

Determinants of Factors Associated With Community Demand for Health Services at Pintu Padang Health Center, South Tapanuli Regency

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Article Info

Article history:

Received January 16, 2023

Revised February 18, 2023

Accepted April 12, 2023

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ABSTRACT

Demand for health services is one of the most important and influential factors in a health service, Demand (demand) can be in the form of goods or services used or purchased by patients. The purpose of this study was to determine the relationship between information technology, values and norms and accessibility to health services at the Pintu Padang Health Center. Measurements in this variable were carried out using a questionnaire. This type of quantitative research with a Cross Sectional approach. The sample was 365 respondents. Sampling used the Accidental Sampling method. Univariate and bivariate analysis. The results of data analysis showed that there was a significant relationship between information technology and public demand with a p-value of 0.000 (<0.05), there was a significant relationship between values and norms to public demand with a p-value of 0.000 (0.05), there was a significant relationship between accessibility and public demand with a p-value of 0.000 (0.05). Further improve services that can make it easier for patients to get health services.

Keywords:

Demand, Health Services, Determinants

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1. INTRODUCTION

Health is a very crucial aspect of human life and is the human right of each individual. As stated in the Indonesian Law Number 36 of 2009 related to health, health is a human right and is an element of welfare that must be achieved in line with the ideals of the Indonesian state as stated in the 1945 Constitution and Pancasila [1]. This is in line with the RPJMN 2020-2024, where the goal to be realized is to improve the health and nutritional status of the people through health efforts and people's empowerment supported by equitable distribution of health services and financial protection [2]

The philosophy and foundation of the Pancasila state, especially the fifth principle, one of which is the right to obtain health. Law Number 36 of 2009 also explains that each individual has the same rights to gain access to resources in the health sector and to obtain affordable, safe and quality health services [3]

In some developed countries such as Japan, they have sophisticated and complete health technology that is tailored to the needs and level of demand of their people. In Japan itself has 5 types of health insurance tailored to the conditions of the community, the second is Australia, the health system in Australia has also achieved Universal Health Coverage. To achieve this health system, there are many ways that the Australian government has developed continuously over the past decades. Australia has a health care system funded by the government, with medical services subsidized through a universal national health insurance scheme, third is Malaysia, the health service system already uses high technology, Malaysia has won the Medical Travel Destination of the Year 2015 at the International Medical Travel Journal (IMTJ). No wonder Malaysia, especially Kuala Lumpur and Penang, is also one of the main destination countries for obtaining health services such as medical check-ups as well as tourist destinations, then Thailand since 2002 has achieved Universal Health Coverage as a health system in the country. Unlike Indonesia, where the Indonesian population has not all been able to enjoy and reach health services as it should, some Indonesians still access health services out of pocket [4]

Based on the 2019 Indonesian Health Profile, the total number of Health Center in Indonesia until December 2019 was 10,134 Health Center, which included 6,086 inpatient Health Center and 4,048 non-inpatient Health Center. This figure increased compared to 2018 which amounted to 9,993 (PKM inpatient = 3,623, PKM non-

inpatient = 6370). In the past five years, the number of Health Center has increased by an average of seventy Health Center per year [5]

Based on data from the Directorate General of Health Services of the Indonesian Ministry of Health 2019. The number of health centers in South Sulawesi in 2018 was 458, while the number of health centers that performed health services according to standards was 395 health centers. While the number of Health Center in Gowa Regency in 2019 was 25 Health Center spread across 18 sub-districts [5]

The population in Batang Angkola Sub-district in 2020 is 872,094 people consisting of 95,786 men and 96,708 women, Batang Angkola Sub-district is the sub-district with the highest population compared to other sub-districts in South Tapanuli Regency, the growth rate is 9,632 people / km² compared to other sub-districts, and there is 1 Health Center in Batang Angkola Sub-district, namely Pintu Padang Health Center, the distribution of Health Center in Batang Angkola Sub-district has described the ideal ratio, according to the ratio of Health Center to sub-districts in 2020 of 1.4. This illustrates that the ideal ratio of Health Center to sub-districts, which is at least 1 Health Center in 1 sub-district, has been met nationally, but it is necessary to pay attention to the distribution of these Health Center in all sub-districts[6]

Based on the annual report on the number of community visits in Batang Angkola Sub-district at the Health Center by the South Tapanuli Regency Health Office in 2021, there is a very significant difference between visitors at the Pintu Pandang Health Center and the auxiliary Health Center. In 2018 the number of visitors at Pintu Pandang Health Center was 84,363, in 2019 there were 81,406 visitors and in 2020 there were 48,011 visitors, the number of visitors to Pintu Pandang Health Center was more than the number of visitors at the Helper Health Center in 2018 of 35,165 visitors, in 2019 of 38,578 visitors and 2020 of 32,910 visitors. Both health centers are located in Batang Angkola Sub-district, South Tapanuli Regency, and the highest number of visitors each year is at Pintu Pandang Health Center. However, in the last 3 years, the number of visitors to Pintu Pandang Health Center has decreased [7]

The number of health workers who work at Auxiliary Health Center is 28 health workers and at Health Center Pintu Padang 50 health workers. The large number of health workers cannot be used as a benchmark for good or bad health services provided to the community, Health Center Pintu Padang has the status of main accreditation, but still needs to improve its services so that the services provided are in accordance with the demands and needs of the community, this is based on the fact that there are still several community complaints about the services provided by the Health Center. In April 2021, the Pintu Padang Health Center was covered by the newspaper media for providing poor service to the people who came, something like this will certainly worsen the image of the Pintu Padang Health Center it self. According to prospective researchers, the number of health centers cannot be used as the only standard that the demand for health services has been met, but the most important thing is how the health center can provide optimal health services to the community. Based on research conducted by [8] that people will visit many health centers with complete health service facilities compared to incomplete facilities, also the ease of obtaining information by the community / patient greatly affects the level of visitors at the health center. In addition, research conducted by [9] that accessibility is one of the causal factors affecting public demand for health services, there are difficulties in accessing services to the Padang Bulan Health Center in Medan City because the population area is far from the Health Center as well as the lack of supporting transportation infrastructure to get to the Padang Bulan Health Center, so that some respondents complained about the long distance from their residence to the health center which caused respondents to incur transportation costs.

This study aims to look at several determinant factors associated with community demand for health services at the Pintu Padang Health Center in South Tapanuli Regency.

2. METHOD

Types and Research Design

The type of research used in this study is descriptive quantitative research, using a Cross Sectional approach in which the independent and dependent variables are examined at the same time to see the factors that give a relationship to community demand for health services at the Pintu Padang Health Center, South Tapanuli Regency. This study aims to look at several determinant factors associated with community demand for health services at the Pintu Padang Health Center in South Tapanuli Regency.

Location and time of Research

The research was conducted at Pintu Padang Health Center, South Tapanuli Regency. The study was held in January 2023.

Population and Research Sample

The population in this study was the number of community visits at the Pintu Padang Health Center as many as 3,990 residents who came to the Health Center during October, November and December of 2022, this number was obtained from data on the number of visits to the Pintu Padang Health Center in South Tapanuli Regency in 2022. The sample in the study was outpatients at the Pintu Padang Health Center with a sample in this study of 365 patients. The sampling method was carried out by Accidental sampling, namely any outpatient at the Pintu Padang Health Center who happened to be encountered by the researcher at the time of the study.

Research Diagrams

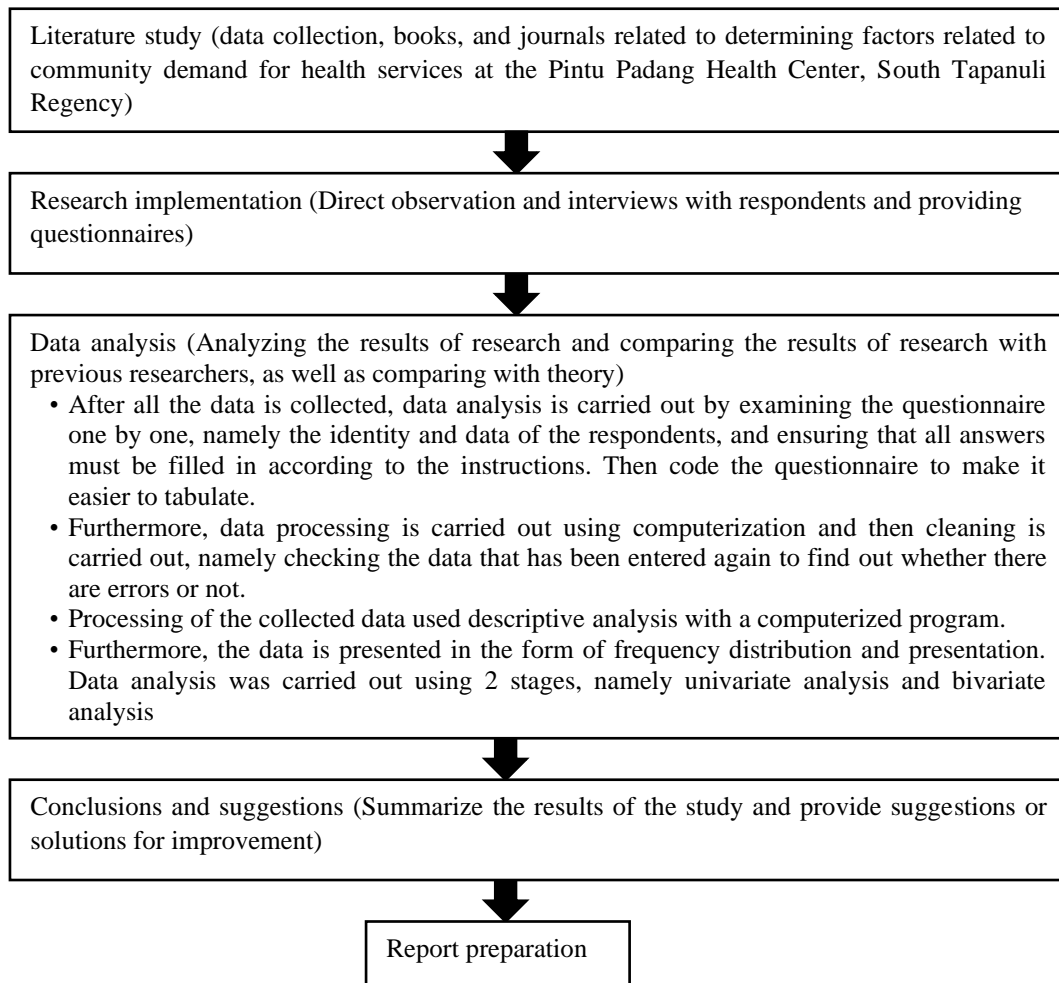


Figure 1. Research Flow Chart

3. RESULTS AND DISCUSSION

3.1 Relationship between Information Technology and Demand for Health Services

Advances in information technology have penetrated various fields of human life, one of which is in the health sector such as medicine. Progress in the health sector is growing so rapidly that many findings are obtained with the help of information technology in the field of hospital organization, treatment, and research on the development of health science itself. Information technology-based healthcare is receiving a lot of attention worldwide. Mainly due to the promise and opportunity that technology can improve the quality of human life [10]

Demand for health services is influenced by several factors, one of which is information technology. The high demand for health services makes this element a big enough influence on the development of better health services. Based on statistical tests using the Chi-Square test, the p-value is 0.000. This shows that there is a statistical relationship between information technology and the problem of demand for health services in the working area of the Pintu Padang Health Center, South Tapanuli Regency.

The results show that respondents who stated that information technology/media is available, more have a high demand, namely 167 (86.5%) respondents, this indicates that the availability of information media related to health services is needed by respondents. As many as 175 respondents stated that information media that is easy to obtain and provides information that is easily understood by the community as well as by the needs of patients visiting the Pintu Padang Health Center has proven to be a reason for the community to return to reuse health services at the Pintu Padang Health Center, South Tapanuli Regency.

Based on the results of the cross-tabulation, people who stated that information technology was available at the Pintu Padang Health Center and would reuse health services at the Pintu Padang Health Center were 175 (90.7%) respondents because they felt it was easy to get the information needed about their illness or complaints, in contrast to people who stated that information technology was not available and had a low demand for health services at the

Pintu Padang Health Center because they thought the information needed was not available as many as 18 (9.3%) respondents, so they would reuse health services at the Pintu Padang Health Center was also low.

Meanwhile, some respondents stated that information media is available, but their demand for health services at Health Center Pintu Padang is low, this is because other variables influence, for example, as many as 176 (91.2%) respondents still feel that accessibility to Health Center Pintu Padang is still difficult to reach, such as the high cost of transportation that must be incurred, this can certainly affect their decision to choose Health Center Pintu Padang again as a place of treatment.

Of respondents who stated that information media was not available the majority also had a low demand for health services, but there were also 148 (86.0%) respondents who stated that information media was not available but their demand for services was high, this was because they felt more confident and believed that if their illness was handled directly by health workers at the Pintu Padang Health Center, it would be faster to help the recovery process, and some respondents were also old patients who had routinely sought treatment at the Pintu Padang Health Center in South Tapanuli Regency, they already felt compatible with the treatment provided by health workers. They do not question the availability of information technology/media, even though information media is not available, they prefer to seek treatment at the Health Center because they feel suitable and have previous treatment experience.

The results of this study obtained a p value = 0.000 which means less than ($\alpha=0.005$). From this, it can be concluded that there is a relationship between information technology and the demand for health services at the Pintu Padang Health Center, South Tapanuli Regency.

This is in line with research conducted by [11] related to the relationship between ease of information on health services with the results of the chi-square test Yates correction value 66 of ($p=0.001$) so that H_0 is rejected, meaning that there is a significant relationship between ease of information and service utilization in hospitals. This study is in line with the research of Syahril which states that there is a significant relationship between the ease of information with the selection of place of delivery. Easy information is one of the factors that make patients choose health services.

Ferlie, Ewan B [12] stated that the implementation of a patient care information system (PCIS) is a potential means to achieve a reduction in medical errors. David S.G. Sloan [13] states that information has a very important role in supporting health care selection decisions and quality demands. David W [14] research on using information technology to reduce errors falls into two categories-general advice that is relevant across domains, and very specific recommendations. It is important to recognize that this list is not exhaustive, but it does contain many of the most important and well-documented ones. Although many of these relate to the domain of medicine, this is because the best evidence is currently available for this field; we anticipate that information technology will eventually prove important for reducing errors across a wide variety of domains.

According to Joan [15] on Some Unintended Consequences of Information Technology in Health Care: The Nature of Patient Care Information System-Related Errors that in practice, the flow of healthcare activities is often much less linear than in other fields, with roles being much more flexible and overlapping, and distinctions between steps being much more blurred.

Based on the researchers' observations, the information technology available at the Pintu Padang Health Center is an online registration system for patients who want to seek treatment, an information system through print media both information related to how to prevent Covid-19 transmission, information on how to reactivate health insurance and the availability of how to use VIKA (Voice Interactive JKN) information technology for JKN participants so that patients can more easily get information about the status of bills and the status of participation in the JKN-KIS program, as well as online consultation services for pregnant women who want to consult directly with midwives.

This research is also in line with research conducted by Manganello, Jennifer, et al. in [10] related to technological developments in their article entitled "The Relationship of health literacy with the Use of digital technology for health information: implications for public health practice." (Journal of public health management and practice) states that public health services are strongly influenced by the use of digital, electronic and print technology, the application of health interventions in the development of digital technology is very effective in serving the community.

The same thing was also conveyed by Moller, Arlen C., et al. in [10] their article entitled "Applying and advancing behavior change theories and techniques in the context of a digital health revolution: proposals for more effectively realizing untapped potential." (Journal of behavioral medicine) that the application of digital technology-based health interventions is considered very beneficial. First, it can facilitate access to services, and facilitate the reach of services to the community. Second, it can move health interventions to digital platforms and present research with new opportunities to advance theories and concepts of health services [10].

3.2 Relationship between Values and Norms and Demand for Health Services

According to Twoddle, what is perceived as healthy for one person may not be perceived as healthy for another, due to differences in perception. In addition, there are differences in the concept and perception of health and illness in society. Objectively, if a person is affected by a disease, one of his organs is impaired in function, but

he does not feel sick. Or vice versa, a person feels sick when he feels something in his body, but from clinical examination, there is no evidence that he is sick [16]

The results show that respondents who have high values and norms in believing in the occurrence of an illness, mostly have a high demand for health services, namely 88.9%. Based on observations, most respondents who came for treatment were aged 66-75 years and were elderly patients who had routinely sought treatment at the Pintu Padang Health Center in South Tapanuli Regency. They are very dependent on the treatment of doctors and other health workers, they believe that their illness can only be handled by doctors, that some of these elderly respondents are also PROLANIS (Chronic Disease Management Program) participants who routinely participate in chronic disease prevention activities which are always held by the Health Center once a month. The activities are in the form of gymnastics, blood sugar checks, blood pressure, weight measurements, and also health counseling. Respondents feel that their disease can be controlled or controlled by actively participating in these activities.

The results of this study relate to perceived benefits or benefits that will be felt if you adopt the recommended behavior. In other words, perceived benefit is a person's perception of the value or usefulness of new behavior in reducing the risk of developing a disease. People tend to adopt healthy behaviors when they believe new behaviors will reduce their risk of developing a disease[17]

A total of 23 (11.1%) respondents have high values and norms in believing the cause of an illness, but their demand for health services is low. This happens because the respondents' perception of health is still not in accordance with the actual concept of health or illness. Where as many as 105 respondents feel they are sick when their bodies can no longer carry out their usual activities. When they can no longer be productive, then they utilize health services at the Health Center. They still believe that health workers are professionals in treating diseases, they trust medical treatment more, but they have low demand for Health Center services because they only decide to come to the Health Center if their condition is very forced. If the illness is mild, they mostly just buy medicine at the pharmacy.

The existence of these attitudes can also occur because a person is influenced by cues to action. Cues to action can move people to change their behavior in making decisions. These cues to action can come from information from the mass media, advice from people around, personal or family experiences to make visits to the Health Center as a health service provider Meliana in [18]

The values and norms of respondents with low categories and high demand for health services amounted to 55 (34.8%). According to researchers' observations in the field, a total of 203 respondents were still lacking in understanding the true concept of health and illness, but they felt they still needed health services at the Health Center. This depends on personal risk or vulnerability which is one of the stronger perceptions in encouraging people to adopt healthy behaviors. The greater the risk they perceive, the greater the likelihood of engaging in behaviors to reduce risk. To reduce these risks, they utilize Health Center services as health care providers who are believed to be able to overcome the health problems they experience.

From the results of this study, it was also found that the values and norms of respondents in the low category had a low demand for health services. A total of 105 respondents have perceptions or assumptions that are not in accordance with the real health-sickness concept, so they also feel no desire to reuse health services at the Pintu Padang Health Center, South Tapanuli Regency.

The above is related to perceived barriers where behavior change is not something that can happen easily for most people. Some individuals prefer to do self-medication or seek treatment that is considered better than having to visit the Health Center.

Based on the results of the analysis using the Chi Square test conducted on community values and norms regarding demand for health services with utilization of health services, the results obtained a value of $p = 0.000$ so that $p \leq 0.05$ then H_0 in this study was rejected, meaning that there is a relationship between community values and norms on Demand for health services with utilization of health services in the working area of Health Center Pintu Padang South Tapanuli Regency.

The results of this study are in accordance with the theory put forward by [16] the low utilization (use) of health facilities such as health centers, hospitals, treatment centers, and so on is often the fault or cause is blamed on the distance between these facilities and the community which is too far away (both physically and socially), high tariffs, unsatisfactory services and so on. We often forget the community factors themselves, including the community's perception or concept of illness. Culturally "unsafe" clinical service has serious adverse effects. This commentary discusses the above factors and provides example cases from the author's own career of where such factors have affected the health of individuals or groups [19].

This research is in line with research conducted by Mujahidah in Napirah, Rahman, and Tony's research in [17] which states that perceptions or values and norms have a significant relationship with health service utilization because $p = 0.042$. In fact, in society there are various concepts of health and illness that are not in line and even contradict the concept of health and illness provided by the provider or health service provider. The community (customer) and health care providers (provider) tend to have different concepts of health-sickness. Basically, there is a difference in perception on the concept of disease (disease) with pain (illness), where usually people who are actually affected by the disease, but do not feel sick. People consider themselves sick only when they are lying weak and unable to carry out activities

Perception is an important psychic function that becomes a window of understanding for the events and realities of life faced by humans. Humans as creatures who are given the mandate of the caliphate are given various kinds of privileges, one of which is the more complicated process and function of perception.

3.2 Relationship between Accessibility and Demand for Health Services

Accessibility is one of the obstacles to utilizing government health services. The definition of access is the ease of reaching physically not just meters, but the existence of roads and transportation to get there. Access is also in the sense of ease of obtaining the service. Distance is the community's place with the health center as measured by the time indicator. The affordability of health services includes distance, time and cost. Services that are not strategically located or difficult to reach by patients lead to reduced access to health services. Although the availability of health services is adequate, their use depends on the community's accessibility to information [20]

People who live in remote areas are generally isolated villages and transportation is difficult to reach, so it takes a long time to travel to health services. The issue of equity and affordability of basic health services in Indonesia still requires attention and follow-up. It is estimated that only about 30% of the population utilizes the services of Health Center and Auxiliary Health Center. Under these circumstances it is not surprising that the degree of public health in Indonesia is not satisfactory

The results show that respondents who are easy to reach health services at the Pintu Padang Health Center, South Tapanuli Regency, the majority also have a high demand for health services, namely as much as 86.1%, this means that the respondent's decision to choose health services also looks at the ease of accessibility. In addition, there are also a small number of respondents who easily access health services but have a low demand for Health Center Pintu Padang services in South Tapanuli Regency, namely 32 (13.9%), meaning that even though they have easy access, they do not choose Health Center Pintu Padang as a place of treatment. This can be influenced by various other variables such as their perception of the concept of health-sickness or can also be influenced by their satisfaction with the services received so that their demand is low for the services of Health Center Pintu Padang South Tapanuli Regency.

Based on the results of the cross tabulation, 22 respondents stated that it was easy to access health services to Health Center Pintu Padang and would return for treatment because in terms of distance and costs incurred it was still affordable so that the use of health services was accessed repeatedly. In contrast to the people who have difficulty in accessing health services at Health Center Pintu Padang, as many as 208 respondents, the utilization is also less because they feel the costs that must be incurred to go to the Health Center are quite expensive, and prefer to go to the Health Center if the disease is very severe.

From the results of the study it was also found that there were 41 (30.4%) who had difficulty accessing health services but their demand for health services was high. This happened because some of them, namely 131 respondents, claimed to have felt suitable for treatment at the Pintu Padang Health Center, South Tapanuli Regency, they claimed to have routinely sought treatment and were well acquainted with the officers so they were reluctant to switch to other places and preferred to do treatment or consultation at the Pintu Padang Health Center, South Tapanuli Regency.

This research is in line with the research of [21] obtained the results that there is a relationship between distance and community demand for health services at the Barombong Health Center, Tamalate District, Makassar City, where the distance between the respondent's residence and the health center is quite far but the respondent's demand for health services is high [21]

Another 116 respondents who stated that it was difficult to reach health services at the Pintu Padang Health Center also had a low demand for health center health services. This happens because the working area of the Pintu Padang Health Center is quite large, around 12.35 km² and also the conditions of the economic level of the community are different so that the costs used to get to the Health Center also vary, and this certainly affects the respondents' decision to reuse Health Center services.

This research is in line with the research of White Stephen L. [22] In each model, travel distance as a measure of the price of time was found to be a significant factor in utilization and utilization of health services and Haiyan Shao's research, (2022) The accessibility pattern of high-level medical institutions in Haikou presents high in the north and low in the south. The accessibility pattern of low-level medical institutions is the opposite. High-level medical institutions have a strong demand for medical treatment, which is less hampered by distance. The healthcare demand of low-level medical institutions is small, and they mainly are medium- and short-distance medical travel [23]. The types of medical services at different levels are mainly "low supply - low demand" and "high supply - low demand" types. The results of his research state Michael D (1977) that the importance of relative location is placed in proper perspective by briefly reviewing the role of client and service characteristics on health service utilization[24].

This research is in [25] line with which shows that there is a significant difference in the average transport costs between those who have never and have used health services at the Health Center. In conclusion, there is a significant relationship between the amount of transport costs to the Health Center and the utilization of services at the Health Center. And this study also showed a relationship between travel time and utilization of health services at

Health Center. Respondents with a short travel time had a 1.540 times (95% CI: 1.03 - 2.30) chance of utilizing Health Center health services compared to respondents who needed a long travel time [25]

4. CONCLUSION

Based on research that has been conducted on 365 community respondents visiting the Pintu Padang Health Center, South Tapanuli Regency in 2021, there is a significant relationship between information technology and Demand for health services at the Pintu Padang Health Center with a p-value of 0.000 (<0.05). There is a significant relationship between values and norms on Demand for health services at the Pintu Padang Health Center with a p-value of 0.000 (<0.05). There is a significant relationship between accessibility and demand for health services at the Pintu Padang Health Center with a p-value of 0.000 (<0.05).

ACKNOWLEDGEMENTS

The author is grateful to all my team in the Community Health Study Program of the STIKes Darmas Padangsidiimpuan Undergraduate Program so that this article can be written and published.





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