



# The Importance of Health Accessibility Policies in Border Areas

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**Abstract.** People who reside in rural or remote places have a more difficult time gaining access to medical care than those who live in cities and towns. This article will validate and supplement the research that has already been done on the subject of health accessibility policies for persons living in border areas. This study is a review of the relevant literature, and it makes use of the Publish or Perish (PoP) software to locate articles of significance and the Vos viewer to show the importance of earlier research. In this study, we looked at 23 previous papers that were related to our topic. The findings indicate that people who live in border areas, not only in Indonesia but also in other developing nations, have a difficult time gaining access to adequate medical care. The ramifications of this research for the governments of developing nations, in order for them to formulate health programs that are appropriate in border areas.

**Keywords:** Health Policy · Health Accessibility · Border Areas

## 1 Introduction

Access to health care is seen as a means of accomplishing a variety of objectives, including increased productivity and improved overall service quality. Access is a broad word that refers to the degree to which a client or patient and the health care system are compatible with one another. The availability, accessibility, accommodation, affordability, and acceptability of health services are the components that make up a set of unique, independent, and interrelated aspects that help maximize and quantify access to health care [1].

The primary objective of many of the currently in place health policies is to expand patients' access to various medical services. There is widespread political desire to address inequalities in access, but it will be difficult for governments to formulate effective policies in this area until there is a more comprehensive understanding of what is currently known about equitable access to services [2]. Therefore, forecasting the effectiveness of a policy implementation strategy is seen as an important tool for deciding which policy implementation strategy will eventually be adopted, as there may be many available, and this will undoubtedly have significant implications for government policy and budgeting [3].

The model developed by Van Meter and Van Horn makes the assumption that the relationship between public policy, the implementor, and policy performance follows a linear path [4]. There are a number of factors that have an impact on the policy, including the degree to which those responsible for implementing it comprehend the policy's standards and goals, the availability of human resources, financial resources, and time, the characteristics of the organization responsible for putting the policy into action, the extent to which those responsible for implementing the policy are able to understand what is expected of them and what they should be doing, as well as the conditions of the environment. Social, economic and political [5]. According to Van Meter and Van Horn, when faced with a program that was unsuccessful, many observers may blame the failure to weak planning or the insufficiency of the program itself [4]. This is explained in the context of a failed program. Levine is a prime example of how the majority of problems encountered in the struggle against poverty stem not from the nature of the program itself but rather from difficulties encountered in its administration [6].

In developing countries, persons living in rural areas continue to face significantly more challenges in terms of gaining access to public health services as compared to those living in urban areas. This is due to the fact that people who live in border areas of developing countries are perpetually confronted with poor health infrastructure, difficulty in accessing health care, and the lack of applicability of policies that have been made by the government. Developing countries have borders with a variety of countries, including developed countries. On the basis of the findings of earlier research conducted in Indonesia and other nations, this study will provide a policy-oriented description of the current state of health accessibility in border areas. This study comprises of an explanation of the notion of borders, health accessibility, and health policies that are discussed in the literature review, followed by a description of the research problem that will be investigated later on in the introduction. After that, an explanation of how to obtain articles as references is provided in the research methods sub-chapter, and the results and discussion sub-chapters will provide an explanation of the results of previous research that are mapped based on sources originating from Indonesia and other countries.

## **2 Literature Review**

### **2.1 The Concept of Borders**

The border area described in this article is based on the Regulation of the Minister of Defense of the Republic of Indonesia Number 13 of 2014, which defines a border area as a geographical area facing neighboring countries, with residents living in the area, united through socio-economic and socio-cultural relations, and with administrative area coverage. This article describes the border area as a geographical area facing neighboring countries, with residents living in the area, and with administrative area coverage. Certain after an agreement has been reached amongst the countries that border each other. In the viewpoint of political geographers, the notion of borders can be broken down into two parts: the boundary and the frontier. Both the boundary and the frontier are used because of the position of the border, which can either be in front of or behind a country. The

boundary serves as a limiter or binder for the state as a sovereign political geographical unit, while the frontier is utilized because of the position of the border [7].

The border region is the same as the 3T area as it was before (Front, Outermost, Disadvantaged). Situmorang and Ayustia came to the conclusion based on their research that several factors that characterize border areas or 3Ts are as follows [8]: 1) the absence of good public infrastructure such as roads, electricity, and clean water; 2) the presence of organized crime; and 3) the presence of organized gangs. 2) Unfinished business in the medical field, including hospitals and health institutions 3) Use two different currencies for the selling and purchase of goods; and 4) Have territorial borders that directly border with other countries.

The lands along the borders of countries play a significant part in the upkeep and preservation of state sovereignty. When it comes to the territory, the region around the border is where a country's sovereignty is most clearly displayed. This is due to the fact that territories that are geographically bordered contain borders with other countries. People who make their homes in border regions play a vital part in the state's ability to maintain its sovereignty. If the state is in a position to ensure the well-being of the people living along the border, then the community can be utilized to support continued state sovereignty. On the other hand, if the government is unable to provide for the welfare of the people living along the border, which forces the community to become dependent on the nations that are immediately adjacent to it, then this might be a challenge to the state's sovereignty [9].

## 2.2 Accessibility

Access to health care can be thought of as the degree to which the user and the service are compatible with one another. Access was acknowledged as an essential component of health care services up until 1981; nonetheless, the concept was vague and inadequately defined in scientific parlance. The utilization theory is the dominant paradigm in health care research, and the access variable is the usage variable that is identified across the board but is not measurable in any of the theories created. Access theory was first presented by R. Penchansky and J Thomas in the year 1981. Determinants of usage, such as those proposed by Andersen and other utilization theorists, are a source of inspiration for this [10, 11].

According to R. Penchansky and J Thomas, access has an effect on consumers as well as systems in three different ways: the usage of services, the level of customer happiness, and the practices of the system [10]. The theory developed by Penchansky and Thomas offers a helpful definition that takes into account the various aspects of access. According to their definition, access is determined by the level of congruence that exists between the customer and the service. If there is a better match, there will be better access.

Access to health services can be defined in a variety of ways; nonetheless, the vast majority of researchers agree that access is related to the timely utilization of services in accordance with individual requirements. According to Peters et al., there are four

primary dimensions of access, and each of these dimensions has components of supply and demand [12]. These components include the following:

- Geographic accessibility, which refers to the actual distance or amount of time it takes to go from the location where services are provided to the users.
- Availability, which refers to having the appropriate kind of treatment readily available for those who have a requirement for it. This could include having operating hours and wait times that are suitable for the people who will be utilizing the treatment, in addition to having the appropriate kind of service provider and materials.
- Financial accessibility, which refers to the relationship between the cost of services and the users' willingness and ability to pay for those services.
- d. Acceptability, which refers to the degree to which health service providers are responsive to the social and cultural expectations of individual users and society.

### 2.3 Policy on Health Care

According to Walt, the concept of health policy encompasses a wide variety of decision-making efforts and actions [13]. These efforts and actions include the technical aspects of medical and health services, as well as the involvement of actors/actors both at the individual and organizational scale or institutions from the government, private sector, NGOs, and community representatives. Others that have an impact on health. Because the health industry is a component of the economy, health policy is regarded as being of significant importance. It is obvious that the healthcare industry acts much like a sponge, soaking up a significant portion of the state budget in order to cover the cost of various healthcare services. There are others who believe that health policy is the primary factor in economic growth; this is attributed to the fact that there has been significant innovation and investment in the health technology sector, which includes the pharmaceutical trade business. But what's even more significant is that judgments about health policy entail questions of human life and death.

According to Gormley and Weimer, the goal of health policy is to offer a framework for the prevention of disease, as well as services that are centered on health care, the treatment of illness, and the protection of those who are vulnerable [14]. A health policy prioritizes efforts made over the long term to realize certain objectives and offers actionable advice for making significant choices. Health policy concerns issues that are seen as significant in both an organization and society.

Health is defined by Law number 36 of 2009 concerning Health as a state that is healthy on all levels (physically, mentally, spiritually, and socially) and that enables everyone to live a socially and economically productive life. In order to accomplish this goal, there are a number of different aspects that must be taken into consideration. According to Blum, there are four different elements that might have an effect on a person's health status [15]. These factors include genetic factors, environmental factors, behavioral factors, and health service factors.

According to Lubis and Wijaya, health services are any effort that is carried out independently or jointly within an organization to maintain and improve health, prevent and cure disease, and restore the health of individuals, families, groups, and communities. or society [16]. According to Law Number 36 of 2009 Concerning Health, there are a

few different terminology that are used in the context of health services. These include promotive, preventative, curative, and rehabilitative.

### 3 Methods

This research uses the method of descriptive analysis, and the sources of data come from a study of previous literature. Primary data were obtained from the Google Scholar database for the purpose of this study. The author utilizes the Publish or Perish (PoP) application to acquire the necessary literature data. The application is equipped with the term “Health accessibility policy in boundary,” and it searches through the 500 prior research publications indexed on Google Scholar in 2017–2022. The author made the decision to use the Google Scholar database since it is both comprehensive and a popular resource, accounting for its selection. Additionally, in order to generate pertinent comments and conclusions, the author makes use of the Vos Viewer analytic tool as a tool to process the data that was collected from Publish or Perish. This data was obtained from the website (PoP). The author uses a combination of the Vos Viewer analysis tool and the Mendeley program in order to conduct a literature assessment of papers that have a strong causality on the topic of health access policies in border areas.

The purpose of this study was to investigate health access policies, particularly those that apply in border regions. The primary goals of this study are to conceptualize existing research and expand on topics linked to it. This study will collect concepts by asking fundamental questions like what are the findings of prior research on the state of health access in border communities. The findings of this study are anticipated to serve as input and early thoughts for the development of policies in Indonesia pertaining to the management of health access in border areas.

### 4 Results and Discussion

The following information may be shown in Fig. 1 below, which is based on the findings of Vos Viewer for the years 2017–2022:

On the basis of the findings of the Vos Viewer study, a total of 23 pertinent articles were located that discussed accessibility and policy in border areas. There are 18 articles that explore accessibility and policies in the border areas of Asia, Europe, and Australia. These articles make up the 23 total articles. There are 5 articles that discuss the accessibility and policies in the border areas of Indonesia. The following table provides a synopsis of 18 articles along with the findings of those articles:

This sub-discussion will clarify the outcomes of past study based on Table 1, which was provided earlier. The knowledge concerning the actions that were taken to allocate health resources prompted Audi et al. to carry out their research in Syria [17], which led to the country’s selection as the study’s location. Audi et al., conducted research on health disparities in Syria with a particular emphasis on access to public hospitals and made use of data from 2010, which was just before to the beginning of the civil war [17]. According to the findings, there is a significant gap in accessibility to public hospitals among the provinces, particularly in the north and east, which are home to each of the provinces. In addition, Lane et al., who worked as a researcher using the South African



**Table 1.** (continued)

No	Author and year of study	Research results
6	Lawal and Anyiam, (2019)	Areas of low accessibility exist throughout the State of Akwa Ibom in the Niger Delta region of Nigeria due to geography.
7	Bryant and Delamater (2019)	The E2SFCA method for measuring and comparing accessibility uses micro and macro-level population representations, and the results provide insight into the limitations associated with using macro-level data to measure and interpret spatial accessibility
8	Cyr et al., (2019)	The results of the literature review show four dimensions Newly identified policies are government and insurance policies, health organization and the influence of surgery, stigma, and primary care and specialist influence
9	Tao et al., (2018)	Village-level spatial accessibility to health services shows a significant disparity, and a large distribution of public hospitals unequal distribution in Beijing, China being the main cause
10	Song et al., (2018)	Accessibility varies in Australia both temporally and spatially, and the rural-urban imbalance differs for different types of hospitals.
11	Mathon et al., (2018)	The ratio of accessibility of health professionals to the population is higher for Haitians compared to Dominicans, when borders are open than when closed
12	Sohrabi et al., (2018)	Malaysians and Iranians do not have sufficient access to health care providers despite the coverage of health services through public clinics, while Indian society still faces many structural, financial and personal barriers to delivering health care services
13	Forster et al., (2020)	Structural adjustment reforms reduce access to health systems and increase neonatal mortality. Additional analysis shows that labour market reforms are driving these deleterious effects.
14	Harris and Dodson, (2017)	There has been an expansion of efforts to train local primary care and hearing health providers to recognize and appropriately treat the causes of preventable hearing loss in developing countries. Telehealth applications to connect providers and patients in rural areas have developed.

(continued)

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No	Author and year of study	Research results
15	van Weel et al., (2018)	Six countries (Bahrain, Egypt, Lebanon, Qatar, Sudan and UAE) have improved their public health, but are currently facing challenges from non-communicable diseases, an aging society, and rising costs. The main concerns are the lack of trained FPs in community settings, underutilization of prevention and equitable access to care.
16	Gregory and Tembo, (2017)	Implementation of e-Health in Zambia was characterized by high levels of training gaps, lack of regulatory policies, challenges in using technology and many other factors.
17	Strasser et al., (2016)	Sub-Saharan Africa (SSA) governments should draw on community expertise to identify specific public health priorities and should build capacity to enable the recruitment and training of local students from underserved areas to provide quality health care in rural communities.
18	Usher (2015)	Current health policies add to health problems because they only address objective access measures, with little input from citizens, and they have limited results.

Approach and carried out a literature evaluation [18]. The purpose of the research that will be conducted Lane et al., is to improve the development of health management and policy systems [18]. According to the findings, there are a total of thirty-four possible best practices for low- and middle-income countries' policy creation and management processes. The thirty-four best practices have the potential to improve the overall quality of health policy, and there is a good chance that their adoption will be successful.

Research Carpentieri et al., conducted in Italy is motivated by the fact that the number of people aged 65 years and over (elderly) will increase in 2050, and it is estimated that the elderly population will be greater than the number of children under the age of 15 years [19]. The research was motivated by these facts. These illnesses can make people in Italy more vulnerable and dependent on the healthcare services that are available there. According to the findings of the study Carpentieri et al., the elderly population as a whole suffers from poor accessibility to primary health services [19]. This is especially true for elderly people who live in the suburbs; consequently, an effective strategy for urban development planning is required in order to improve the quality of life for elderly people. An examination of the relevant published literature that was carried out by Levine to show the development of the idea of accessibility. According to the findings, the idea of accessibility can be broken down into two distinct categories: the first is application-based, and the second is definition-based [6].

Research carried out in Ethiopia that is based on attempts to achieve fair access to health care and enhance the health of the population overall [1]. According to the findings of a recent study Olyaeemanesh, the accessibility to health center-based Puskesmas resources in Ethiopia over the years 2015 to 2017 was unequally distributed across



the country [1]. According to research conducted by Lawal and Anyiam, one of the most significant obstacles to reaching the Sustainable Development Goals (SDGs) in Nigeria is the unequal distribution of opportunities to receive medical treatment [20]. According to the findings of the research carried out by Lawal and Anyiam, regions of the state of Akwa Ibom in the Niger Delta region of Nigeria that are difficult to access are dispersed over the entirety of this region [20]. The E2SFCA method was used to measure and compare accessibility using micro and macro-level population representations in research carried out by Bryant and Delamater [21]. The results provide insight into the limitations associated with using macro-level data to measure and interpret spatial accessibility.

The literature review research that was conducted by Cyr et al., was motivated by an inaccurate definition of access to health care due to the different facilitators and barriers experienced by people living in urban versus rural America [22]. The findings of the research conducted by Cyr et al., indicate that the definition of health access must now take into account four new factors [22]. These factors are referred to as stigma, health organization and the influence of surgery, primary care and special effects, and government and insurance policies. The two-step floating catchment area (2SFCA) method was utilized in the research that was carried out by Tao et al., in Beijing, China [23]. According to the findings of a recent piece of research carried out by Tao et al., the unequal distribution of public hospitals is the primary factor responsible for the large imbalance in village-level geographic accessibility to health care [23]. The availability of health care is significantly hindered by the administrative restrictions imposed by geographic boundaries.

Research carried out in Australia by Wang et al., is based on efforts to improve the health of the people and maximize the performance of the national health system. This research was carried out in Australia [24]. Case study research was conducted Wang et al., with the purpose of comparing the accessibility of rural and urban populations, and a two-step floating catchment area kernel density model (MKD2SFCA) was utilized as an analytical tool [24]. According to the findings of a recent study Wang et al., the degree of accessibility in Australia changes through time as well as space, and the rural-urban imbalance is not the same for all hospitals [24]. Research carried out by Mathon et al., that departed from the significant problem of the geographical accessibility of health care that is experienced by individuals in poor nations, particularly by people living in border areas such as Haiti and the Dominican Republic [25]. The research that was carried out by Mathon et al., utilized a strategy called a two-step floating catchment area (2SFCA) in conjunction with linear regression in order to predict accessibility to health care providers [25]. The purpose of this study Mathon et al., is to determine how the border affects the accessibility of health services for Haitians living in close proximity to the border between Haiti and the Dominican Republic [25].

A literature review study was carried out by Sohrabi et al., against the backdrop of the problem of accessibility of public health clinics that is experienced by residents of urban poverty levels due to the fact that they have restricted resources and financial capabilities [26]. The objective of the research that was conducted by Sohrabi et al., was to investigate and analyze the problems that the urban poor in Malaysia, Iran, and India have with regard to gaining access to public health care, as well as to provide

explanations for such problems [26]. Even though the coverage of health services that can be received through public clinics in Malaysia and coverage that can be received through health posts and health centers in Iran is quite good, research results Sohrabi et al., show that Malaysians and Iranians have poor access to public health care providers [26]. This is the case despite the fact that coverage of health services in Iran is quite good. When it comes to providing health care services through urban public health posts and urban family welfare, the Indian government continues to encounter a large number of obstacles, including structural, budgetary, and personal obstacles.

The market-oriented policies that developing countries are encouraged to adopt as a result of economic globalization and the efforts of organizations like the International Monetary Fund (IMF), according to research that was undertaken by (Forster et al., [27]. In exchange for policy adjustments, the International Monetary Fund (IMF) provides nations that are struggling economically with financial support. The term “structural adjustment programs” refers to the process through which nations all over the world have liberalized and deregulate their respective economies. According to the findings of a study that was carried out [27], structural adjustment reforms lower patients’ access to the healthcare system and raise the rate of infant mortality. The fulfillment of the Sustainable Development Goals (SDGs) in developing nations can be put in jeopardy by structural adjustment plans. The policies that govern structural adjustment take into account the varying degrees of health equity that exist among emerging nations. This indicates that the policy reforms demanded by the IMF, in particular the requirements mandating liberalization of the labor market, are connected with negative implications for access to health systems and infant mortality rates [27].

The undeveloped hearing health infrastructure for people who have hearing loss is the focus of the research that was undertaken as a literature review by Harris and Dodson [28]. The purpose of the research Harris and Dodson is to investigate the existing literature on the topic of access to hearing health in developing nations and locate areas where it can be improved in the near future [28]. According to the findings of the research that was conducted by Harris and Dodson, there has been a significant amount of development in terms of health that has been made in a number of developing countries [28]. These developments include initiatives to train primary care and local hearing healthcare workers in developing nations to detect and properly treat the causes of hearing loss. The availability of a telehealth application to connect patients living in rural locations with their respective healthcare professionals. It has been stated that newborn hearing screening programs have been modified so that they are better matched to the resources and traditions of the local area. This indicates that the governments of developing nations have made attempts to improve services via the implementation of various policies and programs.

The significance of puskesmas in the overall global strategy for universal health coverage served as the impetus for the research that was carried out by (van Weel et al., [29], (UHC). As a result, it is essential to have an understanding of the health system in order to successfully implement PHC; however, data are not available for the majority of countries. The purpose of the research project [29] is to investigate and investigate the connection between primary health care (PHC) and the health systems in six different countries, including Bahrain, Egypt, Lebanon, Qatar, Sudan, and the

United Arab Emirates. According to the findings of a recent study van Weel et al., [29], Bahrain, Egypt, Lebanon, Qatar, Sudan, and the United Arab Emirates have all made strides in improving their public health; however, these countries are now dealing with the challenges of non-communicable diseases, aging societies, and rising costs. The primary issues at hand are the dearth of properly educated family physicians (FP) working in community settings, the inadequate use of preventative measures, and the absence of barriers to equal access to medical care.

The high level of skill gaps, absence of regulatory policies, obstacles in deploying technology, and many other factors relating e-Health inspired the research that was carried out by Gregory and Tembo [30]. The study that was conducted by Gregory and Tembo makes use of a health facility that is based on mixed research methodologies, and its ultimate goal is to achieve a balanced opinion and experience among healthcare providers regarding the deployment of e-health [30]. According to the findings of the research carried out by Gregory and Tembo [30], e-Health should be supported by stakeholders, there should be an operational e-Health model site, there should be access to e-Health training laboratories, and the government should take initiatives to implement E-government. These are the conclusions that were drawn from the research. According to Gregory and Tembo, an e-Health training program and the necessity of implementing an e-Health Policy are both recommended [30].

The short life expectancy and poor health status faced by individuals living in rural and isolated locations in developing nations, particularly Sub-Saharan Africa, served as the impetus for the research that was carried out by Strasser et al., [31], (SSA). According to the findings of the research Strasser et al., [31], the government of Sub-Saharan Africa (SSA) should make use of the knowledge and experience of the local community to determine the top health concerns facing rural communities. The government also has to establish capacity to facilitate the recruitment and training of local students from areas that lack appropriate health services so that they can deliver quality health care to rural populations. These areas typically have a shortage of health services. The unjust nature of public and economic policies served as the impetus for the research carried out by Usher [32]. According to the findings of the study Usher [32], present health policies contribute to existing health problems. This is due to the fact that these policies primarily discuss objective access measures, and citizens and the community are not involved in them very much.

While the outcomes of the research overview of five publications carried out in Indonesia are presented in the following table, we should note that:

According to Table 2, it is common knowledge that the research carried out by Siagian et al., in Paser Regency was motivated by the development goals of the government of the Republic of Indonesia, particularly the local government of Paser Regency, and that it is the right of every resident, without exception, to have access to high-quality and low-cost health facilities [34]. The study Siagian et al., aims to analyze the accessibility of residents of Paser Regency to health facilities (Class C Hospital, Puskesmas, and Clinics) that are affiliated with BPJS Health as well as provide a general explanation of the health facilities that can be found in Paser Regency [34]. According to the findings of the research conducted by Onesimus Siagian and his colleagues in 2021, the people living in the Paser Regency have a difficult time gaining access to health facilities,

**Table 2.** A synopsis of the articles written by researchers in Indonesia.

No.	Author and year of study	Research results
1	Siagian et al., (2021)	Health accessibility occurs, especially to puskesmas in Paser Regency
2	Mubarak et al., (2021)	There is limited health accessibility in Nunukan district due to limited infrastructure
3	Laksono and Wulandari, (2021)	Kalimantan people living in border areas have a lower chance than people living in non-border areas to use inpatient hospitals.
4	Huraerah, (2019)	That influence access to health services in Bandung consist of infrastructure that opens access to health, transportation facilities to support health access, geographical conditions determine health access, health costs as health capital and socio-cultural problems.
5	Setiyono, (2018)	It is necessary to revitalize health service policies to be important to ensure a sustainable National Health Insurance policy

particularly puskesmas. Building a health facility construction facility that is linked with BPJS Kesehatan is one of the recommendations that has been made to the government with the goal of making it simpler for people living in the Paser Regency to get to the nearest health facility.

The research was carried out by Mubarak et al., in the Nunukan district, which is located in the border region between Indonesia and Indonesia [35]. The purpose of the study Mubarak et al., is to identify and examine the availability of social infrastructure and economic infrastructure, as well as the socio-economic situations of the population in Nunukan Regency between the years 2015 to 2019 [35]. According to the findings of the research Mubarak et al., [35], the lack of infrastructure that the residents of Nunukan Regency have access to is the primary cause of the poor accessibility of health care that they face. Due to the fact that the border region of the island of Kalimantan is one of the regions that requires the attention of the government, research was carried out there by Laksono and Wulandari [36]. The investigation that was carried out by Laksono and Wulandari made use of information obtained from the 2013 Indonesian Basic Health Survey [36]. It also included 69,043 respondents who were selected using the multistage cluster random sampling method. Finally, the findings of the survey were subjected to a Multinomial Logistics Regression test. According to the findings of the research conducted by Laksono and Wulandari [36], residents in border regions in Kalimantan have a lower likelihood of utilizing the services of inpatient hospitals compared to those residents of non-border regions. In addition, Laksono and Wulandari discovered eight additional predictors that influence hospital utilization in adults residing on the island of Borneo in Indonesia [36]. These predictors include the type of residence, marital status,

level of education, nature of employment, socioeconomic status, length of travel time, and cost of transportation.

The inability of Bandung's low-income residents to easily receive medical care, which is an issue that is still challenging to resolve, served as the impetus for the qualitative study that was carried out by Huraerah [37]. The goal of the research project [37] is to provide a description of the factors that influence access to health services as well as poor decisions to use health services. According to the findings of the research Huraerah [37], the factors that determine access to health services are as follows: infrastructure that opens access to health services; transportation facilities that support health access; geographical conditions that determine health access; health costs as health capital; and socio-cultural issues. Aside from that, unsuitable choices to utilize health services are brought on by both external and internal variables. The health care system, such as national policy in the health sector, resources or health staff, as well as political and economic conditions, are examples of external variables. Internal factors such as the characteristics of the poor include demographics, knowledge, beliefs, income, costs, transportation, health complaints, and health condition factors consisting of health status and satisfaction with health services. Other internal factors include the characteristics of the rich.

The study that was carried out by Setiyono diverges from the efforts that the government is making to construct national health insurance [33]. There are still a lot of obstacles to overcome before we can attain our goal. Since the beginning of the year 2000, the government of Indonesia has implemented an ambitious program of the National Health Insurance, which is based on the idea of universal coverage (JKN). It is very obvious that the government is committed to providing health care for all of its citizens as demonstrated by Law Number 40 of 2004, which is concerned with the National Health Insurance System. Under the legal umbrella of Law Number 24 of 2011 concerning the Social Security Administering Body (BPJS), the government established an implementing agency to support its implementation. This agency is comprised of BPJS Health (family health insurance), as well as BPJS Employment. This agency is governed by Law Number 24 of 2011. As a result of the integration of the state's social assistance program for the disadvantaged into the National Health Insurance, which ensures that all citizens have access to medical care regardless of their financial situation, the National Health Insurance has become the universally accepted method of payment for medical care in the United States (JKN) [33]. Nevertheless, significant issues come up, most notably concerning the accessibility of cash and other resources, both of which are consistently lacking in BPJS's operations. Therefore, it is crucial to revitalize health care policies in order to ensure a sustainable policy for the National Health Insurance (JKN) program [33].

According to the findings of this review of the relevant literature, it is common knowledge that access to medical care remains a challenge in developing nations, particularly for individuals who make their homes in frontier regions. One of these countries is the Republic of Indonesia, where residents of border regions continue to have difficulties in gaining access to adequate medical care. The findings of this study highlight the significance of undertaking additional research on the accessibility of healthcare in border regions, particularly for developing nations like Indonesia.

## 5 Conclusion, Limitations and Suggestions

The results of this study have provided an empirical explanation of why it is so important to pay attention to people who live in border areas so that they can have easier access to health care. Due to the limits of earlier studies, which only used 23 articles as references about health accessibility in border areas, the author of this study is aware that the findings cannot be extrapolated to all countries based on what was found in this particular research. Additionally, it is anticipated that the government would implement relevant legislation in order to address concerns regarding access to healthcare in border regions. In the future, it is intended that more in-depth study on health accessibility in border areas will be carried out using qualitative, quantitative, and mixed research methodologies. This is especially important for emerging nations like Indonesia.

## References

1. Olyaeemanesh, A., Woldemichael, A., Takian, A., Sari, A.A.: Availability and inequality in accessibility of health centre-based primary healthcare in Ethiopia. *PLoS ONE*, 14(3), 1–16 (2019).
2. Goddard, M., Smith, P.: Equity of access to health care services: Theory and evidence from the UK, (2001)
3. Savio, N.D., Nikolopoulos, K.: Forecasting effectiveness of policy implementation strategies: working with semi-experts. *Foresight*, 11(6), 86–93 (2009).
4. Van Meter, D.S., Van Horn, C.E.: *The Policy Implementation Process: A Conceptual Framework*. Administration & Society, 6(4), 445–488 (1975).
5. Nugroho, R.: *Public Policy*, PT. Elex Media Komputindo., Jakarta (2017)
6. Levine, J.: A century of evolution of the accessibility concept. *Transportation Research Part D: Transport and Environment*, 83(4), 1–5 (2020).
7. Bangun, B.H.: Konsepsi dan pengelolaan Wilayah perbatasan negara: perspektif hukum internasional. *Tanjungpura Law Journal*, 1(1), 52–63 (2017).
8. Situmorang, D.M., Ayustia, R.: Model Pembangunan Daerah 3T: Studi Kasus Daerah Perbatasan Kabupaten Bengkayang. *Mbia*, 18(1), 49–64 (2019).
9. Sumadinata, W.S., Ramadhan, R.A.: Politik Indonesia dalam Memberantas Ketimpangan di Kawasan Perbatasan. *ICENIS Conference*, 10(9), 1–4 (2018).
10. R. Penchansky, J Thomas: *The concept of access*, (1981)
11. Saurman, E.: Improving access: Modifying penchansky and thomas's theory of access. *Journal of Health Services Research and Policy*, 21(1), 36–39 (2016).
12. Peters, D.H., Garg, A., Bloom, G., Walker, D.G., Brieger, W.R., Hafizur Rahman, M.: *Poverty and access to health care in developing countries*, (2008)
13. Walt, G.: *Health policy: an introduction to process and power*. (1994).
14. Gormley Jr, W.T., Weimer, D.L.: *Organizational report cards*, Harvard University Press (1999)
15. Blum, H.L.: *Planning for health: Generics for the eighties*. In: *Planning for health: generics for the eighties*. pp. xv–462 (1981)
16. Lubis, V.H., Wijaya, F.: Faktor–Faktor Yang Berhubungan Dengan Pemanfaatan Pelayanan Kesehatan Ke Rumah (Home Services) Pada Pasien Di Rs Imc Bintaro. *Jurnal Kesehatan STIKes IMC Bintaro*, 4(1), 51–62 (2021).
17. Audi, M.N., Mwenda, K.M., Wei, G., Lurie, M.N.: Healthcare accessibility in preconflict Syria: a comparative spatial analysis. *BMJ open*, 12(5), e059210 (2022).

18. Lane, J., Andrews, G., Orange, E., Brezak, A., Tanna, G., Lebesse, L., Carter, T., Naidoo, E., Levendal, E., Katz, A.: Strengthening health policy development and management systems in low- and middle- income countries: South Africa's approach. *Health Policy OPEN*, 1 100010 (2020).
19. Carpentieri, G., Guida, C., Masoumi, H.E.: Multimodal accessibility to primary health services for the elderly: A case study of Naples, Italy. *Sustainability (Switzerland)*, 12(3), (2020).
20. Lawal, O., Anyiam, F.E.: Modelling geographic accessibility to Primary Health Care Facilities: combining open data and geospatial analysis. *Geo-Spatial Information Science*, 22(3), 174–184 (2019).
21. Bryant, J., Delamater, P.L.: Examination of spatial accessibility at micro- and macro-levels using the enhanced two-step floating catchment area (E2SFCA) method. *Annals of GIS*, 25(3), 219–229 (2019).
22. Cyr, M.E., Etchin, A.G., Guthrie, B.J., Benneyan, J.C.: Access to specialty healthcare in urban versus rural US populations: A systematic literature review. *BMC Health Services Research*, 19(1), 1–17 (2019).
23. Tao, Z., Cheng, Y., Zheng, Q., Li, G.: Measuring spatial accessibility to healthcare services with constraint of administrative boundary: A case study of Yanqing District, Beijing, China, (2018)
24. Wang, X., Shi, Z., Song, G.: Analytical study of influence of boundary conditions on acoustic power transfer through an elastic barrier. *Smart Materials and Structures*, (2018).
25. Mathon, D., Aparicio, P., Lachapelle, U.: Cross-border spatial accessibility of health care in the North-East Department of Haiti. *International Journal of Health Geographics*, 17(1), (2018).
26. Sohrabi, M., Tumin, M., Farid Osman, A.: Issues And Challenges of Public Health Accessibility Among Urban Poor People: A Case Study of Malaysia, Iran And India. *Malaysian Journal of Medical Research*, 02(04), 22–31 (2018).
27. Forster, T., Kentikelenis, A.E., Stubbs, T.H., King, L.P.: Globalization and health equity: The impact of structural adjustment programs on developing countries. *Social Science and Medicine*, 267(April 2018), 112496 (2020).
28. Harris, M.S., Dodson, E.E.: Hearing health access in developing countries. *Current Opinion in Otolaryngology and Head and Neck Surgery*, 25(5), 353–358 (2017).
29. van Weel, C., Alnasir, F., Farahat, T., Usta, J., Osman, M., Abdulmalik, M., Nashat, N., Alsharief, W.M., Sanousi, S., Saleh, H., Tarawneh, M., Goodyear-Smith, F., Howe, A., Kassai, R.: Primary healthcare policy implementation in the Eastern Mediterranean region: Experiences of six countries. *European Journal of General Practice*, 24(1), 39–44 (2018).
30. Gregory, M., Tembo, S.: Implementation of E-health in Developing Countries Challenges and Opportunities: A Case of Zambia Blended Learning in Zambia BLiZ View project Computer Communication View project Implementation of E-health in Developing Countries Challenges and Opportunit. *Science and Technology*, 7(2), 41–53 (2017).
31. Strasser, R., Kam, S.M., Regalado, S.M.: Rural Health Care Access and Policy in Developing Countries. *Annual Review of Public Health*, 37 395–412 (2016).
32. Usher, K.: Valuing All Knowledges Through an Expanded Definition of Access. *Journal of Agriculture, Food Systems, and Community Development*, 1–6 (2015).
33. Setiyono, B.: Perlunya Revitalisasi Kebijakan Jaminan Kesehatan Di Indonesia. *Politika: Jurnal Ilmu Politik*, 9(2), 38–60 (2018).
34. Siagian, W.O., Wibowo, S.M., Hamsyah: Health Facilities Accessibility In Paser Regency. *BESTARI: Buletin Statistik dan Aplikasi Terkini*, 1(2), 73–78 (2021).
35. Mubarak, M.M., Magister, J., Wilayah, P., Kota, D.: Evaluasi Ketersediaan Infrastruktur Pada Kawasan Perbatasan Indonesia-Malaysia (Kasus Kabupaten Nunukan). *Indonesian Journal of Spatial Planning*, 2(1), 45–53 (2021).

36. Laksono, A.D., Wulandari, R.D.: The Border-Non-Border Areas Disparities in Hospital Utilization in Kalimantan Island, Indonesia. *Medico-legal Update*, 21(1), 29 (2021).
37. Huraerah, A.: Accessibility of the Poor in Healthcare Service in Bandung, West Java, Indonesia. *KnE Life Sciences*, (2019).

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