

Need and Access to Health Care for the Elderly in Countryside Samut Songkhram Province

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Abstract

Access to good quality healthcare services is essential in order to promote healthy living, to prevent the diseases, avoid disabilities and reduce the death rate. Access to healthcare revolves around the idea that the healthcare services are being provided in order to get the positive outcomes related to health. Interaction quality with the health care providers is an essential component of the overall situation of health care. Therefore, the current study has been conducted with the aim to explore the impact of interaction quality with healthcare providers on the access to healthcare and need of healthcare in Samut Songkhram province along with the mediating role of value of healthcare. In the continuation of this purpose, the researcher has collected data from the people who have experienced the health care system of the research area. After the careful analysis of the collected data, the results have been obtained. These results have made it clear that interaction quality with healthcare providers has significant and positive impact on access to healthcare and needs of healthcare. Moreover, these results have also made it evident that the mediating role of value of healthcare is also significant in the relationship between interaction quality; and access and needs of healthcare.

Keywords: *Interaction Quality, Healthcare, Access, Need, Value of Healthcare*

1 Introduction

Access to good quality healthcare services is essential in order to promote healthy living, to prevent the diseases, avoid disabilities and reduce the death rate. Generally three components are considered in context of healthcare access i.e. insurance coverage, health related services and timeliness regarding healthcare (Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016; Okoro, Hollis, Cyrus, & Griffin-Blake, 2018). Access to healthcare revolves around the idea that the healthcare services are being provided in order to get the positive outcomes related to health. This takes place through three steps. The first step is to enter the healthcare system. The next step is to find the location of center where healthcare services are supposed to be found. In the next step, a healthcare provider is found and is told about the health issues faced by the patient. Through following these steps, a patient is able to make his or her physical, social and mental life better and ultimately the quality of life is improved (Bradley, Rumsfeld, & Ho, 2016; Welton & Harper, 2016). However, there are certain barriers to healthcare services. Some of the major barriers include increased costs, lack of health insurance, inadequate health services etc. These barriers lead to different problems and issues such as un-fulfillment of health needs, delayed healthcare service provision, financial issues etc. This shows that access to healthcare and needs of healthcare are very important to be provided timely. Interaction quality with the health care providers is an essential component of the overall situation of health care. This interaction involves interaction between the patient and the health care provider as well as between the family of the patient and health care provider. This interaction impacts the overall value of health care system (Jin et al., 2019; Johanson et al., 2019; Regolisti et al., 2018).

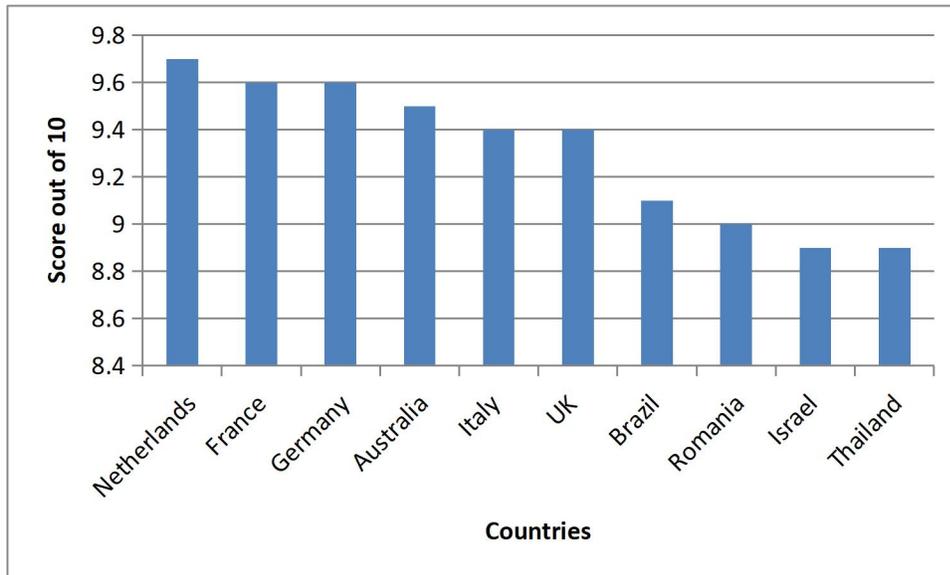
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Figure 1: Top Performing Countries in Access to medicine (clearstate)



Good interaction quality with the healthcare providers can lead to the improved value of health care and this ultimately provides better access of healthcare and fulfills the health care needs. However, in Samut Songkhram province of Thailand, the access of health care is weaker and the needs regarding healthcare are also not being fulfilled effectively due to the poor quality of interactions with health care providers. In the past, there are various studies regarding the interaction quality of healthcare providers and its impact on the overall healthcare access and needs but the value of health care has not been considered along with these issues. In addition, for Samut Songkhram province of Thailand, this study has not been conducted previously. Therefore, these gaps have been fulfilled by conducting the current study which has the following objectives:

- To analyze the impact of interaction quality with healthcare providers on the access to health care in Samut Songkhram province
- To analyze the impact of interaction quality with healthcare providers on the need of health care in Samut Songkhram province
- To study the mediating role of value of healthcare in the relationship between interaction quality and access to healthcare
- To study the mediating role of value of healthcare in the relationship between interaction quality and need of healthcare

This study will be significant for the health care providers as they will be able to get guidance from this study in order to improve the interaction quality with the patients so that the overall value of healthcare can be improved and related services are accessible for people and their needs are fulfilled.

Table 1: Thailand Health Expenditure (EOS Intelligence)

Key Indicators	Values
Population	67 Million
Health Insurance Coverage	67 Million
Real GDP	US \$144 Billion
Health Expenditure	4.1%
Govt. Expenditure on health	3.1%

2 Literature Review

2.1 Impact of Interaction Quality with Health Providers on Access to Health Care

The impact of the interaction quality with healthcare providers on the access of healthcare has been a topic of different researches. In the same way, different researches on the topic of nurse and family relationship have also been conducted (Bruce & Ritchie, 1997; Chesla, 1996; Robinson, 1996). One of such studies has over viewed the literature regarding the topic of parent and nurse relationship and interaction. Most of the literature that was reviewed in that study had the common aspects such as trust, interaction quality, healthcare quality, decision making in context of healthcare etc. In the past, it was essential for the family members of the patients to trust the doctors or healthcare providers but in recent times this trust is developed gradually on the basis of interaction of the patient and healthcare providers and the quality of interaction shared between them (Dixon, 1996). In the same way, researchers are focusing on the aspects of shared decision making process between the patient family members and the healthcare professionals. A study was conducted in the past in which the quality interaction by the family members was the basic subject of the study. In that study, various characteristics of a good family and healthcare provider relationship were recognized and discussed (Åstedt-Kurki, Paunonen, & Lehti, 1997; Jantunen, 1991; Bansal & Kumar, 2018). The results of the study suggested that the family members of the patient face difficulties in having good interaction about the patient's condition which shows the poor quality of interaction by the healthcare providers. Either no information was available or very less information was obtained due to poor interaction quality. In the exact same way, the poor interaction quality was the reason why there was no peaceful space where discussion about the health of the patient could be discussed with the family members. This discussion suggests that when the interaction quality is improved by the healthcare providers, it leads towards the easy access to healthcare services for the patients. Thus the following hypothesis can be drawn in this regard;

H 1: Interaction quality with health providers has significant impact on access to health care

2.2 Impact of Interaction Quality with Health Providers on Need of Health Care

The impact of interaction quality on the needs regarding healthcare has also been an interesting topic that has been covered in the past. The needs regarding different types of health such as physical health, mental health etc. have been increased in the last few years for different age groups especially for the elderly people. Interaction quality is actually the perception made by the customer about the interaction that happens between the customer and the service provider at the time of service encounter. In the same way, it also involves the aspect that what quality of service will be provided by the service providers (Gronroos, 1984; Lemke, Clark, & Wilson, 2011; Adebola, 2018). In the same fashion, another study suggested that interaction quality or interpersonal interactions leave a certain impact on the customer mind about the service (Binter, Booms, & Mohr, 1994). Taking this discussion to the next level, a study was found in which the impact of good service interaction was found to have an impact on the satisfaction level of the customers and the service providers play an essential role in this regard (Gerrard & Cunningham, 2001). Same suggestion was given by another study that was conducted in the similar context (Jamal & Naser, 2002). A researcher discussed in his study that the efforts put by the employees regarding the quality of interaction is significant for making good relationships with the customers and is an essential factors that makes sure that the customers are satisfied which in the context of the current study are patients (Jap, 2001). In the context of the current study, a study suggested that in case of medical treatments and healthcare provision, interaction quality also plays an essential role in making the perceptions of the patients about the quality of healthcare provider (Lin, Chiu, & Hsieh, 2001). There are different elements that are associated with interaction quality such as politeness, empathy and friendly manners of the healthcare providers to the patients. It has been found out that when the patients are made well aware of their condition and health and the options for treatment, they feel more satisfied all because of the quality of interaction (Gaur, Xu, Quazi, & Nandi, 2011). In the similar context, the needs of the patients are also fulfilled by providing good interaction quality to the patients. This leads towards the conclusion that interaction quality is linked with the needs of the healthcare, thus it can be hypothesized that;

H 2: Interaction quality with health providers has significant impact on need of health care

2.3 Mediating Role of Value of Health Care

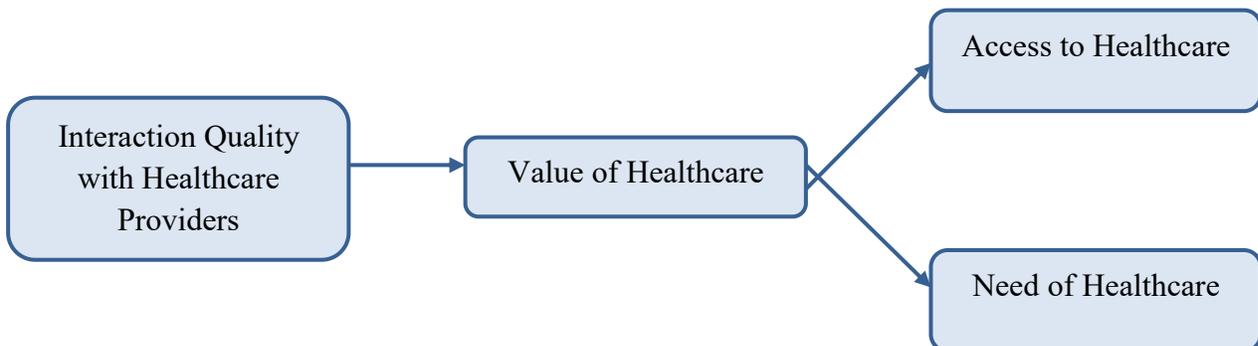
As far as the mediating impact of value of health care is concerned, there are not so many studies in the past that have linked this variable with the interaction quality by the healthcare providers. According to Gummeson (1987), relationship quality might be interpreted as the accumulated value of healthcare. Similarly, Raval and Grönroos (1996) discussed that in the initial stages, the value of each interaction is important but with the passage of time, the quality of interaction is more important. Thus it can be suggested based on these studies that value of the healthcare can be associated with the interaction quality. In the same way, the value of healthcare can also be associated with the customer satisfaction (Gülsün & Miç 2019; Durvasula, Lysonski, Mehta, & Tang, 2004; Iqbal & Hameed, 2020; Woodall, 2003). In another study, it was found out that nurses do cooperate in context of providing information to the family members but there was a huge gap between their actual practice of healthcare and perceived practice of healthcare (Bruce & Ritchie, 1997). Another research by Moser, Dracup, and Marsden (1993) also pointed out the same aspects that interaction quality by healthcare providers was significant for the family members. As far as the access of healthcare and need of healthcare are concerned,

they can also be associated with the value of healthcare. The interaction quality of healthcare has impact on the value of healthcare and this increased value will make the healthcare services more accessible. In the same way, the increased value of healthcare will also be able to fulfill the needs of the patients regarding healthcare. Thus this discussion can lead to the conclusion that value of healthcare has an important role as a mediating variable between interaction quality; and access of healthcare and need of healthcare. This leads to the generation of the following hypotheses;

H 3(a): Value of healthcare has significant mediating role in the relationship between interaction quality with healthcare provider and access to healthcare

H 3(b): Value of healthcare has significant mediating role in the relationship between interaction quality with healthcare provider and need of healthcare

2.4 Theoretical Framework



3 Methodology

3.1 Research Design and Sample

In continuation of the objective of the current study i.e. to explore the impact of interaction quality with healthcare providers on the access to healthcare and need of healthcare in Samut Songkhram province along with the mediating role of value of healthcare, the researcher has collected data from the people who have experienced the health care system of the research area. The sample has been selected through purposive sampling technique and thus the selected sample will be able to provide required information about the healthcare system of the research area and will represent the whole population. The questionnaire was distributed among 420 respondents and at the end, 398 responses were selected for the use in the study.

3.2 Instrumentation

For the purpose of data collection, survey questionnaire has been used. The questionnaire is a blend of different questions regarding the variables of the study and involves all the items associated with these variables. Different sections have been developed such as demographics section and then each section for each variable.

3.3 Measures

Six items are associated with interaction quality with health care providers and are developed in a past research (Ekinici & Dawes, 2009). One sample item of this construct is given as “the advice given by doctors or other health providers was

easy to understand”. Access to health care has four items associated with its measurement and these are obtained from the past literature (Gold, 1998). It includes the items such as “how often got an appointment for health care as soon as needed”. Need of healthcare has three items for its measurements, developed by a researcher in the past (Woolcott et al., 2010). The mediating variable, value of healthcare is associated with four measurement items, that have been taken from a past research (Jerant, Fiscella, & Franks, 2012). A sample item is “healthcare is not worth the money it costs”. All these items have been measured through a five point Likert scale ranging from 1(strongly disagree) to 5(strongly agree).

3.4 Data Analytical Approach

The collected data has been analyzed statistically through the use of SPSS and AMOS and tests such as SEM, CFA have been used to find out the impact of independent variable on the dependent variables and also the mediating role of the mediating variable. The results that have been obtained as per the statistical analysis have been interpreted in the next section.

4 Results and Analysis

4.1 Demographics

The demographics of the respondents suggest that among a total of 398 respondents, 55.3% were males and females made 44.7% of the total respondents. The demographics regarding age indicated that the highest number of respondents i.e. 41% belonged to the age group of 25 to 35 years and the lowest of them i.e. 3.8% had the age more than 45 years. In the same way, the experience of most of the respondents i.e. 42.2% ranged from 2 to 5 years and only 9.8% of them had the experience of more than 8 years.

4.2 Descriptive Statistics

According to the descriptive statistics of the variables as reported in table 1, it can be estimated that the collected data is normally distributed because of the skewness values and the range of minimum and maximum values from 1 to 5 i.e. range of Five point Likert scale.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
ValueHC	398	1.00	5.00	3.3442	.95897	-.393	.122
IntQuHCP	398	1.00	5.00	3.5546	1.15215	-.594	.122
AcceHC	398	1.00	5.00	3.2069	1.18953	-.290	.122
NeedHC	398	1.00	5.00	3.5923	1.09819	-.484	.122
Valid N (listwise)	398						

4.3 KMO and Bartlett's Test

According to the values of KMO and Bartlett’s test reported in table 2, it can be deduced that the collected data has high adequacy for the study and the factor analysis is useful for the study as well. This makes the data eligible to move further in the research process.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.926
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.
	6830.348
	136
	.000

4.4 Rotated Component Matrix

As the factor loading values of all the indicators associated with the constructs of the study are greater than 0.7 as per the rotated component matrix (table 3), the result can be deduced that all the indicators have good contribution towards the variables of the study.

Table 4: Rotated Component Matrix

	Component			
	1	2	3	4
VH1			.824	

VH2					.755			
VH3					.784			
VH4					.836			
IQ1	.899							
IQ2	.854							
IQ3	.822							
IQ4	.870							
IQ5	.903							
IQ6	.885							
AH1							.860	
AH2							.883	
AH3							.879	
NH1			.790					
NH2			.835					
NH3			.859					
NH4			.837					

4.5 Convergent and Discriminant Validity

The results of convergent and discriminant validity have been reported by the researcher in table 4. The composite reliability and average variance extract values are according to the appropriate range thus suggesting the validity of the constructs of the study.

Table 5: Convergent and Discriminant Validity

	CR	AVE	MSV	MaxR(H)	AH	VH	IQ	NH
AH	0.914	0.781	0.263	0.915	0.884			
VH	0.883	0.657	0.323	0.953	0.408	0.810		
IQ	0.911	0.851	0.280	0.987	0.513	0.519	0.922	
NH	0.916	0.732	0.323	0.989	0.357	0.568	0.529	0.855

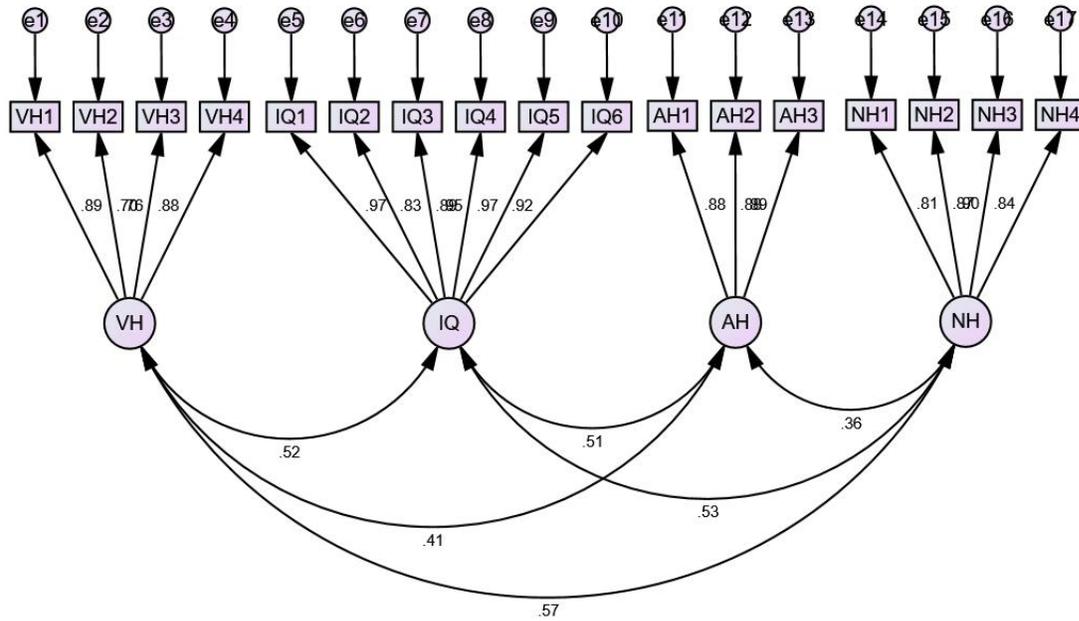
4.6 Confirmatory Factor Analysis

According to the results of confirmatory factor analysis reported in table 5 different indicators of CFA such as CMIN/DF, GFI, IFI and RMSEA etc. have their values within the range of threshold values which are also shown in the table. This shows the fitness of the model (Hameed, Nadeem, Azeem, Aljumah, & Adeyemi, 2018; UI-Hameed, Mohammad, & Shahar, 2018).

Table 6: Model Fit Indices

CFA Indicators	CMIN/DF	GFI	IFI	CFI	RMSEA
Threshold Value	≤ 3	≥ 0.80	≥ 0.90	≥ 0.90	≤ 0.08
Observed Value	2.418	0.919	0.976	0.976	0.060

Figure 2: CFA



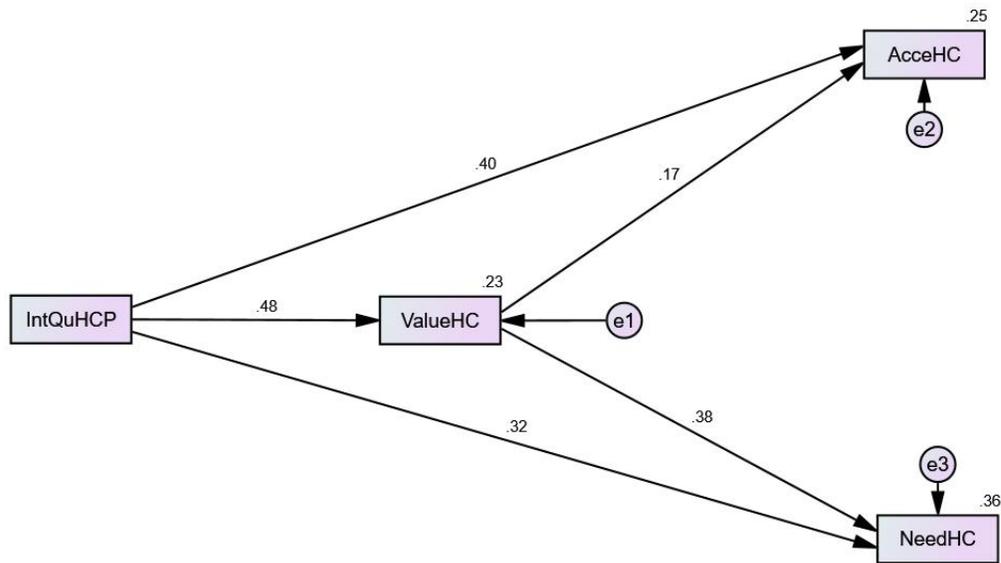
4.7 Structural Equation Modeling

The results of SEM suggest that the impact of interaction quality has significant and positive impact on both access to healthcare and need of healthcare. It can be stated as per the results that access to healthcare and need of healthcare will increase by 40.3% and 31.6% respectively with the increase of one percent of interaction quality. Moreover, the mediating impact of value of healthcare has also been found as significant in both the direct relationships of the study.

Table 7: Structural Equation Modeling

Total effect	IntQuHCP	ValueHC
ValueHC	.476**	.000
NeedHC	.496**	.378**
AcceHC	.482**	.165**
Direct effect	IntQuHCP	ValueHC
ValueHC	.476**	.000
NeedHC	.316**	.378**
AcceHC	.403**	.165**
Indirect effect	IntQuHCP	ValueHC
ValueHC	.000	.000
NeedHC	.180**	.000
AcceHC	.079**	.000

Figure 3: SEM



5 Discussion and Conclusion

5.1 Discussion

As it has been quite clear that the motive to conduct the current study was to explore the impact of interaction quality with healthcare providers on the access to healthcare and need of healthcare in Samut Songkhram province along with the mediating role of value of healthcare. In this scenario, the researcher collected data from the respondents regarding the variables of the study and it was analyzed to verify the hypotheses of the study. The first hypothesis in this regard was that the interaction quality with healthcare providers has significant impact on the access to healthcare. This hypothesis has been accepted in light of the results and can be verified from the literature in the past (Sakellariou & Rotarou, 2017; Zhang et al., 2017). When the interaction quality between patients and the healthcare providers is improved then healthcare is supposed to be more accessible to people. The second hypothesis of the study was that the interaction quality with healthcare providers has significant impact on the need of healthcare. The results have also proved this hypothesis as true. The needs of the people regarding healthcare can be effectively fulfilled when the interaction quality with the healthcare providers is improved. This result is in concordance with the past studies (Rehman, Ali, & Ahmad, 2017; Schokkaert, Steel, & Van de Voorde, 2017). In the last, hypotheses were also drawn regarding the mediating role of value of healthcare in the study. The results have shown that the mediating role of value of healthcare has also been found as significant. These results are in line with the previous literature (Porter, Kaplan, & Frigo, 2017).

5.2 Conclusion

The results of the study have suggested that the impact of the interaction quality with healthcare providers on access to healthcare and need of healthcare is significant and in the same way the mediating role of value of healthcare has also been found as significant. Thus it can be concluded on the basis of the obtained results that the access to health care can be improved and need of healthcare can be fulfilled of the interaction quality of people with the healthcare providers is improved. In the same way, the increase in the value of healthcare might also improve the access and need fulfillment of healthcare.

5.3 Implications and Limitations

The most important practical implication of the study is regarding the health care system of Samut Songkhram province of Thailand. The healthcare system can get guidance from this study in order to improve the access to healthcare and fulfilling the needs of healthcare by improving the interaction quality with the healthcare workers and by enhancing the value of overall health system. They might also devise policies and regulations under the light of this study to ensure that healthcare is accessible to everyone and their related needs are being fulfilled. Moreover, this study might find the theoretical implications for the researchers as they can get literature and information from this study regarding healthcare.

The context of the study is recommended to be changed from healthcare to some other sector and the region or area of research must also be changed in the future researches. This will enhance the body of literature in this regard.

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