service decisions choose medical treatment for as many as 17 people or 28.3%. The results of the chi-square test obtained a sig value of $0.085 > 0.05$, so it was concluded that there was no significant relationship between geographic access and Health Service Decision Determination in Gorontalo.

The results of cross-tabulation of geographic access with Health Service Decision Determination obtained that economic access is the very supportive category, and health service

Table 4. The Relationship between Geographic Access and Health Service Decision Determination

Geographic Aspect		Health Service Decision Determination					Sig.	
		Medical	Percentage	Traditional Treatment	Percentage	Total		Percentage
Highly Support	Not	1	1.70%	0	0.00%	1	1.70%	0,085
Not Support		2	3.30%	1	1.70%	3	5.00%	
Fairly Support		17	28.30%	6	10.00%	23	38.30%	
Support		9	15.00%	11	18.30%	20	33.30%	
Highly Support		4	6.70%	9	15.00%	13	21.70%	
Total		33	55.00%	27	45.00%	60	100.00%	

decisions chose medical treatment for as many as 22 people, or 66.7%. The results of the chi-square test obtained a sig value of $0.009 < 0.05$, so it is concluded that there is a significant relationship between economic access and Health Service Decision Determination in Gorontalo.

The results of cross-tabulation of social access with Health Service Decision Determination obtained the largest category of social access is very supportive, and health service decisions choose medical treatment for as many as 19 people, or 31.7%. The results of the chi-square test obtained a sig value of $0.871 > 0.05$, so it was concluded that there was no significant relationship between social access and Health Service Decision Determination in Gorontalo. Based on the test results, the difference in the average answer to health service decisions between Java Island and non-Java Island communities is 0.341, and the t-value is 4.284, with a sig. value of 0.000. The sig. value is $0.000 < 0.05$. So H_0 is rejected, and H_a is accepted, meaning a significant difference in health service decisions between Java Island and non-Java Island communities.

Based on the research results, there was a

significant difference in the decision to choose health services between the people of Semarang (Java) and Gorontalo (Outside Java) suburbs, with a t-value of 4.284 and a sig value of 0.000. Statistical calculations in each research area (suburban Java and suburban outside Java) concluded no relationship between access to health services in geographic and social access. In economic access, there was no relationship in the Java suburban area (Semarang), and there was a relationship in the suburban area outside Java (Gorontalo) with the determination of the decision to choose health services by the family.

This research activity in the suburban areas of Java and outside Java with access to health services on geographic access (distance, ease of getting transportation, and available road/infrastructure conditions) and social aspects (community habits in seeking health services, perspectives on the most qualified place to seek treatment, the most satisfying and trusted health service place) has no relationship with the health services decision determination by families. It is because the geographical factor is not a main obstacle or a difficulty that can be overcome because road and transportation access to the outskirts of the

Table 5. The Relationship between Economic Access and Health Service Decision Determination

Economic Aspect		Health Service Decision Determination					Sig.	
		Medical	Percentage	Traditional Treatment	Percentage	Total		Percentage
Fairly Support		6	10.00%	2	3.30%	8	13.30%	0,009
Support		5	8.30%	14	23.30%	19	31.70%	
Highly Support		22	36.70%	11	18.30%	33	55.00%	
Total		33	55.00%	27	45.00%	60	100.00%	

Table 6. The Relationship between Social Access and Health Service Decision Determination

Social Aspect	Health Service Decision Determination				Total Percentage		Sig.
	Medical	Percentage	Traditional Treatment	Percentage			
Fairly Support	2	3.30%	1	1.70%	3	5.00%	0,871
Support	12	20.00%	9	15.00%	21	35.00%	
Highly Support	19	31.70%	17	28.30%	36	60.00%	
Total	33	55.00%	27	45.00%	60	100.00%	

city (suburban areas) both in Java and outside Java are currently relatively good. Likewise, with social and cultural access, the common habit of the community in seeking treatment is in medical health services that provide health insurance programs from the government (National Health Insurance program) because from several respondent assessments (quality, satisfaction, cost, available information) it is considered quite satisfactory. The results can be said to be in line with research that states no boundaries between supporting and inhibiting factors. Service utilization is facilitated by behavioral factors (awareness, beliefs, and behavior) possessed by individuals (pregnant women), families, communities, and those closest to them in health services for mothers and newborns in Ethiopia (Alemayehu et al., 2021).

The research area, part of Indonesia's geographical conditions with many regions and islands with diverse characteristics, faces its own challenges in providing health services. Within the region, in rural or remote areas, more complicated health service access factors will be obtained. The results of the study stated that the level of accessibility to health services is significantly lower in rural, mountainous, and coastal areas compared to metropolitan areas (Sangwan, 2022; Sangwan et al., 2024). In reality, several unresolved public health problems are access problems (Mubasyiroh, 2016). Many studies have stated that the high incidence of MMR and IMR is due to one of the factors being difficult access to health services. Similar studies have concluded that several barriers to accessing health services include geographic location, travel time, availability of transportation facilities, and referral access (Adane et al., 2022; Yan Li et al., 2023; Liknaw

et al, 2021; Preety et al., 2022). Ease of access is often a priority in location considerations where location convenience is seen geographically, ease of obtaining other public facilities, and proximity to the community are important points for ease of access to health services (Rieke et al., 2023; Bandita & Nandita, 2020; Mariam & Yusuke, 2019).

In contrast to previous research results, cultural factors related to habits, community environment, and existing values can also determine healthcare patterns and health services chosen (Handayani et al., 2019). According to several research results, there are several obstacles in accessing health services, including geographic location, travel time, availability of transportation facilities, access to referrals, aspects of diagnostic accuracy and drug availability, shortage of health workers, where ease of access is often a priority in consideration (Yilin et al., 2022; Siqin et al., 2021; Michael et al., 2022; Jean et al., 2020; Desire & Neha, 2021). Other studies related to culture, state that a combination of strategies at various levels of health services is needed to ensure services are accessible, culturally appropriate, acceptable, and affordable (Resham & Yibeltal, 2022; Sara et al., 2020; Cory & Lindsey, 2021; Bryony et al., 2021). According to Vernon M et al, religious norms, sociocultural and matriarchal figures, and gender stereotypes are important influences on the acceptance and utilization of maternal health services, including childbirth in health facilities and contraception (Vernon et al., 2020). So it takes support from health workers related to the cultural competence of certain communities, such as the disabled community, the LGBTQ community, and refugees (Alexandros et al., 2022; Hathairat et al., 2020). The results of this

study are not in line with previous studies. It may be due to different research time conditions. Where nowadays, health services are more widely available through health insurance by the government called JKN (National Health Insurance).

In economic access, we concluded that there was no relationship in the suburban areas of Java (Semarang). But, there was a relationship in the suburban areas outside Java (Gorontalo) with the determination of health service decisions by families. Due to geographical access, the majority stated that it was fairly support (38.3%) from the choice of 5 criteria, namely very unsupportive, unsupportive, quite supportive, supportive, and very supportive. Population density, limited residential areas, and the number of health service facilities, especially private health services, are fewer outside Java than in Java. The conditions affect the transportation cost to seek health services. Although, the government's health insurance policy applies equally in Java and outside Java. Identical with the results of a study in Ethiopia, which provides evidence of the positive impact of community-based health insurance in Ethiopia, namely increasing the use of health services and reducing very large health expenditures (Yibeltal et al., 2023). The results of Dan Li et al's research concluded that the main determinants of inequality in determining the use of health services include marital status and economic status, including the service quality index observed in migrant worker groups in rural China (Dan Li et al., 2022; John et al., 2020).

The study results concluded there are significant differences in the decision to choose health services between the people of Semarang (Java) and Gorontalo (Outside Java). It was due to the difference in the answers of the most respondents in: 1) the habits of people seeking health services: in the Java suburban area (medical 95.7%, traditional medicine 4.3%) outside Java (medical 83.3%, traditional medicine 16.7%), 2) the most qualified place to seek treatment: in the Java suburban area (medical 54.3%, traditional medicine 45.7%) outside Java (medical 45.0%, traditional medicine 55.0%), 3) determining health service decisions: medical in the Java suburban area

(medical 89.1%, traditional medicine 10.9%) outside Java (medical 55.0%, traditional medicine 45%), from this data we can conclude that the choice of health services in suburban families in Java is more oriented towards choosing medical services such as hospitals, health centers, family doctors, and doctor's practice clinics. While in areas outside Java Island, there are still quite a lot of families who choose health services in traditional medicine, such as treatment to a shaman and the like. Cultural factors may be still quite influential, including customs and traditional leaders who are followed.

CONCLUSIONS

Based on the research results, there was a significant difference in health services decision determination between the people of Semarang (Java) and Gorontalo (Outside Java) suburbs, with a t-value of 4.284 and a sig value of 0.000. From the results of statistical calculations in each research area (suburban Java and suburban outside Java), we concluded that there was no relationship in access to health services in geographic and social access. While in economic access, we concluded there was no relationship in the Java suburban area (Semarang), and there was a relationship in the outside Java suburban area (Gorontalo) with the determination of the health services decision by families. There was a significant difference in health services decision determination between the Semarang (Java) and Gorontalo (Outside Java) suburban communities. The choice of health services in suburban families in Java is more oriented towards choosing medical services such as hospitals, health centers, family doctors, and doctor's practice clinics. While in areas outside Java, there are still quite a lot of families who choose health services in traditional medicine, such as treatment to a shaman and the like. Cultural factors, in this case, may still be quite influential, including customs and traditional leaders followed.

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