Factors that Affect Demand Creation for Health Services: Literature Review

Shafira Putri Yufa1*, Diansanto Prayoga2,3,4
1Bachelor of Public Health Study Program, Faculty of Public Health, Universitas Airlangga| email: shafira.putri.yufa-2020@fkm.unair.ac.id
2Public Health Study Program, Department of Health and Natural Sciences, Faculty of Health Sciences, Medicine and Natural Sciences, Department of Health Administration and Policy, Faculty of Public Health, Universitas Airlangga| email: diansanto.prayoga@fkm.unair.ac.id
3Center for Health Management Studies, Universitas Airlangga| email: diansanto.prayoga@fkm.unair.ac.id
4Center for Health Marketing Research, Universitas Airlangga| email: diansanto.prayoga@fkm.unair.ac.id
* Corresponding Author: shafira.putri.yufa-2020@fkm.unair.ac.id

ABSTRACT

Introduction: The prosperity of the country is represented by a healthy society. The existence of a demand for public health services is greatly influenced by quality and fair health providers, so that based on the aspect of being a health provider they are able to provide health services when there is an increase in demand from the community.

Objective: The aim of this literature review is to determine the variables that influence demand for health services. The findings of this literature study are expected to be a starting point for future studies and to provide insight into health service quality management in various health service providers.

Method: This article was written using a literature review, namely an international literature search carried out using databases such as ScienceDirect and Proquest. Inclusion criteria include articles that discuss community demand for health services.

Result: Article search results show that there are 7 (seven) related studies. Gender, place of residence, level of education, employment before retirement, age, health financing, technology, norms, values, and accessibility are several factors that influence people's demand for health services. This study reveals these factors. Additionally, this study emphasizes accessibility factors, which significantly influence the demand and allocation of health promotion services. This is because health services are considered emergency and require improvement in the available health centers.

Conclusion: Based on the results of the review, it can be concluded that there are several factors that influence the creation of demand or demand for health services at the Community Health Center. Factors such as gender, place of residence, education level, employment before retirement, age, health financing, heat waves, technology, values and norms, and accessibility significantly influence the demand for and allocation of health promotion services.

Keywords: Demand; Health Services; Medical Facility
INTRODUCTION

The prosperity of a country is represented by a healthy society. Therefore, health is a basic right of every citizen, and health promotion is an important part of health services. There is a strong demand for services to support them to adopt a healthy lifestyle [1]. According to research, there is a significant relationship between health facilities and health service utilization. Health is defined as a state of overall physical, social, and mental well-being, not just freedom from disease or infirmity [2]. Illness is also part of excellent health, as illness is more in line with poor health. Health is the obligation of everyone to participate in realizing, maintaining and improving the highest degree of public health [3].

Socially and culturally, humans are constantly striving to achieve perfect health [4]. This can be explained by the fact that good health is key to human existence and the achievement of certain goals and aspirations on Earth. To ensure that humans can live and work at their best, healthcare facilities are essential. One of the central challenges that needs to be addressed is how to create a strong, sustainable and effective demand for these health services [5]. Improving 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 [6]. The government is committed to providing the best health services to the community so that the Indonesian people remain healthy because it is a basic need and must be provided regardless of the socioeconomic status of each person [7].

The utilization of health services is also influenced by the needs (Demand) of the community [8]. Demand for public health services is strongly influenced by quality and fair health providers, so that based on aspects as health providers are able to provide health services when there is an increase in demand from the community. The study states that demand in health services is a desire, a need that is realized by action and getting real service. Demand for health services arises through a process of changing health problems into perceived health problems, followed by feeling the need for health services and finally stated with actual demand. In an effort to convert perceived service needs into an effective form of demand, consumers must have the willingness and ability to buy or pay for the required number of types of health services. demand for health services is the actual service purchased by health service customers, in this case the patient [9].

Quality of health services, according to the Regulation of the Minister of Health of the Republic of Indonesia Number 30 of 2022, is defined as the level of health services for individuals and communities that can improve optimal health outcomes, provided in accordance with service standards, the latest scientific developments, and to fulfill patient rights and obligations [10]. Services are considered competent or satisfactory if they can meet the needs and expectations of the community [11]. Various facts show that there are serious problems in the quality of health services in Indonesia. This is due to the absence of the best quality control system implemented [12].

The use value of health services can be seen from the quality of health services (quality of service) which has an impact on customer satisfaction. Good service will affect patient satisfaction, encourage them to reuse the service, or at least recommend the service to others who also need it. Good service can also be used as a source of assessment of health service performance to determine the elements that must be maintained and improved by health service providers [13]. The quality of health services is multi-dimensional, and in terms of health service users (health service customers), the notion of service quality is more related to the response of officers to patient needs, smooth communication between officers and patients, concern and hospitality of officers in serving patients [14]. Companies that continuously improve service quality and pay attention to customer preferences can encourage customers to build strong relationships with the company and increase their loyalty. Therefore, service quality should be an important concern because it can build loyalty [15].

Healthcare administrators often concentrate on better staff training, improved medication, and availability of supplies in the towns and neighborhoods of health institutions. While these initiatives are very important, there are still many community access issues that have yet to be resolved. There are often many health services available, but few utilize them. All relevant issues include availability of services, ease of access, understanding of resources, instructions on how to use services provided by self-employed practitioners most efficiently, and cultural standards of treatment [16].

Many public health centers have main accreditation status, but still need to improve their services to meet the demands and needs of the community because there are still community complaints about the services provided by public health center. According to prospective researchers, the number of health workers cannot be used as a measure of the good or bad health services provided to the community. Previous studies have shown that public health center that have complete health service facilities are more visited by the community than public health center that do not have them. In addition, the ease with which people or patients can obtain information greatly influences the number of people visiting the health center. One of the factors that influence public demand for health services is accessibility [17]. This is in line with previous research where there is a decrease in the use of health services due to high demand but the demand is not met. Therefore, the high demand for health services must be accompanied by the fulfillment of access to services such as information and health service facilities [18].
Based on the above background, the authors are interested in discussing "Factors that Affect Demand Creation for Health Services". The purpose of this literature review is to determine the variables that affect demand for health services. The findings of this literature study are expected to be a starting point for future studies and to provide insight into the quality management of health services in various health service providers.

METHOD

The writing of this article uses a literature review, which is a search for both national and international literature. The literature review method is used to collect and analyze literature relevant to the research topic. In this study, which talks about how variables as service quality affect the decisions made by the community to create demand for health services.

The first step in the literature review research method is to identify relevant literature. Included in this list are scientific papers, theses, books, journals, and other relevant documents that focus on factors affecting demand for health services and health service quality. This literature study was conducted using the keywords demand for health services, quality of health services to produce 16 suitable articles. The selection process began after the various literature sources were identified. Relevant and high-quality literature sources were collected for further review. The relevance of the topic and research methodology, as well as the accuracy and validity of the research results were the criteria used to select the studies.

The selected journals were screened based on the researchers' inclusion and exclusion criteria. The inclusion criteria for this literature review included journal articles related to demand creation for health services using databases such as Science Direct and Google Scholar, published in the last five years, from 2018 to 2023. Exclusion criteria were articles that were excluded from this literature review if their structure was incomplete (no research methods, no results, no identity). The selection process involved reading, recording and reviewing relevant information from each literature source. We found 1,326 articles in Science Direct and 5,690 in Google Scholar. These were then narrowed down to 120 articles. The researcher then re-investigated the articles based on the inclusion and exclusion criteria. After going through the selection process, researchers obtained 7 articles that could be analyzed consisting of 3 national journals and 4 international journals. Furthermore, the results of this literature analysis will be compiled in a thorough literature review to help understand the current problem and build a strong research base for future research.

![PRISMA Flow Diagram](image-url)
RESULTS

A total of 7 (seven) research articles were evaluated and met the inclusion criteria. Table 1 shows the results of the search for these articles.

Table 1. Literature Review Results

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Article Title</th>
<th>Objective</th>
<th>Research Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muhammad Bayu Nanda (2021)</td>
<td>Faktor-faktor Yang Mempengaruhi Permintaan Pelayanan Kesehatan Rumah Sakit Umum Daerah Depati Bahrin Kabupaten Bangka</td>
<td>To find out what factors can influence the demand for health services at RSUD Depati Bahrin, Bangka Regency by analysing the effect of family income, visit price, education, cost, and distance travelled on the demand for health services at RSUD Depati Bahrin, Bangka Regency.</td>
<td>This study used quantitative methods and descriptive analysis. Patient education, distance travelled, patient income, cost/price of visit, and the independent variable of demand for health services are the dependent variables in the cross-section data analysis. In this study, the analytical tool used was multiple linear regression analysis, which was conducted with the help of e-views. The purpose of this analysis is to predict how the independent variables affect the dependent variable.</td>
<td>The cost of visits has a negative and significant impact on the demand for health services. If the cost of the visit is higher, the demand for health services is lower. Patient education has a positive and significant impact on demand for health services. If the patient's education level is higher, it is positively correlated with the demand for health services. The longer the distance travelled, the less demand for health services. Healthcare demand is not significantly affected by family income and other commodity prices.</td>
</tr>
<tr>
<td>Weicun Ren, Xiwang Ma, Clifford Silver Tarimo, Yiqing Xing, Xinyuan Lv and Zhang Liang (2023)</td>
<td>A study on the current state and equity level of the health promotion service demands among older adults in China</td>
<td>The objectives of this study were to establish an evaluation model for assessing the demand for elderly health promotion services (DOAHPS), quantitatively assess the current state and level of inequality of DOAHPS in China, and explore the main components affecting the current state and level of inequality of DOAHPS. DOAHPS data from the &quot;Survey on Healthcare Demand of Chinese Residents in the New Era&quot;, which included 1,542 elderly people aged 65 and above, were studied in this study. The structural equation modelling (SEM) method was used to investigate the relationship between DOAHPS evaluation indicators. To evaluate the current state and influencing factors of DOAHPS, Weighted TOPSIS and Logistic Regression (LR) methods were used. The degree of equalisation of DOAHPS allocation among various elderly age groups was also calculated using the Rank Sum Ratio (RSR) method and Theil's T index.</td>
<td>The total DOAHPS score was 42.57 ± 1.51. Sleep behaviour was positive with DOAHPS ($r = 0.40; 0.38; P &lt; 0.05$). Gender, place of residence, education level, and occupation before retirement were significant components of DOAHPS (all P &lt; 0.05). The overall DOAHPS level was found to be moderate compared to the maximum level, although the demands may be greater for the urban-dwelling elderly population with higher levels of education. The discrepancy in the distribution of DOAHPS is mainly due to differences in education and employment in each group. Policymakers could target elderly men with lower education living in rural areas to improve health promotion services for the elderly.</td>
<td></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Methodology</td>
<td>Findings</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Hannah Mason, Jemma King, Amy Peden and Richard Franklin (2022)</td>
<td>Systematic review of the impact of heatwaves on health service demand in Australia</td>
<td>The aim of this study is to create effective methods to provide and utilise health promotion services for the elderly, as well as to improve the efficiency of services provided with limited resources. This method uses a review of peer-reviewed literature published between 2000 and 2020. Keywords such as heat, extreme heat, ambulance, emergency department, and hospital were used to conduct searches in six databases: MEDLINE, Scopus, Web of Science, PsychINFO, ProQuest, and Science Direct. If heat research was conducted over two or more consecutive days, the studies were included. The quality of evidence was assessed by the GRADE method. Taking into account local climate variability and acclimatisation, the excess heat factor (EHF) was the preferred method for determining heat waves. Future research should look at spatially relevant and evidence-based heatwave prevention programmes. A better understanding of the health effects of heatwaves, including demand for services, will help develop the necessary programmes to improve the resilience of populations and health systems. Results showed that during hot periods, hospitalisation demand, ED presentations, ambulance calls and deaths increased compared to non-heat periods. Cardiovascular, renal, respiratory, and neurological, mental, and behavioura conditions were the most at risk. Advanced age (60 years or older) and low socioeconomic status are the two main risk factors. Not much research has been done on the definition of uniform heat and its effects spatially.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normayanti Rambe, Lisna Khairani Nasution, Susi Febriani Yusuf (2023)</td>
<td>Determinants of Factors Associated With Community Demand for Health Services at Pintu Padang Health Center, South Tapanuli Regency</td>
<td>The aim of this study was to investigate the various variables that influence community demand for health services at the Pintu Padang Community Health Centre in South Tapanuli District. Quantitative descriptive research with a cross-sectional approach was used. The study was conducted at Pintu Padang Health Centre, which is located in South Tapanuli Regency. The study population was 3,990 community visits made at the health centre. The accidental sampling method was used to collect a sample of 365 respondents in the study. The tool to collect data was a questionnaire. There were two ways to analyse the data: univariate analysis and bivariate analysis. Bivariate analysis used the Chi-Square test to determine how the independent variable and dependent variable relate to each other. There is a statistically significant relationship between information technology and demand for health services at Pintu Padang Health Centre, as shown by the Chi Square statistical test results. The p value of 0.000 indicates this finding. All respondents need information media related to health services. The Chi Square test results showed a p value of 0.000, indicating that there is a relationship between community values and norms and demand for health services. Finally, the p value was 0.000. The results showed that all three independent variables-accessibility, values and norms, and information technology-and the dependent variable, community health service demand, had a statistically significant relationship.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devi Indah Erlita, Yuhka Sundaya Kesehatan Grossman (2022)</td>
<td>Ulasan Kritis Teori Permintaan Kesehatan Grossman</td>
<td>The purpose of this study is to determine the factors that influence rural communities' health demand review, the researcher used a critical review. Food commodity prices, health commodity prices, per capita income, food consumption, immunisation, and education are</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The study will focus on the relationship between drug costs, demographics, and socioeconomic factors with the demand for health services in the area. The purpose of this study is to determine the factors that influence rural communities' demand for health services in Akinyle local government. The study will focus on the relationship between drug costs, demographics, and socioeconomic factors with the demand for health services in the area.

To conduct this study, a questionnaire was used to collect baseline data. Afterward, the data was processed using descriptive analysis, regression analysis, percentages, and frequency distribution to examine the relationship between variables. As a result of the descriptive analysis, the majority of respondents who requested healthcare services were female (58%), aged between 31 and 40 years old (35.5%), married (51.5%) and had S1/D3/D4 education (24%). According to the regression analysis, the demand for health services was significantly influenced by the price of health services, cost of medicines, distance to the public health center, and educational qualifications. In contrast, income, age, and gender had no significant effect. Health service prices, drug costs, and distance to the health centre are significant at the 5% level, and educational qualifications are significant at the 10% level. There is a positive relationship between demand for health services and opinion.

The results of the study on the need and demand for health services at Public health center Siwalankerto Surabaya are considered positively by the surrounding community. This is what influences people's preference for health services. The main factors in choosing health services are the quality of service and the distance of no more than 3 km to the main facility chosen, which is the Public health center. Community satisfaction with health services at Public health center is not only direct, but also influenced by other factors, such as a comfortable waiting room and the availability of other non-
need for health service utilisation, this data was analysed using descriptive statistical tests through frequency distribution tables.

DISCUSSION

Based on the results of the articles collected and the author's analysis, it was found that there are several factors that influence the creation of demand for health services. Factors such as gender, place of residence, education level, occupation before retirement, age, health financing, heat waves, technology, values and norms, and accessibility significantly affect the demand and allocation of health promotion services. These factors tend to be the basis for creating demand for health services because it is an emergency and needs to be improved at the available health service centers. According to previous research, it is concluded that there is an influence between the dimensions of physical evidence (tangibles), reliability, responsiveness, assurance, and empathy on patient satisfaction with health services [19].

The concept of demand explains how the demand for a good or service is affected by various factors. Factors that affect demand include the price of the good itself, or the price of other goods, per capita income and household income, people's habits and desires, population factors, and the efforts of goods providers to improve services [20]. Demand for health services comes from the demand for health itself. According to this model, each person assesses the benefits of spending on health that is analogous to spending on other goods to determine his or her ideal health status [21]. If health care providers can improve the quality of their health services in accordance with established standards and tailored to the needs of patients, patients will be more loyal to the hospital [22]. To meet the increasing demand for community services after JKN, the quality of service of primary healthcare facilities (FKTP) must be improved [23]. Service quality includes the availability of specialists, medicines, medical equipment, and facility comfort. Healthcare providers can use the survey results to assess and change their policies and services. In the JKN era, local governments and healthcare providers should work together to improve infrastructure and human resources to improve services and meet the community's expectations for good and accessible healthcare [14].

Demand for healthcare is also influenced by age. There is a need for healthcare systems to address long-term care and the demands associated with aging. Healthcare financing and health insurance systems need to adapt to the demand for affordable and accessible healthcare for older people. The calculation of healthcare tariffs is essential to know how much it costs to finance all its activities and to keep providing services to the community. Unit costing will provide information on the cost per item, so that the efficiency and performance of a unit can be properly monitored and facilitate the budgeting process and healthcare strategy [24].

According to research the Long-Term Care Health Insurance Program in Qingdao has shown benefits in providing long-term medical care services to the elderly. The healthcare system needs to shift to supportive and curative medical services to maximize the quality of life of the elderly [25]. There are gaps in service allocation, particularly with regard to pre-retirement education and employment. The government needs to consider disparities in individual capacity when formulating policies related to health promotion services [26].

Demand creation from the public for health services can also be caused by heatwaves that affect the health care system, including increased demand for health services, resources, and infrastructure. Hence the need for emergency services to be equipped with appropriate cooling resources and equipment. Vulnerable populations are more likely to access healthcare services during heatwaves [27]. Citing Grossman's opinion, he explained that consumers actually have enough information and allow them to be rational in the future or in the present in choosing their health conditions [28].

In addition, there is a significant relationship between information technology and healthcare demand. The availability of information media strongly influences demand, indicating the importance of digital technology in healthcare. This finding suggests that improving information technology infrastructure can improve patient access to health services. Information is very important because all information related to public health must be managed properly and securely [29]. Therefore, a smooth and secure system is needed so that all information collected can be used to provide better health services that benefit the entire community [30]. In addition, the role of values and norms also contributes to determining the demand for health services. Patients who have higher health-related values and norms tend to have higher demand for health services. This finding underscores the importance of understanding social and cultural norms in providing quality healthcare [30].

The digital health ecosystem in Indonesia offers many new business opportunities and areas for collaboration. A strong foundation for digital health businesses supported by higher health awareness among the younger generation and a population more familiar with technology. The digital health ecosystem provides greater consumer control and enhances the provision of appropriate end-to-end health services [31]. For healthcare facilities, a social media presence has the potential to expand reach, support patient demand for appointment visits, and improve the image and reputation
of healthcare services. Social media marketing strategies can increase healthcare utilization by prioritizing patient satisfaction and meeting patient needs, increasing organizational reach, and improving hospital reputation. The number of visits and patient loyalty will increase due to the decision of patients or their families to choose or use the services available [32].

Demand for health services by the community is also strongly influenced by accessibility. There is a significant relationship between accessibility and demand for health services. Accessibility limitations, particularly in remote areas, present challenges for individuals in utilizing government health services. Addressing accessibility issues can contribute to increased demand for health services [29,33]. There is a relationship between distance and community demand for health services at Public health center, but no relationship between health insurance and community demand for health services at Public health center [34]. Improving health services and addressing accessibility issues can improve patient access to health services and promote equitable access to health service resources [29].

From the results of the literature review supported by journals and other studies, it was found that the demand for health services is influenced by several things including factors such as gender, residence, education level, occupation before retirement, age, health financing, heat waves, technology, values and norms, and accessibility significantly affect the demand and allocation of health promotion services. There are factors from the heatwave that affect the health care system, including increased demand for health services, resources and infrastructure. The studies referenced in this literature review also emphasize the role of values and norms in determining demand for health services. Patients who have higher health-related values and norms tend to have higher demand for health services. Finally, demand for health services is influenced by accessibility. The accessibility factor and demand for health services have a significant relationship. Good health services will make patients happy, which in turn will encourage them to be loyal, which means they will use and recommend the service to others around them. In order to attract patients to continue visiting health care facilities, improving health facilities is essential. When service quality and patient satisfaction are not considered, it is likely that patients will lose them. As an important component of human-centered care, patient satisfaction is considered a key indicator of service quality.

Innovation in healthcare can have a significant impact on demand creation in the healthcare sector. Studies show that the use of remote observation services changes service delivery mechanisms, creates novelties, presents new ways to interact and changes patient responsibilities. One form of this is telemedicine [35]. According to Permenkes No 20 of 2021, telemedicine is the remote provision of health services by health professionals using information and communication technology. This includes the exchange of information on diagnosis, treatment, prevention and prevention of disease and injury, research and evaluation, and continuing education of healthcare providers for the benefit of improving the health of individuals and society. In accordance with the development of science and technology, telemedicine services can be teleradiology, teleelectrocardiology, teleultrasonography, clinical teleconsultation, and other telemedicine consultation services [31]. Innovative in the field of health care proved to be able to solve the problem of powerful and safe for the permanence of services in the process of shifting from visits to the director to the virtual world [11].

Therefore, the results of this study can serve as a foundation for healthcare providers and others to consistently improve, promote, and develop service quality. Ultimately, this will improve the availability, affordability, and transparency of health services that are essential for public welfare.

CONCLUSION

Based on the results of the review, it can be concluded that there are several factors that influence the creation of demand for health services. Factors such as gender, place of residence, education level, occupation before retirement, age, health financing, heat waves, technology, values and norms, and accessibility significantly influence the demand and allocation of health promotion services. These factors tend to be the basis for creating demand for health services because it is an emergency and needs to be fixed at the available health service centers. Hence the importance of health care as a fundamental human right and the need for equal access to health care resources. This emphasizes the importance of improving health services to ensure affordable, safe, and quality health services for all individuals.

SUGGESTION

This study recommends that healthcare providers and others consistently improve, promote and develop service quality.

REFERENCES


