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Preferences, Needs, and Demand Analysis of Health Facilities Development

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Abstract: Health is one aspect that determines human living standards. Health is needed to support all life activities, and health facilities are required to provide a healthy community. This study aimed to identify and analyze the relationship between preferences, needs, and demands for developing health facilities in Bogor City. Data were collected in May 2023. A total of 201 research respondents participated in the study. The relationship test showed that the mother's occupation and preference had a significant positive relationship with the level of interest, and the mother's employment and level of interest had a significant positive relationship with the level of need. Monthly family expenditure had a significant negative association with the level of need, mother's age had a significant negative relationship with the demand for the construction of health facilities, and family size and grade of importance had a significant positive relationship with the demand for health facility development.

Keywords: health facilities, insurance ownership, quality of health services

JEL Classification: E30, G22, I18



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STATEMENT OF PUBLIC INTEREST

Health is a human right and one of the elements of welfare that the ideals of the Indonesian nation must realize. Improving the degree of public health plays an essential role in the formation of Indonesian human resources, increasing the resilience and competitiveness of the nation to support national development.

Previous studies have focused more on clinical evaluations that have been established. While this research focuses on areas with limited health facilities but a high population, it is essential to build health facilities. The results showed that the need variable on the importance level dimension had a significant positive relationship with the demand for health facilities. Community perceptions of the importance of facilities determine people's visits to health facilities for treatment.



1. Introduction

Health is a human right and an element of welfare that the ideals of the Indonesian nation must realize. This is in line with Law No. 40 of 2004, every citizen has fair access to quality and affordable health services (Kalijogo et al., 2019). Improving public health plays an essential role in forming Indonesian human resources (HR) and increasing the resilience and competitiveness of the nation to support national development (Islami et al., 2018; Rerung et al., 2021). Individuals improve their health status by investing in and consuming several health goods and services, and good health facilities are required to achieve good health conditions (Grossman, 2017).

Health is an important requirement for humans to sustain all activities of life. The phenomenon of people preferring to seek treatment abroad rather than domestic health services is a big challenge. The challenge is to improve quality in all fields, especially in the health sector. Communities need this, which will help health service providers determine strategies to meet community needs in the health sector (Haning et al., 2018). According to Wellay et al. (2018), the demand for healthcare is characterized by the level of actual consumption by an individual in the event of an illness or injury. This consumption could differ in accordance with demand factors such as income, cost of care, education, social norms and traditions, and the quality and appropriateness of the services provided.

Efforts to increase public health can involve investment in a country's development. In Indonesia, health service facilities include hospitals, health centers, private clinics, and individual doctors (Kaunang et al., 2020). Owing to the government's limitations in treating patients and the community's needs, clinics can be established as health facilities that the community can access (Natsir et al., 2020). Based on the type of service, the clinics were divided into Pratama and primary clinics. Pratama clinics provide essential medical services, whereas primary clinics provide basic and specialist medical services. The health services offered by these two types of clinics can be outpatient care, one-day care, inpatient care, and home care (Harijanto, 2018).

Public health is a pillar of nation-building. Therefore, development in the health sector is essential for increasing awareness, willingness, and ability to live healthily to achieve the highest degree of health (Isriawaty, 2015). The development of health facilities needs to focus on various aspects so that they can be accessed by the community and provide benefits for health business actors. These aspects can be identified by identifying preferences, needs, and requests for developing health facilities in an area. In addition, identifying the needs and demands of developing health facilities can be a guideline for understanding what consumers expect (in this case, health service users). Thus, consumers choose to build health facilities (Tjiptono, 2014).

Preferences are part of an individual's decision-making component. Individual features of decision-making include perceptions, attitudes, and values. The results of research conducted by Yu et al. (2017) found that patients' healthcare-seeking preferences were mainly influenced by healthcare providers' characteristics, illness severity, and sociodemographic characteristics. Health needs are defined as the physical and psychological deviations from healthy conditions. Needs assessments are critical to ensure that health services continue to be needed and identify new target populations that demonstrate unmet needs (Harrison et al., 2013). Meanwhile, the demand for health is the desire for health services supported by the ability and

willingness to utilize these health services (Haning et al., 2018). The use of services or demand for medical services plays a vital role in improving each person's health. The demand for health care is derived from the demand for health and is influenced by several factors, including price, income, and population (Ghorbani, 2021).

Previous research is related to need and demand analyses to evaluate clinics that have been established and show the level of satisfaction with health facility services (Kamal et al., 2022). This study analyzed community preferences, needs, and demands for constructing health facilities. The results of the analysis are expected to provide information to business actors who will build health facilities such as clinics to become the primary choice of consumers for treatment. The Ciparigi sub-district in Bogor City was selected as the research location for this study. Ciparigi Sub-District is one of the sub-districts in Bogor City with the largest population. However, health facilities are still limited; therefore, health facilities such as clinics can be constructed. Based on this, this study aims to identify and analyze preferences, needs, and demands for constructing health facilities in Ciparigi, North Bogor, and Bogor City.

2. Literature Review

2.1 Preference

Preference is an individual's tendency to choose something that is preferred by others. Several factors can influence consumer preferences, including product characteristics (Santoso et al., 2023), which are part of an individual's decision-making component. Individual components of decision-making include perceptions, attitudes, and values. These decisions influence each other during the decision-making process. The term preference comes from the word preference, which refers to interest in something. Preferences were defined as subjective tastes. Preference refers to the tendency to choose something based on wants, needs, interests, and likes or dislikes. The tendency of male and female patients to choose health service facilities can be influenced by economic conditions, health facilities, education, convenience, and others (Udeme & Orumie, 2021).

Factors related to health preferences that influence the decision to choose an alternative health facility are three components (Sarwono, 2019): (1) personality factors. This is caused by demographics (gender, age, and number of family members), social structure (education level, occupation, sociocultural status, and health beliefs), and (2) supporting factors. A need cannot be achieved without the resources of an individual. These support components consist of income, knowledge, health insurance, health facilities, personnel availability, service waiting time, and accessibility; and (3) need factors. The need is an individual stimulus for choosing an alternative health-service facility. These needs depend on an individual's perception of the disease and evaluation of health facilities.

2.2 Need

Needs are human desires for goods and services that must be met to survive. Needs describe basic human needs such as food, clothing, shelter, education, health, and recreation. Everyone has different needs for utilizing health facilities. Humans generally choose products that meet their needs and satisfy their needs. In other words, human needs are rational regarding how much money they spend. Health needs are factors that influence physical and psychological deviation from healthy conditions (Haning et al., 2018). According to Shaikh and Hatcher (2005), human needs may differ depending on the factors that influence them.

The need for health services continues to change with the rapid pace of healthy lifestyles, knowledge, and economic growth (Dharmesh & Shirmali, 2014). The development of health-conscious consumer behavior is rapid, thereby increasing consumer awareness in the health and medical care industry (Lee, 2018). However, according to Bamfo and Dogbe (2017), different members, health-conscious consumer behaviors, and various factors influence consumers in choosing health facilities. The type of disease experienced by consumers is an important factor that significantly influences hospital choice.

The quality of services provided by health facilities affects satisfaction; therefore, consumers will re-select these health facilities (Zamil et al., 2012). Communication between service providers and patients effectively increases satisfaction and influences consumer returns (Rugare et al., 2013). The quality of services owned by health facilities causes patients to choose hospitals to receive health services. One factor that influences consumer use of a product is its goods, services, and recommendations from other people (Yousapronpaiboon & Johnson, 2013).

2.3 Demand

Demand is the desire for a specific product and is supported by its ability and willingness to buy. The demand for health is highly influential on the utilization of health services. Utilizing health services is a behavior or action whereby individuals seek health services. Utilizing health services is essential to society and aims to assist in determining health status (Andersen et al., 1997).

A total of 24 subthemes or factors were identified and classified into health system, insurer, healthcare provider, and healthcare recipient themes. Poor monitoring and control, the fee-for-service payment system, the limited role of insurance companies, insufficient monitoring of insurance companies, the educational nature of our health centers, healthcare providers' interests, and patients' information gap were some important factors in the induced demand for healthcare services (Seyedin et al., 2021). Demand for health is the desire for health services that are supported by the ability and willingness to utilize these health services (Shaikh & Hatcher, 2005).

2.4 Medical Facility

Health service facilities are used to organize health service efforts in terms of promotive, preventive, curative, and rehabilitative activities carried out by the government, local government, and the community (Permenkes RI No. 75, 2014). Good health services are inseparable from the excellent work attitude of health workers toward people who need everyone to have the right to choose quality health service facilities. People's tendency to choose a health agency is closely related to the health services provided by that agency. With the development of science and technology, there have been many choices for goods and services in all fields, including health. The health sector is one of the most rapidly growing sectors.

Service facilities for consumers must be considered because customers often see service quality in the physical evidence or service facilities provided. The service facility environment helps shape customer feelings toward service personnel. The better the service facilities provided, the higher the comfort felt by the consumers. Service facility customers often see that service quality positively influences customer satisfaction and loyalty (Foster, 2010).

Government Regulation Number 47 of 2016 concerning Health Service Facilities states that providing affordable health service facilities for all levels of society must consider various aspects, such as service needs, population size, area size, and accessibility. The increase in population is directly proportional to the increase in the population's need for service facilities, including health service facilities.

The urgency to increase the quantity and quality of health service facilities in an area is to meet needs and improve the population's welfare through adequate and affordable health facilities (Sadali et al., 2022). The availability of service facilities can be studied in terms of location, quality, and quantity, all of which are closely related to public welfare. Health facilities are among the basic facilities whose availability is crucial, considering that health is a fundamental human right that fulfills needs and families (Sadali et al., 2018).

3. Conceptual Framework

Referring to the literature on location, quality, and quantity, it was hypothesized that family characteristics are related to community preferences, needs, and demands for developing health facilities. Preferences are related to the needs and demands of the community regarding health development. Furthermore, it is hypothesized that need relates to a community's demand to construct health facilities. The conceptual framework is illustrated in Figure 1.

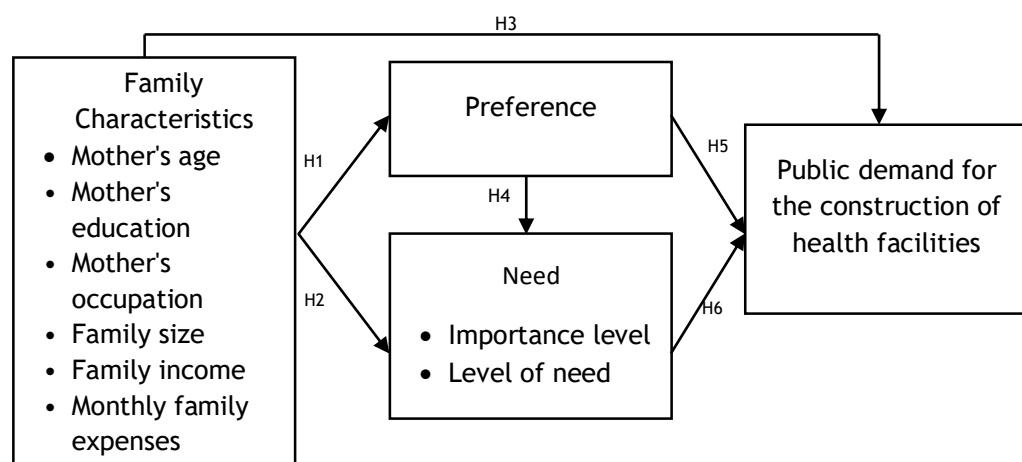


Figure 1. Conceptual framework

Based on the figure 1, the research hypothesis is described as follows:

H1: Family characteristics have a significant positive relationship with preference

H2: Family characteristics have a significant positive relationship with needs

H3: Family characteristics have a significant positive relationship with demand community towards the development of health facilities

H4: Preferences have a significant positive relationship with needs

H5: Preference has a significant positive relationship with community demand for the development of health facilities

H6: Need has a significant positive relationship with community demand for the development of health facilities

4. Methods

4.1 Participant

This research is a quantitative descriptive study with a cross-sectional design. It does not monitor or compare changes over time (Aaker et al., 2013). This research was conducted in Ciparigi Village, North Bogor, Bogor City, West Java. Data were collected in May 2023. Interviews were conducted with the housewives. Nonprobability sampling, particularly purposive sampling, was used in this study. Purposive sampling is a technique used to determine a research sample with certain considerations that aim to make the data more representative. Based on these conditions, the selected sample criteria were pregnant women and mothers with children aged 0 to 18 years who lived in Ciparigi Village, North Bogor, with a total sample of 201 people. Eight RWs were selected based on the densest population.

4.2 Measurement

This study used primary data sources obtained directly from respondents. Data were collected through interviews using a structured questionnaire that included information about respondents' identities, preferences, needs, and demands to construct health facilities. The questionnaire was developed based on Mareta (2016) and Haning et al. (2018). The preference variable consisted of five indicators with a Cronbach's Alpha 0.528. The questionnaire was measured using a two-point Guttman scale (1 = no, 2 = yes). The need and demand variables comprised 38 indicators with a Cronbach's Alpha of 0.934. The questionnaire was measured on an importance scale using a four-point Likert scale (1 = very unimportant, 2 = not important, 3 = important, 4 = very important). The needs scale questionnaire was measured using a four-point Likert scale (1 = really do not need it, 2 = do not need it, 3 = need it, 4 = really need it).

4.3 Analysis

Descriptive analyses were used to describe the variables studied systematically. Correlation analysis was used to determine the relationships among family characteristics, preferences, needs, and demands for the development of health facilities.

5. Findings

5.1 Respondent Characteristics

This study included 201 respondents with an average age in early adulthood (18-40 years). Table 1 shows that most respondents (94.5%) are married, and the rest are divorced. Most respondents' education was at the high school level (41.8%). Almost 50% of respondents had two children. Most (81.6%) of the respondents are unemployed.

Table 1. Wife's age, marital status, number of children, education, and occupation

Characteristics	n	%
Wife's age		
Early adults (18-40 years)	126	62.7
Middle adult (41-60 years)	68	33.8
Late adult (>60 years)	7	3.5
Marital status		

Characteristics	n	%
Married	190	94.5
Divorced	11	5.5
Number of children		
None	4	2.0
One	37	18.4
Two	90	44.8
Three	43	21.4
> 3	27	13.4
Education		
Not schooling	2	1.0
Primary school	49	24.4
Junior high school	63	31.3
Senior high school	84	41.8
Diploma	1	0.5
Post Graduate	2	1.0
Mother's occupation		
Unemployee	164	81.6
Laborer	8	4.0
Business owner	23	11.4
Private sector employee	1	0.5
Other	5	2.5

Table 2 shows that respondents in the study had a family size of less than four to more than seven people. More than half of the respondents (64.2%) had families with small family sizes (≤ 4 people). Regarding monthly income, the income of the respondents varied widely, from less than IDR 1,000,000 to over IDR 5,000,000, with an average respondent having an income of IDR 2,000,001 to IDR 3,000,000 below the City/Regency Minimum Wage (UMK) for Bogor City, namely IDR 4,639,429. As for expenses, a third of respondents (32.3%) had monthly family expenses of IDR 2,000,001 to 3,000,000.

Table 2. Family size, income, and expenses

Characteristics	n	%
Family size		
Small family (≤ 4 people)	129	64.2
Average family (5-7 people)	63	31.3
Large family (> 7 people)	9	4.5
Family income (rupiah per month)		
IDR $\leq 1,000,000$	23	11.4
IDR 1,000,001-2,000,000	59	29.4
IDR 2,000,001-3,000,000	52	25.9
IDR 3,000,001-4,000,000	32	15.9
IDR 4,000,001-5,000,000	28	13.9
IDR $> 5,000,000$	7	3.5
Family expenses (rupiah per month)		
IDR $\leq 1,000,000$	17	8.5
IDR 1,000,001-2,000,000	54	26.9
IDR 2,000,001-3,000,000	65	32.3
IDR 3,000,001-4,000,000	38	18.9
IDR 4,000,001-5,000,000	21	10.4
IDR $> 5,000,000$	6	3.0

5.2 Community Preferences for the Development of Health Facilities

Table 3 shows that most of the respondents (91.5%) had health insurance for the type of BPJS type (94.0%). More than half of the respondents (64.7%) preferred self-medication when sick by buying over-the-counter medicines or pharmaceutical drugs first, and when the respondent's child was sick, more than half (52.7%) chose self-medication, and less than half (44.8%) chose to check the child to a health facility immediately.

Table 3. Ownership of insurance and steps taken when sick

Variables	n	%
Insurance ownership		
Yes	184	91.5
No	17	8.5
Type of Insurance		
BPJS (Social Health Insurance Body)	184	91.0
No insurance	17	8.5
Steps were taken when the family member was sick		
Just ignore it	6	3.0
Self-medicate	130	64.7
Go to a health facility	65	32.3

Based on the results of the interviews, respondents chose to go to a health facility for treatment when their illness had lasted for more than 2 to 3 days and had not healed. Most of the diseases experienced by respondents who needed treatment at health facilities included fever, flu and cough, asthma, dizziness and nausea, hypertension, itching, diarrhea, toothache, gout, and stomach ulcers. A small number of respondents also suffered from other types of diseases, such as stomach and back pain, inflammation, hemorrhoids, allergies, cholesterol, joint pain, eye pain, tonsillitis, hepatitis, vertigo, diabetes, pinched nerve, anemia, smallpox, lung, keloid, and TB. Other types of procedures, such as pregnancy checks, childbirth, tumor surgery, bone fractures, and gland surgery, were also reasons for respondents seeking treatment at health facilities.

Table 4 shows that most of the respondents (76.6%) were treated using health insurance with the type of insurance used, namely BPJS (Social Health Insurance Body). Likewise, when a child is sick, more than half (67.7%) of respondents choose to use health insurance with the type of insurance used, namely BPJS. Most of the Ciparigi community visited the public health center for treatment, and 33.8% chose the primary clinic. Some respondents also visited other health facilities, such as practicing doctors, public hospitals, private hospitals, main clinics, therapists, and midwives' clinics, as their first choice when someone is sick (Table 4).

Table 4. Behavior of using insurance, the type of insurance used, and using health facilities

Variable	n	%
Use of insurance in medical treatment		
Yes	154	76.6
No	47	23.4
Insurance used		
BPJS/KIS (Indonesia Insurance Card)	154	76.6
Not using insurance	47	23.4
Medical Facility		

Variable	n	%
Public health center	122	60.7
Primary clinic	68	33.8
Other	11	5.5

Table 5 shows that respondents' WTP (Willingness to Pay) for treatment if they did not use insurance varied widely, ranging from not paying to be willing to pay more than IDR 250,000. One-third of respondents (31.8%) stated that they could pay for medical treatment for less than IDR 50,000, whereas when a child was sick, one-third of respondents (30.3%) were willing to pay medical expenses of IDR 50,000 to IDR 100,000.

Table 5. Willingness to pay medical expenses

Variable	n	%
Not paying	9	4.5
<IDR 50,000	64	31.8
IDR 50,001 - IDR 100,000	62	30.8
IDR 100,001 - IDR 150,000	39	19.4
IDR 150,001 - IDR 200,000	10	5.0
IDR 200,001 - IDR 250,000	10	5.0
> IDR 250,000	7	3.5

Table 6 shows that most respondents (94.5%) are willing to seek treatment at the new clinic, while the rest (5.5%) are not willing to seek treatment at the new clinic because they are too far from home. More than half of the respondents (79.6%) were willing to accept advertisements via WhatsApp and Instagram for clinical promotion, whereas the remainder (20.4%) were not willing to accept advertisements because they did not have WhatsApp and/or Instagram.

Table 6. Willingness to seek treatment at the new clinic

Answer	n	%
Yes	190	94.5
No	11	5.5

5.3 Analysis of Community Needs for the Development of Health Facilities

The selection of health facilities was determined by eight factors: distance, quality of service, completeness of equipment, friendliness of health workers, affordability, easy and fast service, availability of medicines, and efficient payment processes. The results of the research on the importance level in Table 7 show that families in the Ciparigi area indicated that the most important factors owned by the clinic were friendly health workers (69.2%), quality of service (62.2%), complete equipment (54.7%), affordability rates (52.7%), a hassle-free payment process (52.7%), and medical personnel providing medicines (51.7%). Two other factors at the level of importance, namely, easy and fast service (50.7%) and distance (49.3%), were included in the critical category.

When juxtaposed with the level of importance, the results of the level of need showed that families in the Ciparigi area needed only one factor, namely friendly health workers (51.2%). Meanwhile, the other seven factors were in the need category, namely the payment processes that were not complicated (59.7%), distance (58.7%), easy and fast service (55.7%), medical personnel who provide medicines (54.7%), service quality (54.2%), complete equipment (50.7%), and affordable rates (49.8%) (Table 7).

Table 7. The level of importance and need in the selection of health facilities that are frequently visited

Defining factor	Level of Importance					Level of Need				
	VU	NI	I	VI	Total	RDN	DN	N	RN	Total
Distance	0.0	7.0	49.3	43.8	100	0.0	7.5	58.7	33.8	100
Service quality	0.0	0.0	37.8	62.2	100	0.0	0.0	54.2	45.8	100
Complete equipment	0.0	4.0	41.3	54.7	100	0.0	4.5	50.7	44.8	100
Friendly health workers	0.0	1.0	29.9	69.2	100	0.0	1.5	47.3	51.2	100
Affordable rates	0.0	7.0	40.3	52.7	100	0.0	6.5	49.8	43.8	100
Easy and fast service	0.0	0.0	50.7	49.3	100	0.0	1.0	55.7	43.3	100
Medical personnel provide medicines	0.0	3.5	44.8	51.7	100	0.0	3.5	54.7	41.8	100
The payment process is not complicated	0.0	0.5	46.8	52.7	100	0.0	0.5	59.7	39.8	100

Note: VU = Very Unimportant; NI = Not Important; I = Important; VI = Very Important; RDN = Really Don't need It; DN = Don't Need It; N = Need It; RN = Really Need It

This study had five public facilities: a canteen, children's playground, large parking area, comfortable waiting room, and clean bathrooms. Based on the level of importance, 53.2% of the families stated that a clean bathroom was at a critical level. Four other public facilities, such as the canteen (73.1%), a large parking area (59.2%), a comfortable waiting room (58.7%), and a children's play area (57.2%), were at a critical level. At the level of need, all public facilities, namely canteens (71.6%), comfortable waiting rooms (64.2%), large parking lots (58.7%), clean bathrooms (58.6%), and children's play areas (57.4 %) is at the level of need (Table 8).

Table 8. The level of importance and need of public facilities for health facilities

Facilities	Level of Importance					Level of Need				
	VU	NI	I	VI	Total	RDN	DN	N	RN	Total
Canteen	0.0	14.4	73.1	12.4	100	0.0	18.9	71.6	9.5	100
Children's play area	0.5	24.4	57.2	17.9	100	0.0	27.9	57.2	14.9	100
Spacious parking lot	0.0	12.4	59.2	28.4	100	0.0	13.9	58.7	27.4	100
Comfortable waiting room	0.0	1.0	58.7	40.3	100	0.0	2.0	64.2	33.8	100
Clean bathroom	0.0	0.5	46.3	53.2	100	0.0	1.0	58.7	40.3	100

Note: VU = Very Unimportant; NI = Not Important; I = Important; VI = Very Important; RDN = Really Don't need It; DN = Don't Need It; N = Need It; RN = Really Need It

Table 9 also shows additional facilities, including AC, Wi-Fi, 24-hour services, home-visit services, and pharmacies. Based on the level of importance, 56.2% of families in Ciparigi stated that 24-hour services were critical. The other four additional facilities, namely pharmacies (62.7%), air conditioning (58.2%), home visit services (53.7%), and Wi-Fi (51.7%), were at a critical level. The results for the level of need (Table 9) show that all additional facilities were at the level of need, namely AC (63.2%), pharmacy (63.2%), Wi-Fi (57.2%), 24-hour service (57.2%), and home visit service (55.2%).

Table 9. Interest level of importance and need for additional facilities at health facilities

Facilities	Level of Importance					Level of Need				
	VU	NI	I	VI	Total	RDN	DN	N	RN	Total
Air conditioning	0.0	26.4	58.2	15.4	100	0.0	25.9	63.2	10.9	100
Wi-Fi	1.0	36.3	51.7	10.9	100	1.5	33.3	57.2	8.0	100
24-hour service	0.5	1.0	42.3	56.2	100	0.5	1.0	57.2	41.3	100
Home visit service	0.5	28.4	53.7	17.4	100	0.5	27.9	55.2	16.4	100
Pharmacy	0.0	4.0	62.7	33.3	100	0.0	2.5	63.2	34.4	100

Note: VU = Very Unimportant; NI = Not Important; I = Important; VI = Very Important; RDN = Really Don't need It; DN = Don't Need It; N = Need It; RN = Really Need It

Table 10 shows that more than half of the research respondents said that the choice of the health facility they frequently visited was due to satisfactory service (57.2%). In addition, the second highest percentage stated that respondents chose health facilities because of two factors: familiarity with doctors and satisfactory service (31.8%).

Table 10. Determining factors in visiting a health facility

Driven Factors to visit health facility	n	%
Already know the doctor	22	10.9
Satisfying service	115	57.2
Already know the doctor and satisfactory service	64	31.8

5.4 Analysis of Community Demand for Development of Health Facilities

Community demand for health facilities was measured by the time of the respondent's last visit to the public health facility for both the respondent and their child (Table 11). This study focused on the respondents' visits to health facilities over the last six months. Based on the data analysis results, most respondents or their families (59.7%) visited health facilities in the last six months.

Table 11. Visits to health facilities in the last six months and priority choice of health facilities

Visit and Medical Facilities	n	%
Visits to health facilities (last six months)		
Visit	120	59.7
Did not visit	81	40.3
Medical Facility		
Outpatient care/ polyclinic	110	54.7
Hospitalization	21	10.4
Emergency services	46	22.9
Integrated mother and child	15	7.5
Pharmacy	1	0.5
Laboratory	2	1.0
Medical checkup	4	2.0
Nutrition	2	1.0

The demand for health services in Ciparigi was measured by the respondents' priority choices from the list provided by the researchers. Some of the health facilities asked

by the respondents were as follows: outpatient/polyclinic services, inpatient services, emergency services, integrated maternal and child services, integrated intensive inpatient services, pharmaceutical services, radiology services, laboratory services, medical cosmetic services, medical checkup services, physiotherapy services, nutrition services, mental health services, daycare services (childcare), and others. The results showed that the priorities, the majority of which were selected in order of the highest percentage, were outpatient/polyclinic services (54.7%), emergency services (22.9%), and inpatient services (10.4%). Only a small percentage of respondents considered medical checkups (2%), laboratories (1%), nutrition (1%), and pharmacy (0.5%) services as health facilities that respondents wanted (Table 11).

5.5 Relationship between Family Characteristics, Preferences, Level of Interest, Level of Need, and Community Demand for Health Development

The results of the correlation analysis (Table 12) showed that the mother's occupation and preference had a significant positive relationship with the level of importance. This shows that working mothers and a high preference for health facilities increased their interest in building health facilities. The mother's occupation and level of importance had a significant positive relationship with the level of need. Thus, families with working mothers and a high level of importance will increase their need to construct health facilities. Monthly family expenditure has a significant negative relationship with the level of need. This means that the higher the family expenditure, the smaller the need to construct health facilities.

Table 12. Relationship between family characteristics, preferences, level of interest, level of need, and community demand for the construction of health facilities

Variables	Preference	Level of interest	Level of need	Demand
Mother's age	0.069	0.048	0.037	-0.215**
Mother's education	-0.029	-0.013	-0.055	0.049
Mother's job	-0.015	0.191**	0.262**	0.053
Family size	-0.087	0.104	0.090	0.241**
Family income	-0.035	-0.132	-0.138	0.067
Monthly family expenses	0.054	-0.077	-0.190**	0.121
Preference	1	0.198**	0.121	0.123
Level of interest		1	0.803**	0.161*
Level of need			1	0.116
Demand				1

Note: ** significant at p-value<0.05

Maternal age has a significant negative relationship with demand. This shows that the older the mother, the lower the demand for health facilities. Family size and level of importance had a significantly positive relationship with community demand for the construction of health facilities. This means that the greater the number of family members and the higher the interest in health facilities, the higher the community's demand for building health facilities.

6. Discussion

This study's preferences were based on insurance ownership, use of insurance for treatment, and willingness to pay for medical expenses. The results showed that most respondents had health insurance of the type of BPJS insurance and used it for treatment at health facilities. Changes in the service system from the general customer category to the BPJS Health participant category have an impact on reducing the number of visits by general participants and increasing visits by BPJS Health participants (Mardiati et al., 2018). The shifting of BPJS service system affect the waiting time for services (Lestari & Djamaludin, 2017). Thus, there is a discrepancy between customers' wishes and expectations of customers (Anwar et al., 2019).

The results showed that respondents chose to go to a health facility for treatment when their illness had lasted for more than 2 to 3 days and had not healed. When sick, more than half of the respondents chose to self-medicate by buying over-the-counter medicines or pharmaceutical drugs first, while the other half chose to go straight to a health facility. Adequate health facilities are needed to improve communities' health and nutritional status. This can be realized if there is simultaneous government and private support. Health facilities owned by an area reflect the quality of the health services that can be provided to residents. To fulfill the right to health, the state must ensure that health facilities, goods, and services are available and sufficient. The availability in question is the presence of an adequate number of professional health workers (adequate ratio per population), sufficient and well-functioning health facilities, essential medicines, and adequate health interventions (Fuady, 2014).

The results showed that most respondents visited the puskesmas for treatment, and the other respondents chose the primary clinic. Some respondents also visited health facilities, such as practicing doctors, public hospitals, private hospitals, primary clinics, therapists, and midwives' clinics, as their first choice when sick. Health development faces many problems, including quality, equity, affordability, and poor health service performance. Dissatisfaction with health services is more prominent in government outpatient services at hospitals, health centers, and auxiliary health centers (pustu) than in private services in hospitals, clinics, or treatment centers, and practicing doctors/midwives/nurses (Sulistyorini & Purwanta, 2011).

The results showed that respondents' WTP for treatment if they did not use insurance varied widely, ranging from not paying to being willing to pay more than IDR 250,000. In this study, one of the three respondents stated that they could pay medical expenses if they were less than IDR 50,000. Willingness to pay or willingness to pay is the willingness of users to issue rewards for the health services they receive or can also be interpreted as the maximum amount someone is willing to pay; in this study, willingness to pay is still relatively low because economically there are still limitations to fulfilling health efforts so that the construction of facilities health can also consider paying with health insurance (Juliasih & Hardy, 2013). This study measured two dimensions: level of importance and level of need. The results showed that families in the Ciparigi area said that the factors in choosing a health facility that were very important and needed to have a health facility were friendly health workers, quality of service, and complete equipment. The results of this study are consistent with those of Sulistyorini and Purwanta (2011). The factors that influence the utilization of health service facilities are perceptions of the quality of health services, such as service time at service facilities. Furthermore, the perception of health costs in private health service facilities is related to their utilization of health service facilities (Yusuf & Awwaliyah, 2018).

The study results show that public facilities and additional facilities that are important for health facilities are clean bathrooms, availability of a canteen, and 24-hour services. Many studies have proven that the ideal allocation of resources in health services and the availability of facilities can ensure that many residents have equal access to health services when needed (Kreng & Yang, 2011; Misnaniarti et al., 2017). The availability of health-service facilities allows individuals to use health services (Dahl et al., 2015; Kehusmaa et al., 2012; Misnaniarti et al., 2017). The community wants additional facilities such as air conditioning and Wi-Fi. This aims to increase the comfort of the community in a health-facility environment. Quality of service is a determining factor in a community's utilization of health services. Communities will feel comfortable using health services if the services the provider provides meet their needs (Belaid et al., 2015).

Demand for health facilities was measured as the time of the respondent's last visit to the public health facility for himself and his children. This study focused on the respondents' visits to health facilities over the last six months. The data analysis showed that most respondents or their families had visited health facilities in the last six months. The relationship between hospital layout and improving care processes, increasing medical efficiency, and reducing health care costs (Zhou et al., 2022).

Research shows that the priorities chosen by the community in requesting the construction of health facilities, ordered from the highest percentage, are outpatient or polyclinic, emergency, and inpatient services. General considerations in selecting health facilities for patients with routine needs include aspects of convenience related to facilities and quality related to services. In general, patients with routine needs (e.g., control, medical checkups, minor ailments, and children's services) have general considerations in choosing a health facility, namely, aspects of convenience related to facilities and aspects of quality related to services (friendliness of staff, communication, and speed). Some patients choose health facilities after receiving recommendations from relatives or acquaintances. Self-evaluation and evaluation of others are also essential in choosing a health facility. Patients also need a reliable doctor (National Committee on Sharia Economics and Finance, 2021).

The relationship test results showed that mothers' occupations and preferences had a significant positive relationship with needs (importance-level dimension). Mothers' occupations and a significant positive relationship with needs (need-level dimension). Monthly family expenditure has a significantly negative relationship with the level of need (need-level dimension). Maternal age had a significant negative relationship with the demand for health facility development. Family size and needs (importance level dimension) have a significant positive relationship with the demand for health facility development. Hawkin and Mothersbaugh (2020) stated that work also influences consumption patterns, meaning that needs are different for different occupational groups. Occupational groups and positions have a particular interest tendency towards products of goods and services, which determine the family's purchasing power.

Public awareness of the importance of health and getting more adequate health services is increasing, so people are becoming increasingly aware of the importance of insurance, especially in government and private insurance (Limaku, 2019). Furthermore, the determination of tariffs for health facility services needs to consider the target market share, presence of competitors, market situation, and efficient and effective operational costs so that the perceived value of the benefits of service products is balanced or satisfactory for patients. Low tariffs are not necessarily a good strategy because they can harm health facilities. It is necessary to observe the price

of a product before it enters the market. The lower the hospital rate, the higher the patients' tendency to choose a hospital will increase (Kotler & Armstrong, 2011).

Previous studies have shown that officers who provide health services are a critical element of the marketing mix of health services in health facilities. Health service officers exhibit good performance, quality, professionalism, and commitment. To realize professional and quality officers, employees must start with employee recruitment, education, and training for those directly related to consumers, corporate culture, and those directly related to marketing activities (Irmawati, 2015). The results of Yamini's research (2022) show that the quality of service and diseases encountered influence the choice of hospitals. Mareta (2016) stated that some respondents chose to go to Puskesmas as a health service facility they used for treatment. Furthermore, Solang (2017) stated that the competition for patient interest in choosing private health facilities as health service facilities can be influenced by patient attitudes towards health facilities, brand image, perceived value, and perceived quality. The limitations of this study are that it focuses only on identifying preferences, needs, and requests for the development of health facilities; therefore, it does not measure existing health facilities.

7. Conclusion

Most respondents had health insurance for the type of BPJS insurance and used BPJS insurance for treatment at health facilities. Most respondents visited the Puskesmas (Community Health Center) for treatment, one-third chose the Pratama clinic, and a small number chose other health facilities. If they did not use insurance, the respondents' WTP for treatment varied widely, ranging from not paying to being willing to pay more than IDR 250,000. Most of the respondents were willing to seek treatment at a new clinic. Respondents prioritized health facilities with the following criteria: friendly health workers, quality service, complete equipment, affordable rates, and a hassle-free payment process—public and additional facilities with the criteria of clean bathrooms, 24-hour services, and pharmacy availability. In addition, respondents mentioned that the choice of health facilities they frequently visited was due to satisfactory. The results showed that outpatient/polyclinic, emergency, and inpatient services are prioritized.

The relationship test results showed that mothers' occupations and preferences had a significant positive relationship with needs (importance-level dimension). Mothers' occupations and a significant positive relationship with needs (need-level dimension). Monthly family expenditure has a significantly negative relationship with the level of need (need-level dimension). Maternal age had a significant negative relationship with the demand for health facility development. Family size and needs (importance level dimension) have a significant positive relationship with the demand for health facility development.

8. Recommendation

Health facility development needs to focus on ease of access to the community, such as costs and distance. Payments with insurance also need to be considered, given the increasing number of BPJS insurance users. The construction of health facilities in Ciparigi Village, Bogor City, can be conducted considering the market potential of this area, as seen from the analysis of community preferences, needs, and demands. In structuring health facilities, it is best for health business actors and the government to improve the serviceability of health facilities, such as service quality, standard requirements for facilities, health workers (HR), and management efficiency. Further

research should be conducted with male respondents to obtain a more detailed description of the community's preferences, needs, and demands regarding the construction of health facilities.

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