Revue Internationale du Chercheur
ISSN: 2726-5889
Volume 4 : Numéro 2

Determinants of demand for healthcare: a review of the literature

Les déterminants de la demande de soins de santé : une revue de littérature

Idriss HOUMAM

Ph.D. student
Faculty of Legal, Economic, and Social Sciences, Ibn Zohr University,
Agadir-Morocco
Laboratory of Studies and Applied Research in Economics
idriss.houmam@gmail.com

Mohamed ADASKOU

Teacher-researcher
Faculty of Legal, Economic, and Social Sciences, Ibn Zohr University,
Agadir-Morocco
Laboratory of Applied Studies and Research in Economics
m.adaskou@uiz.ac.ma

Date de soumission : 02/02/2023

Date d'acceptation : 13/05/2023

Pour citer cet article :

Houmam I., & Adaskou, M. (2023). « Determinants of demand for healthcare: a review of the literature », Revue Internationale du chercheur «Volume 4 : Numéro 2» pp : 111- 137

Abstract

This work aims to describe the determinants of healthcare demand by exploiting a range of empirical studies. Indeed, the study and analysis of these factors are extremely important for formulating policies and strategies aimed at improving the conditions favoring the use and demand of healthcare and the health status of the population.

The literature has reported a range of factors influencing the demand for and use of healthcare services. These determinants can be grouped into four categories: economic determinants (income, cost of care, insurance, ...), socio-demographic and cultural determinants (age, genre, professional status, family status, education level, origin, ethnicity, ...), disease-related determinants (severity of disease, previous health status, ...) and health care supply-related determinants (access to health care services, waiting time, quality of healthcare services, ...).

In the majority of published studies, we can see that household characteristics, income, and the price of healthcare are the main determinants of the demand for healthcare.

Keywords: Demand; Determinants; Health economics; Healthcare; review of the literature.

Résumé

Ce travail vise à décrire les déterminants de la demande de soins de santé en exploitant une panoplie des études empiriques. En effet, l'étude et l'analyse de ces facteurs est extrêmement importante pour la formulation des politiques et des stratégies visant à améliorer les conditions favorisant l'utilisation et la demande des soins de santé et l'état de santé de la population.

La littérature a signalé un ensemble des facteurs influençant la demande et l'utilisation des services de soins de santé. Ces déterminants peuvent être regroupées en quatre catégories : déterminants économiques (revenu, coûts des soins, assurance, ...), déterminants socio-démographiques et culturels (âge, genre, statut professionnel, statut familial, niveau d'éducation, provenance, ethnicité...), déterminants liés à la maladie (gravité de la maladie, état de santé antérieur, présence de maladie chronique,...) et déterminants liés à l'offre de soins (Accès aux services de santé, temps d'attente, qualité des services de soins,...).

Dans la majorité des études publiées, dans ce sens, nous pouvons constater que les caractéristiques des ménages, le revenu et le prix de soins de santé sont les principaux déterminants de la demande de soins de santé.

Mots clés : Demande ; Déterminants ; Economie de santé ; Revue de littérature ; Soins de Santé.

Introduction

In an environment characterized by strong growth and profound changes, human capital remains a constant concern for all public authorities. The development of any economy depends on several factors, but it remains strongly correlated with the human factor.

On the other hand, a state with a poor health system is likely to be short of human capital. In other words, a healthy individual is economically more productive and will thus contribute to economic growth (Arrow, 1963).

Health remains a prerequisite for successful inclusive development and is central to all governmental decisions, as well as contributing to the creation of a favorable living environment. Ultimately, health is a right for every human being and is associated with the notion of well-being. In this perspective, the consideration and improvement of health services can influence the country's economic, social, and societal progress.

The demand for and consumption of healthcare is crucial and necessary for human development. At the micro-level, improved health status can lift individuals and households out of poverty, thereby increasing their productive capacity.

In this regard, analysis of the determinants of healthcare demand is extremely important for formulating policies and strategies to improve the conditions for healthcare utilization and demand and the population's health status.

This paper attempts to synthesize a range of empirical studies dealing with the factors influencing the demand for and use of healthcare. Indeed, there are several determinants of the utilization and demand for healthcare services. So, what are the main factors influencing the demand and use of healthcare services?

The article is organized in four parts: the first part will focus on economic determinants, the second part will deal with socio-demographic determinants, the third part will focus on healthcare supply factors and finally the last part will deal with disease-related determinants.

1. Economic determinants of healthcare demand

Discussing the economic determinants of healthcare demand refers to a range of factors that can affect household behavior. Many studies have attempted to categorize economic determinants, often referring to treatment costs, income, health insurance, and expenditures. Therefore, we will try to review the main works and attempts made in this sense.

1.1. The cost of treatment

In addition to the work on the direct and indirect costs of healthcare, the price of treatment is found to be an important factor of the utilization for healthcare services. Theoretically, the price of treatment (the cost of treatment) should act as an important determinant of the use of healthcare services. For an individual with a particular health condition, changes in the price of medical care would affect their demand for health care consumption.

Andersan & Newman's (1973) study demonstrated that overall consumer welfare would be reduced with the imposition of treatment costs. Indeed, the price of treatment negatively and strongly influences the decision of household demand for healthcare.

In addition, the study by Acton (1975) concluded that in cases where healthcare costs are zero or close to zero, the time required to consume the services reduces the use of health services. Similarly, some studies have indicated that the demand for health services does not affect the cost of care. (Akin et al. 1995). These results contrast other studies that have shown that prices affect health service use (Lavy & Quigley, 1993; Ellis & Mwabu, 2004).

Furthermore, Lavy & Quigley (1993) found that the price of care was found to be a less important determinant of the demand for healthcare, something that seems to contradict the results of the study by Dor et al. (1987), which showed that the cost of treatment is a crucial factor of the utilization for healthcare services.

Along the same lines, Sarma (2009) conducted a study in India to examine the determinants of healthcare demand and healthcare provider choice. Unlike Frederickx's (1998) study, which excluded the price of healthcare, Sarma's study (2009) showed that the price of care was a statistically significant factor of healthcare demand and healthcare provider choice by individuals in rural India. Nevertheless, the study found that the demand for healthcare was inelastic in terms of price.

Similarly, for Meara et al. (2014), the price of treatment was among the determinants selected to explain the demand for healthcare in Africa. In this regard, the occupational status and occupation of the individual were found to play a role in determining the demand for healthcare.

1.2. Income

Studying the evolutionary genesis of income as a factor influencing the demand for healthcare refers to a body of work from the 1990s to the present.

Referring to the study by Gertler & Gaag (1990), it appears that high-income households have a considerable probability of seeking healthcare, as opposed to poor and disadvantaged households that have limited access to healthcare services. In the same vein, work by McCaw-Binns et al. (1995) and Tanti-Hardouin (1994) found a positive relationship between the demand for care and the household's standard of living.

Tanti-Hardouin (1994) found that the demand for healthcare is correlated with income (individual and government income). The authors showed, based on an empirical study, that household income has a significant impact on health expenditures. Similarly, Lavy & Quigley (1993) found that income is a significant factor of utilization for healthcare services in Ghana.

Nahu's (2006) study attempts to identify the factors that determine demand behavior for healthcare services by employing a maximum likelihood estimation technique and using primary data collected in a small Woreda town in western Gojjam. The results of the study confirm that patients' choices of healthcare providers are influenced by a range of determinants, most notably monthly household income.

However, the results reported by Asada & Kephart (2007) diverge from those of Sarma (2009). In this vein, the authors showed that income was a statistically significant determinant of demand for healthcare.

As for the work of Muhofa (2010), the author examined the relationship between economic factors (Income, etc.), socio-demographic characteristics, institutional factors, and utilization of formal healthcare facilities. Through the results of this study, there was a significant relationship between income and utilization of formal healthcare services at the 5% significance level.

Recently, Mwami & Oleche (2017), tried to corroborate the previous studies and more specifically to the study of Asada & Kephart (2007). Indeed, the results obtained affirm that income, as measured by the wealth index, significantly affects healthcare utilization in Kenya.

Broadly speaking, and in light of the work reviewed, it appears that income can be seen as a springboard for determining the demand for healthcare. This finding can be supported by the abundance of work that has confirmed its influence on healthcare utilization in different

settings. In this regard, we will review the main studies that have treated health insurance as an economic determinant of healthcare demand.

1.3. Health insurance

The main objective of health insurance is to improve access to healthcare and to reduce individual expenses for people, especially those with limited income. Health insurance can be defined as a process by which an individual protects himself or herself against financial loss due to an accident or disability to improve healthcare utilization and protect households from the depletion of personal expenditures (Knight, 1921).

The first randomized experiment to examine the effects of health insurance on beneficiaries' health was conducted between 1974 and 1982 in the United States. The results showed that people in cost-sharing plans sought less treatment than those with full coverage, in this case, Medicare (Joseph, 1971). A similar experiment by Berman (2001) demonstrated the same result, but in a different setting, Egypt.

Furthermore, Zweifel & Manning (2000), through risk pooling among insureds, find that health insurance can lower the price of healthcare at the time of purchase, leading to increased healthcare utilization. In this regard, the authors consider health insurance to be an important factor in the demand for healthcare by individuals.

Gardiol et al. (2003) analyzed the effect of supplementary health insurance on healthcare utilization. According to them, having supplementary health insurance increases the chance of consuming more healthcare, which can be justified by the high level of reimbursement for the insured.

However, the results found by Joseph (1971), Berman (2001), Zweifel & Manning (2000), Gardiol et al. (2003), and Jowett et al. (2004) agree with the results of Grossman (1972) and Anderson et al. These have shown that health insurance has a significant effect on healthcare utilization and expenditures. Jowett, Deolalikar, & Martinsson (2004) and Berkman et al. (2000) found a significant negative relationship between health insurance and healthcare utilization.

Even more, in the study conducted by Oladipo (2014), 12 of the variables were found to be the most dominant predictors of healthcare utilization. Among these variables was health insurance. Following the same logic, Meara et al. (2014) found that health coverage, namely health insurance, was among the determinants selected to explain the demand for healthcare in Africa. To that end, health coverage was discovered to play a role in determining healthcare demand.

To complete our reflection on the factors influencing the demand for healthcare, we feel it is necessary to address a fourth economic determinant, namely expenditure.

1.4. Expenditure

In light of research addressing the determinants of healthcare demand, it is appropriate to distinguish between two types of expenditures: expected expenditures and household expenditures (Srivastava and McGuire, 2015). The authors focused on the impact of planned and household expenditures on healthcare service utilization. In this regard, expenditures significantly influence the demand for care.

It is crucial, therefore, to consider expenditures as one of the economic determinants of healthcare demand in addition to the cost of treatment, individual income, and health insurance. These influencing factors can serve as a locomotive for studying the demand for healthcare. However, several research studies emphasize the important role of sociodemographic and cultural determinants in the study of healthcare demand.

2. Socio-demographic and cultural determinants

Integrating sociodemographic and cultural determinants in the analysis of individual healthcare demand seems to be of great relevance. This choice can be justified not only by our research intuition but also by the abundance of scientific work, carried out in different contexts, which traces a panoply of factors influencing the use of healthcare of a socio-demographic and cultural nature. These are essentially age, genre, residence, level of education, and professional status.

2.1. Gender

Gender is often considered one of the main variables used in socio-economic studies and surveys. It refers to the distinction between female and male sex from a psychometric analysis perspective. In this respect, many researchers have used it to explain the demand for healthcare.

Even more so, Nahu (2006) attempts to identify the factors that determine healthcare demand behavior by employing a maximum likelihood estimation technique and using primary data collected in a small Woreda town in western Gojjam. The results indicate that the gender of the patient significantly affects the demand for healthcare.

Furthermore, Lawson (2005) used a discrete choice model to examine the determinants of healthcare-seeking behavior in rural Uganda. The result is consistent with that obtained by Frederickx (1998) in Tanzania.

Asada & Kephart (2007), in their study of the determinants of healthcare-seeking in Canada, found that gender has a strong influence on healthcare-seeking behavior.

In a similar vein, Prosser (2007) conducted a study on factors that affect individuals' healthcare-seeking behavior and unmet health needs. The study used univariate and multiple logistic regression analyses to investigate the outcome variable. The results show that gender is among the main factors influencing individuals' healthcare-seeking.

However, other empirical work has shown controversy. In other words, according to Lahana and colleagues' study (2011), gender does not play any role in the use of health services and this variable is not statistically significant.

2.2. Age

Age is among the variables most likely to influence the demand and utilization of healthcare services. Several empirical studies have examined the effect of age on healthcare utilization and demand, including Andersen & Newman (1973) and Kroeger (1983).

According to Andersen & Newman (1973), the demand for healthcare is influenced by a variety of determinants and factors. This study, conducted in the United States, demonstrated that age significantly impacts the demand for health care. Moreover, several studies also converge on the importance of this socio-demographic determinant, notably the study by Ager & Pepper (2005) and the study by Lahana et al.

In addition, Rous & Hotchkiss (2003) estimated the determinants of household healthcare demand. They found that the age of the individual was significantly associated with disease reporting, but the sign of the parameter was negative.

Nevertheless, the study by Ali & Noman (2013) displays different results from the above studies. The authors sought to estimate the factors that influence the utilization and demand for healthcare services. A binary logistic regression model is used to identify the determinants of healthcare demand. The result reveals that age is negatively related to a patient's demand for healthcare because the marginal benefit of investing in health decreases with age.

Another study is found to be in line with Ali & Noman's (2013) findings on age, namely that of Akin et al. (1995). According to these authors, age and healthcare demand have no economically significant relationship, except in the case where the very young and very old are dependent on others and require more healthcare than other groups due to biological factors.

Finally, it is crucial to point out that many studies consider age as a determinant and explanatory variable of healthcare demand. Hence, we will incorporate it into our research model as an explanatory socio-demographic factor.

2.3. Level of education

According to Grossman (1972), an improvement in the level of education and training will increase the marginal products of health care by the same proportion. Likewise, the work of Andersen and Newman (1973) & Kroeger (1983) has endorsed education as one of the determinants of healthcare demand and utilization.

Several empirical studies in this field have shown that the level of education and schooling of the patient/individual influences the decision to use healthcare services, such as Gage (2007).

According to Frederickx's (1998) study, education was found to be statistically insignificant. In this respect, the author confirmed the existence of a positive influence of education on the demand for healthcare as predicted by Grossman (1972), the non-significance of the coefficient suggests that the education of the head of the household has little impact on the healthcare utilization decisions of the household members.

In a similar vein, Abdulraheem (2007) found that education was among the determinants selected to explain the demand for healthcare. He found that the education of the individual plays a considerable role in determining the demand for health care.

Further, using multinomial logit regression, Sarma's (2009) study showed that the level of education of household members is a statistically significant factor affecting healthcare demand and healthcare provider choice in rural India.

In another study in Uganda, Muhofa (2010) sought to analyze the determinants of formal health service utilization in Butalejah. Explanatory factors were analyzed using Chi-square statistics and logistic regression. Using chi-square, there was a significant relationship between education level and formal health service utilization at the 5% significance level. Using the logit results, the education level factor was significant at the 5% level.

Along the same lines of these studies, Oladipo (2014) conducted research on the degree of healthcare service utilization in urban and rural areas with an in-depth exploration of existing disparities and their implication for the management and planning of healthcare delivery systems. One of the exogenous variables used was the level of education. All of the need variables covered in this study, including level of education, are of importance.

Another study was conducted by Rashid & Antai (2014), which aimed to estimate the role of socioeconomic position as a determinant of maternal healthcare utilization in Namibia. Through multivariate logistic regression analysis, it was found that the education level variable was positively correlated with healthcare utilization, confirming the theoretical contributions of Grossman (1972), Andersen & Newman (1973), and Kroeger (1983).

More recently, we have reviewed the work of Wellay et al. (2018), who assessed the factors that could potentially influence the demand for health services in Ethiopia. The study found that the education level of the household head had a significant influence on the demand for care.

In brief, we can conclude that the level of education can serve as a stepping stone to explaining the use of health services.

2.4. The environment of residence

The residential setting is one of the predictors of healthcare provider use. Studies conducted by researchers such as Andersen & Newman (1973), and Lahana et al. (2011) have raised the importance of residential settings in the context of health service utilization. They concluded that individuals from urban and rural areas have different perceptions of health service utilization.

In addition, Ager & Pepper (2005) demonstrated that the residential environment remains a critical factor and explanatory determinant of individual healthcare utilization.

A few years later, Adu Gyamfi & Abane (2013) consider residential settings as one of the selected determinants to explain health service utilization in Ghana. According to the results, it was found that the individual's residence environment explains the use of health services.

Specifically, Rashid and Antai's study (2014), conducted in Namibia between 2006 and 2007, demonstrates through bivariate and multivariate analyses that education, wealth index, marital status as well as the place of residence are found to be determinants of health care demand.

Moreover, Rutaremwa et al. (2015) conducted a study in Uganda based on a sample size of 1728 individuals. The researchers demonstrated that the environment of residence is significantly associated with the demand for healthcare. Indeed, they found that people living in rural areas have difficulty accessing healthcare compared to those living in urban areas.

Finally, several studies confirm the importance of the residence environment variable in explaining the demand for health care, notably the work of Nuwaha (2000) and Gage (2007).

2.5. Family status

Family status seems to be one of the factors influencing the demand for healthcare. In this respect, Newbold & Danforth (2003) considered family status as one of the main determinants used to explain the demand for healthcare. According to the results, it was found that the individual's family status plays a significant role in determining the use and demand for healthcare services.

Similarly, the study by Patil et al. (2002) concurs with the study by Newbold et Danforth (2003). According to these authors, being single differs greatly from being married, since the latter is dependent on responsibility.

On the other hand, Brown et al. (2009), studied the effect of marital status on healthcare use. They argue that married people, especially women, are more likely to use health services than single women. These results can be justified by the change in the individual's lifestyle between singlehood and marriage, especially for women.

Three years later, Sato et al. (2012) confirm the predicted ideas. According to him the family or marital status of the individual positively influences the demand of healthcare. In the same vein, Onwubiko et al. (2014) retained family status to explain healthcare demand in Nigeria. Based on their results, the authors confirm the significant contribution of the individual's family status in determining healthcare demand.

Similarly, Kansiime et al. (2014) attempted to identify factors influencing patients' healthcare choices in Mburo National Park Uganda using a sample size of 245 households. This study states the importance of the variable marital status as a determinant of healthcare seeking.

The same finding can be drawn from the study conducted by Galal & Al-Gamal (2014), which took place in Egypt. The objective is to estimate the role of the position of the determinants of healthcare utilization. It was found that marital status is an undeniable determinant of healthcare demand.

Huang & Gan's (2015) study, investigated the factors influencing healthcare demand in China on a sample of 1764 urban respondents. The results display that marital status shows a positive coefficient of 0.813. This indicates that marital status positively impacts the demand for healthcare in China.

On balance, family status, also referred to as marital status, appears to be another factor determining the demand for health care.

2.6. Professional/occupational status

Occupational status or employment is one of the cultural variables that can influence the demand for healthcare. In this respect, several recent studies have highlighted the important role of this variable in the analysis of healthcare service use choices.

Indeed, the study by Lépine & Nestour (2011) focused on the analysis of the determinants of healthcare demand in Senegal and particularly in the rural sphere. To achieve the main objective of the study, a probit model was estimated on a sample of 4072 individuals. The results of the analyses show that the professional status variable is undeniable.

We can also focus on the work of Meara et al. (2014). According to them, professional status was among the determinants selected to explain the demand for healthcare in Africa. In this regard, occupational status and occupation of the individual were found to play a role in determining the demand for health care.

Similarly, Kansiime et al. (2014) analyzed the factors influencing patients' choice of health care in Mburo National Park, Uganda on a sample size of 245 households. This study states the importance of the variable "employment" as a determinant of healthcare seeking.

A year later, Srivastava & McGuire (2015) publish a paper addressing the topic of healthcare demand in India using a logit (logistic regression) model. The results display that the variable "occupation/employment" is a determinant variable of healthcare demand.

More recently, Yakubu et al. (2021) attempted to investigate the influence of socio-demographic factors on household healthcare demand in a rural community in southern Nigeria. In this regard, a descriptive cross-sectional study was conducted in 2014 among 410 households in Ivhiunone, Fugar in Edo State. Along with other variables (Age, Gender, Marital status, Religion, Educational level, Income), occupational status (Occupation) is considered in this analysis as a significant variable. In sum, according to its coefficient, this variable is found to be negatively correlated with health care utilization in this country.

In light of the literature review, we can say that gender, age, education level, family status, and professional status can be considered important socio-demographic and cultural factors in determining the demand for healthcare. However, to deepen our reflection, it seems relevant to address the third category of factors: the determinants related to the supply of healthcare.

3. Determinants related to the supply of healthcare

Having reviewed the main economic, sociodemographic, and cultural determinants, it is now appropriate to enrich the review with a third category of determinants related to the supply of care. In this respect, the work carried out provides information on a range of factors likely to influence individuals' choices in terms of the use of health services. These are essentially distance, quality of service, and waiting time.

3.1. Distance

Distance is one of the determinants that can potentially influence the decision to seek care. Individuals are less likely to travel more than 5 km to access care. This was demonstrated by Stock (1983) who sought to study the relationship between health service use and distance in Papua New Guinea. Indeed, he showed that utilization decreased significantly as distance increased.

In a similar vein, Nwakoby (1992) identified distance as a major determinant of health service utilization, particularly for maternal and child health services. It is an important factor in two respects: it influences both the choice of facility for care and the ability to reach the facility of choice in time, for example, early in labor.

On the other hand, Wilson et al. (1997), in a study in Nsawam, found that distance from home to the hospital was one of many factors causing low utilization of health services. In the Jasikan District of Ghana, distance degradation played a major role in health service utilization. Many factors counteract distance decay, such as social status, quality of care, attributes, and type of illness.

More lately, Lawson et al. (2004) sought to examine the factors influencing the utilisation for healthcare services in that country. In this study, distance is one of the variables that may affect the demand for healthcare.

In short, the distance individuals travel to access healthcare services must be considered when analyzing the determinants of demand for healthcare. However, it is necessary to take into account the dynamic nature of this variable given the considerable development of means of transport and physical infrastructure that have become increasingly effective in solving accessibility problems.

3.2. Quality of service

According to Costello et al. (1993) and Leslie (1989), the decision to choose healthcare is determined not only by its availability, accessibility, and affordability but also by the quality of the services offered. The components of service quality are the effectiveness of the treatment it provides, the availability of supplies and equipment, the characteristics of its staff, and the nature of its management and organizational structure. Each of these components affects the use of health services.

However, poor quality of modern rural health services is common. For Kroeger (1983), in rural Ethiopia, people bypass the referral system and go to hospital services that are better equipped for primary healthcare, despite the great distance.

Recently, Lawson et al. (2004) aimed to examine the factors influencing the demand for healthcare in Uganda. Indeed, the variable "quality of services" is among the variables that may affect the demand for healthcare.

In addition, the study by Cheng et al. (2005), conducted in China, found that 75.5% of the respondents justified their use of healthcare by the degree of severity of the illness. Of course, other variables were used in this study, namely, education level, distance, quality of services, and standard of living.

Specifically, the work of Abdulraheem (2007), Mariolis et al. (2008), and Adu Gyamfi & Abane (2013) consider the quality of services as one of the determinants selected to explain the demand for healthcare. The results of this research converge on the important role of the quality of services in determining the demand for healthcare.

It is clear, therefore, that the quality of the healthcare service should be retained as a factor influencing the demand for healthcare in our further analyses.

3.3. Waiting time

Time can affect utilization in several ways, such as transportation time, wait time in healthcare services, and wait time for an appointment with the consultant.

Several studies have stated that waiting time is a major determinant of service utilization. A study by Sabur (1990) in India found that on average, a patient had to wait about 72 minutes for a 1.4-minute consultation with a physician, which included examining the patient and writing a prescription.

In underdeveloped countries, the time used to reach the facility and the clinician's response time are essential to measuring utilization according to the study of Vissandjée et al. (1997). In addition, waiting times are not considered a traditional component of the healthcare system in these countries (Al-Ghanim, 2004).

In the same vein, Abdulraheem (2007), waiting time was among the determinants selected to explain the demand for health care in Nigeria. According to the results, it was found that the waiting time is a factor of demand for healthcare. Similarly, for Adu Gyamfi & Abane (2013), waiting time was among the determinants selected to explain the demand for health care in Ghana. The results show that waiting time plays a role in determining the demand for healthcare.

To summarize, the research conducted to analyze the determinants of demand for healthcare identified a range of influencing factors, primarily related to the supply of care. Nevertheless, to complete our reflection, it seems relevant to integrate a fourth category of factors related to the disease.

4. Determinants related to the disease

Starting from the observation that disease-related factors can influence the demand for healthcare, we will try to review the main empirical work, to identify the resulting particularities. To this end, several factors seem to be relevant, namely severity of illness, health capital, health stock, and prior health status.

4.1. Severity of illness

Health science researchers often try to associate disease severity with a battery of measures of disease intensity, from the nature of the disease, through the time to recovery, to the availability or otherwise of treatment options.

In China, the cross-sectional study by Cheng et al. (2005) was carried out in 2001 using a quantitative methodology based on a random questionnaire of 190 individuals. The latter emphasizes the importance of disease severity as a determinant of healthcare demand.

But also, in Nigeria, Onwubiko et al. (2014) conducted a study using a questionnaire administered to 501 individuals and more precisely through a cluster sampling method. The results indicated that the severity of the illness was a determining factor for 31.3% of the respondents.

The study by Wellay et al. (2018) assessed the factors that influence the utilisation for health services among patients in the Tsegedie district (Northern Ethiopia). Thus, the severity of illness was among the undeniable factors in this study influencing health care demand.

In the same vein, the study by Kukla et al. (2017) examined the factors impacting demand for healthcare in Kenya between 2007 and 2014. The results show that disease severity is positively related to healthcare utilization.

It is therefore found that the severity of the illness is categorized among the factors influencing demand for healthcare.

4.2. Health capital/health stock/prior health status

In most research on the demand for healthcare, health capital, a variable derived from the work of Grossman (1972), is explained by the presence of a chronic illness.

In this regard ,Oladipo (2014) conducted a study to investigate the variables that affect healthcare demand. In this study, one of the factors considered was categorized as "need factors. In other words, these factors are defined as those that are imperative and require a range of actions to be taken. One such factor is the patient's current health status. This study also points to the importance of the health stock variable on healthcare demand. It is worth noting that the same finding was revealed in the study by Asada & Kephart (2007).

Similarly, Srivastava & McGuire (2015) attempted to study the demand for healthcare in India using the logit model. The said study confirms the importance of health stock and its influence on healthcare utilization. In this study, health stock was measured via health status before 15 days.

Also, Huang & Gan (2015) studied the factors influencing the demand for healthcare in China based on a sample of 1764 urban respondents. The study points to the importance of health capital as an explanatory variable for healthcare utilization. Recently, the study of Nakovics et al. (2020) confirms the presence of a significant positive association between healthcare utilization and having a chronic disease.

In summary, it was found that the demand for healthcare is often discussed by researchers with reference to a range of factors that may influence individuals' choices regarding healthcare demand.

Finally, this review will highlight an overview of the main works consulted and operationalized in a meta-analysis describing the authors, the variables, and the main results obtained. The table

in the appendix presents an extract of summaries of the empirical studies consulted dealing with the determinants of healthcare demand.

Conclusion

Health is a right for every human being and is associated with the notion of well-being. In this perspective, the consideration and improvement of health services can influence the country's economic, social, and societal progress.

Indeed, health economics deals with several issues including, among others, those related to the supply of health care, the demand for health care, and health expenditure (Adaskou et al, 2021).

Today, having access to healthcare is regarded as a vital element and an essential factor for human development. At an individual level, improved health status can assist people and households in overcoming poverty and enhancing their ability to be productive.

In the course of this work, devoted to the study of the determinants of the demand for healthcare at the crossroads of different theoretical conceptions, we have highlighted the lessons of empirical work carried out from the 1970s to the present day, as well as the particularities linked to the different contexts and countries.

In this sense, it was found that the demand for healthcare is often approached by researchers by referring to a range of factors likely to influence the choices of individuals in the use of healthcare services.

Based on this review, it can be concluded that the demand for healthcare is contingent and depends on several factors and determinants. These variables can be grouped into several groups: Economic determinants (salary, cost of treatment, insurance…), socio-demographic determinants (Age, gender, origin, education level, professional status....), and determinants related to the supply of care and the disease (Quality of care services, waiting time, the severity of the disease...), determinants related to the disease (Severity of the disease, Health capital/health stock...).

In sum, this review has highlighted the results of a range of empirical studies dealing with the determinants of healthcare demand. The work has limitations, including the focus on studies conducted in Africa. Indeed, an empirical study will be conducted to explore and examine this phenomenon and its influencing factors in the Moroccan context.

Bibliographie

[1]. Abdulraheem, I. S. (2007). Health needs assessment and determinants of health-seeking behaviour among elderly Nigerians: A house-hold survey. *Annals of African medicine*, *6*(2), 58.

[2]. Acton, J. P. (1975). Nonmonetary factors in the demand for medical services: some empirical evidence. *Journal of Political Economy*, *83*(3), 595-614.

[3]. Adam, V. Y., & Aigbokhaode, A. Q. (2018). Sociodemographic factors associated with the healthcare-seeking behavior of heads of households in a rural community in Southern Nigeria. *Sahel Medical Journal*, *21*(1), 31.

[4]. Adaskou, M., Houmam I., & Onbouh, H. (2021). Demande et offre de soins de santé : avancées et modèles théoriques. International Journal of Accounting, Finance, Auditing, Management and Economics, 2(3), 66-85.

[5]. Adaskou, M., Houmam I., & Onbouh, H. (2021). Les déterminants de la performance productive des centres hospitaliers publics au Maroc. *Revue Internationale Du Chercheur*, *2*(1).

[6]. Adu-Gyamfi, A. B., & Abane, A. M. (2013). Utilization of health care facilities among residents of Lake Bosomtwe basin of Ghana. *European International Journal of Science and Technology*, *2*(4), 131-142.

[7]. Ager, A., & Pepper, K. (2005). Patterns of health service utilization and perceptions of needs and services in rural Orissa. *Health Policy and Planning*, *20*(3), 176-184.

[8]. Akin, J. S., Guilkey, D. K., & Hazel, E. (1995). Quality of services and demand for health care in Nigeria: a multinomial probit estimation. *Social science & medicine*, *40*(11), 1527-1537.

[9]. Al-Ghanim, S. A. (2004). Factors influencing the utilisation of public and private primary health care services in Riyadh City. *JKAU: Econ. & Adm*, *19*(1), 3-27.

[10]. Ali, K. J., & Noman, A. (2013, November). Determinants of demand for health care in Bangladesh: an econometric analysis. In *3rd Asia-Pacific Business Research Conference.*

[11]. Anastasia J. Gage (2007), Barriers to the utilization of maternal health care in rural Mali, Social Science & Medicine 65 (2007) 1666–1682, doi: 10.1016/j.socscimed.2007.06.001.

[12]. Andersen, R., & Newman, J. F. (1973). Societal and Individual Determinants of Medical Care Utilization in the United States. The Milbank Memorial Fund Quarterly. Health and Society, 51, 95-124. https://doi.org/10.2307/3349613.

[13]. Arrow, K. (1963). Uncertainty and the Welfare Economics of Medical Care. *American Economic Review*, no. 5, 941-73

[14]. Asada, Y., & Kephart, G. (2007). Equity in health services use and intensity of use in Canada. *BMC health services research*, *7*(1), 1-12.

[15]. Berkman, L. F., Glass, T., Brissette, I., & Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social science & medicine*, *51*(6), 843-857.

[16]. Berman, P. (2001). Targeted health insurance in a low income country and its impact on access and equity in access: Egypt's school health insurance. *Health economics*, *10*(3), 207-220.

[17]. Bismark Osei, Mark Edem Kunawotor, Enock Anane. Determinants of Health Care Demand in Ghana Using the Ordered Probit Model Analysis. International Journal of Business and Economics Research. Vol. 3, No. 6, 2014, pp. 259-265. doi: 10.11648/j.ijber.20140306.17

[18]. Babalola, S., & Fatusi, A. (2009). Determinants of use of maternal health services in Nigeria-looking beyond individual and household factors. *BMC pregnancy and childbirth*, *9*(1), 1-13.

[19]. Brown, J. R., & Finkelstein, A. (2009). The private market for long-term care insurance in the United States: a review of the evidence. *Journal of Risk and Insurance*, *76*(1), 5-29.

[20]. Cheng, Y., Chen, C. W., Chen, C. J., & Chiang, T. L. (2005). Job insecurity and its association with health among employees in the Taiwanese general population. *Social science & medicine*, *61*(1), 41-52.

[21]. Costello, E. J., Burns, B. J., Angold, A., & Leaf, P. J. (1993). How can epidemiology improve mental health services for children and adolescents?. *Journal of the American Academy of Child & Adolescent Psychiatry*, *32*(6), 1106-1117.

[22]. Dor, A., Gertler, P., & Van Der Gaag, J. (1987). Non-price rationing and the choice of medical care providers in rural Cote d'Ivoire. *Journal of health economics*, *6*(4), 291-304.

[23]. Ellis, R. P., & Mwabu, G. M. (2004). *The demand for outpatient medical care in rural Kenya*. Institute for Economic Development, Boston University.

[24]. Ezra Gayawan (2014), A Poisson Regression Model to Examine Spatial Patterns in Antenatal Care Utilisation in Nigeria, POPULATION, SPACE AND PLACE Popul. Space Place 20, 485–497, DOI: 10.1002/psp.1775.

[25]. Frederickx, I. (1998). Health in rural Tanzania: The determinants of health status, health care demand and health care choice. Working Papers of Department of Economics, Faculty of Economics and Business (FEB), Department of Economics, Leuven.

[26]. Gage, A.J. (2007). Barriers to the utilization of maternal health care in rural Mali, Social Science & Medicine 65; 1666–1682, doi:10.1016/j.socscimed.2007.06.001.

[27]. Gakii.J, et al. (2013), Demand for Health Care in Kenya: The Effect of Health Insurance, KIPPRA Discussion Paper No. 155.

[28]. Galal et AL-gamal (2014), Health problems and the health care provider choices: A comparative study of urban and rural households in Egypt, Journal of Epidemiology and Global Health; 4, 141– 149, http://dx.doi.org/10.1016/j.jegh.2013.12.00.

[29]. Gardiol, L, Beck, K., Spycher, & S., Holly, A. (2003). Risk adjustment in Switzerland. *Health Policy*, *65*(1), 63-74.

[30]. Gertler, P., & Gaag, J. V. D. (1990). *The willingness to pay for medical care: evidence from two developing countries*. Johns Hopkins University Press.

[31]. Grossman, M. (1972). On the concept of health capital and the demand for health. *Journal of Political economy*, *80*(2), 223-255.

[32]. Howlader et al. (2000), Demand for Healthcare by Rural Households in Bangladesh: Level and Determinants, ICDDR,B: Centre for Health and Population Research Mohakhali, Dhaka-1212, Bangladesh ICDDR,B Working Paper No. 137.

[33]. Huang, F., & Gan, L. (2017). The impacts of China's urban employee basic medical insurance on healthcare expenditures and health outcomes. *Health economics*, *26*(2), 149-163.

[34]. Jochmann et Leon-Gonzalez (2004), Estimating the demand for health care with panel data: a semiparametric Bayesian approach, Health Econ. 13: 1003–1014, published online in Wiley InterScience (www.interscience.wiley.com). DOI:10.1002/hec.936.

[35]. Jouilil Youness et al. (2018), European Scientific Journal, edition Vol.14, No.33 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431, Doi: 10.19044/esj.2018.v14n33p156.

[36]. Joseph, H. (1971). Empirical research on the demand for health care. *Inquiry*, *8*(1), 61-71.

[37]. Jowett, M., Deolalikar, A., & Martinsson, P. (2004). Health insurance and treatment seeking behaviour: evidence from a low-income country. *Health economics*, *13*(9), 845-857.

[38]. Kansiime C, Rutebemberwa E, Mugisha A, Mugisha S, Asiimwe BB, et al. (2014) Determinants of Patients' Choice of Provider in Accessing Brucellosis Care among Pastoral Communities Adjacent to Lake Mburo National Park in Kiruhura District, Uganda. PLoS ONE 9(8): e105276. doi:10.1371/journal.pone.0105276.

[39]. Kazi Julfikar Ali and A.N.K Noman (2013), Determinants of Demand for Health Care in Bangladesh: An Econometric Analysis, World Journal of Social Sciences Vol. 3. No. 6. November 2013 Issue. Pp. 153 – 163.

[40]. Knight, F. H. (1921). Cost of production and price over long and short periods. *Journal of political economy*, *29*(4), 304-335.

[41]. Kroeger, A. (1983). Anthropological and socio-medical health care research in developing countries. *Social science & medicine*, *17*(3), 147-161

[42]. Kukla, M., McKay, N., Rheingans, R., Harman, J., Schumacher, J., Kotloff, K. L., ... & Mintz, E. (2017). The effect of costs on Kenyan households' demand for medical care: why time and distance matter. *Health policy and planning*, *32*(10), 1397-1406.

[43]. Lahana, E., Pappa, E., & Niakas, D. (2011). Do place of residence and ethnicity affect health services utilization? Evidence from Greece. *International journal for equity in health*, *10*(1), 1-9.

[44]. Lawson, R. A. (2005). The use of activity based costing in the healthcare industry: 1994 vs. 2004. *Research in healthcare financial management*, *10*(1), 77-94.

[45]. Lavy, V., & Quigley, J. M. (1993). Willingness to pay for the quality and intensity of medical care: low-income households in Ghana. *Washington*, DC: The World Bank, 1993. 39 p.

[46]. Lépine, A., & Le Nestour, A. (2011). Health Care Utilisation in Rural Senegal: the facts before the Extension of Health Insurance to Farmers. *International Labour Office, Geneva*.

[47]. Lépine, A. & Le Nestour, A. (2018). How effective and fair is user fee removal? Evidence from Zambia using a pooled synthetic control. *Health economics*, *27*(3), 493-508.

[48]. Magadi et al. (2006), A comparative analysis of the use of maternal health services between teenagers and older mothers in sub-Saharan Africa: Evidence from Demographic and Health Surveys (DHS), Social Science & Medicine 64, 1311–1325, www.elsevier.com/locate/socscimed.

[49]. Mariolis, A., Mihas, C., Alevizos, A., Mariolis-Sapsakos, T., Marayiannis, K., Papathanasiou, M., ... & Merkouris, B. (2008). Comparison of primary health care services between urban and rural settings after the introduction of the first urban health centre in Vyronas, Greece. *BMC Health Services Research*, *8*(1), 1-13.

[50]. McCaw-Binns, A., La Grenade, J., & Ashley, D. (1995). Under-users of antenatal care: a comparison of non-attenders and late attenders for antenatal care, with early attenders. *Social science & medicine*, *40*(7), 1003-1012.

[51]. Meara, J. G., Leather, A. J., Hagander, L., Alkire, B. C., Alonso, N., Ameh, E. A., ... & Yip, W. (2015). Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *The lancet*, *386*(9993), 569-624.

[52]. Mercer, C. H., Sutcliffe, L., Johnson, A. M., White, P. J., Brook, G., Ross, J. D., ... & Cassell, J. A. (2007). How much do delayed healthcare seeking, delayed care provision, and diversion from primary care contribute to the transmission of STIs?. *Sexually Transmitted Infections*, *83*(5), 400-405.

[53]. Mhlanga, D. A Dynamic Analysis of the Demand for Health Care in Post-Apartheid South Africa. Nurs. Rep. 2021, 11, 484–494. https:// doi.org/10.3390/nursrep11020045.

[54]. Mousavi et al. (2020), Determinants of Demand for Dental Services at Household Level, Int J Med Rev 2020 July;7(3): 85-92, 10.30491/ijmr.2020.224865.1089.

[55]. Muhofa, T., (2004). Determinants of Use of Formal Health care services in Butaleja Sub – country, Butaleja District, Uganda. Retrieved from: http://news.mak.ac.ug/documents/MarkfiLes/theses/Muhofa_Titus.pdf

[56]. Mwami, M. N., & Oleche, M. O. (2017). Determinants of utilization of health Care Services in Kenya. *International Journal of Academic Research in Business and Social Sciences*, *7*(10), 132-156.

[57]. Nahu, A. (2006). Determinants of demand for health care services and their implication on Health care financing: the case of Bure town. *Ethiopian Journal of Economics*, *11*(683-2016-46848), 89-122.

[58]. Nakovics, M. I., Brenner, S., Bongololo, G., Chinkhumba, J., Kalmus, O., Leppert, G., & De Allegri, M. (2020). Determinants of healthcare seeking and out-of-pocket expenditures in a "free" healthcare system: evidence from rural Malawi. *Health economics review*, *10*, 1-12. https://doi.org/10.1186/s13561-020-00271-2.

[59]. Nwakoby, B. N. (1992). The influence of new maternal care facilities in rural Nigeria. *Health Policy and Planning*, *7*(3), 269-278.

[60]. Newbold, K. B., & Danforth, J. (2003). Health status and Canada's immigrant population. *Social science & medicine*, *57*(10), 1981-1995.

[61]. Newhouse, J. P. (1968). Reimbursing health plans and health providers: efficiency in production versus selection. *Journal of economic literature*, *34*(3), 1236-1263.

[62]. Oladipo, J. A. (2014). Utilization of health care services in rural and urban areas: a determinant factor in planning and managing health care delivery systems. *African health sciences*, *14*(2), 322-333.

[63]. Onwubiko, S. N., Eze, B. I., Udeh, N. N., Arinze, O. C., Onwasigwe, E. N., & Umeh, R. E. (2014). Dry eye disease: prevalence, distribution and determinants in a hospital-based population. *Contact Lens and Anterior Eye*, *37*(3), 157-161.

[64]. Prosser, T. (2007). Utilization of health and medical services: factors influencing health care seeking behavior and unmet health needs in rural areas of Kenya. Thesis, Faculty of Computing, Health and Science Edith Cowan University. https://ro.ecu.edu.au/theses/46.

[65]. Rashid M, Antai D. Socioeconomic Position as a Determinant of Maternal Healthcare Utilization: A Population-Based Study in Namibia. J Res Health Sci. 2014; 14(3): 187-192.

[66]. Ronald, A. and John F. Newman (1973), Societal and Individual Determinants of Medical Care Utilization in the United States, Reprinted from The Milbank Memorial Fund Quarterly: Health and Society, Vol. 51, No. 1, 1973 (pp. 95–124).

[67]. Rene´ Leyva-Flores et al. (2001), How people respond to illness in Mexico: self-care or medical care? Health Policy 57 (2001) 15–26, www.elsevier.com/locate/healthpol?

[68]. Rous et Hotchkiss (2003), Estimation of the determinants of household health care expenditures in Nepal with controls for endogenous illness and provider choice, HEALTH CARE FINANCING, DOI:10.1002/hec.727.

[69]. Rutaremwa, G., Wandera, S. O., Jhamba, T., Akiror, E., & Kiconco, A. (2015). Determinants of maternal health services utilization in Uganda. *BMC health services research*, *15*(1), 1-8.

[70]. Sabur, A. A. (2012). Disaster management system in Bangladesh: An overview. *India Quarterly*, *68*(1), 29-47.

[71]. Sarma Sisira (2009), Demand for Outpatient Healthcare Empirical Findings from Rural India, Appl Health Econ Health Policy, The University of Western Ontario, London, Ontario, Canada.
[72]. Sato, Y., Kaiba, Y., Yamaga, E., & Minakuchi, S. (2012). Reliability and validity of a Japanese version of the Oral Health Impact Profile for edentulous subjects. *Gerodontology*, *29*(2), 1033-e1037.
[73]. Solome K Bakeera et al. (2009), Community perceptions and factors influencing utilization of health services in Uganda, International Journal for Equity in Health, doi:10.1186/1475-9276-8-25.
[74]. Somefun et Ibisomi (2016), Determinants of postnatal care non-utilization among women in Nigeria, BMC Research Notes, DOI 10.1186/s13104-015-1823-3.
[75]. Srivastava, D., & McGuire, A. (2015). Patient access to health care and medicines across low-income countries. *Social Science & Medicine*, *133*, 21-27.
[76]. Ssewanyana, S., et al. (2004). *Demand for health care services in Uganda: Implications for poverty reduction* (No. 677-2016-46634).
[77]. Stella Babalola and Adesegun Fatusi (2009), Determinants of use of maternal health services in Nigeria - looking beyond individual and household factors, BMC Pregnancy and Childbirth, doi:10.1186/1471-2393-9-43.
[78]. Stock, B. (1983). *The implications of literacy: Written language and models of interpretation in the eleventh and twelfth centuries*. Princeton University Press.
[79]. Tanti-Hardouin, N. (2016). Santé et grande précarité : l'exclusion par le soin des populations roms. L'Harmattan, 198 p. : ill. - Questions contemporaines - ISBN: 9782140022081 - Permalink: http://digital.casalini.it/9782140022081.
[80]. Tesfaye G, Chojenta C, Smith R, Loxton D (2018), Application of the Andersen-Newman model of health care utilization to understand antenatal care use in Kersa District, Eastern Ethiopia. PLoS ONE 13(12): e0208729. https://doi. org/10.1371/journal.pone.0208729.
[81]. Vecino-Ortiz, A. I. (2008). Determinants of demand for antenatal care in Colombia. *Health Policy*, *86*(2-3), 363-372.
[82]. Wellay, T., Gebreslassie, M., Mesele, M., Gebretinsae, H., Ayele, B., Tewelde, A., & Zewedie, Y. (2018). Demand for health care service and associated factors among patients in the community of Tsegedie District, Northern Ethiopia. *BMC health services research*, *18*(1), 1-9.
[83]. Wilson, J. B., Collison, A. H. K., Richardson, D., Kwofie, G., Senah, K. A., Tinkorang, E. K., & Accra PMM Team). (1997). The maternity waiting home concept: the Nsawam, Ghana experience. *International Journal of Gynecology & Obstetrics*, *59*, S165-S172.
[84]. Yoshito Kawakatsu (2014), Determinants of health facility utilization for childbirth in rural western Kenya: a cross-sectional study, Pregnancy and Childbirth 2014, http://www.biomedcentral.com/1471-2393/14/265.
[85]. Zweifel, P., & Manning, W. G. (2000). Moral hazard and consumer incentives in health care. In *Handbook of health economics* (Vol. 1, pp. 409-459).

Table 1: Summary of some empirical studies treating the determinants of health care demand

Authors	Place & date	Methode	Variables	Results
Nakovics et al.	Malawi ; 2020	The study used data from two consecutive rounds of a household survey conducted in 2012 and 2013 among 1639 households in three districts of rural Malawi. The analysis was conducted by exploiting logistic regression.	**DV: Demand for curative health care** **IV :** • Age • Gender of the head of household • Suffering from a chronic disease • Duration of illness • Hospitalization • Number of companions • Wealth quartiles Urban residence	The results obtained dictated that among the 1884 (68.75%) who had used curative care services, 494 (26.22%) had incurred a positive health expenditure, the average of which was 2.72 USD. The analysis revealed a significant positive association between the magnitude of care-seeking and age 15-39 years (p = 0.022), head of household (p = 0.037), presence of chronic disease (p = 0.019), duration of disease (p = 0.014), hospitalization (p = 0.002), number of companions (p = 0.019), wealth (p2 = 0.018 ; p3 = 0.001; p4 = 0.002) and urban residence (p = 0.001).
Wellay et al.	Ethiopia ; 2018	This study assessed factors influencing health service utilization among patients in Tsegedie District (Northern Ethiopia).	**DV: The demand for health services in Ethiopia** **IV:** • Perceived severity of the disease	The result indicated that 72.5% (95%CI = 61.6, 81.1) of the participants sought modern health care services. The multinomial logistic regression econometric model revealed that perceived

		This is a cross-sectional community-based study that was conducted from March 1 to 30, 2016 in Northern Ethiopia. The systematic random sampling technique was used to select 423 participants. Multinomial logistic regression model was used to identify the determinants of demand for health care services.	• An educated head of household • Quality of treatment • Distance to a health facility • Cost of treatment	severity of illness was significant (β = 1.27; 95%CI = 0.74, 1.82), being an educated household head (β = 0.079; 95%CI = 0.96, 1.74), quality of treatment (β = 0. 99; 95% CI = 0.47, 1.5), distance to health facility β = 1.96; 95% CI = 0.11, 0.27), cost of treatment (β = -1.99; 95% CI = 0.85, 3.13) were significantly and statistically associated with demand for health care service.
Kukla et al.	Kenya ; 2017	Using the multinomial logit model, this study examined factors impacting demand for health care in Kenya between 2007 and 2014. The study used secondary data. The sample size was 275 households. Logistic regression was exploited to examine the factors influencing the demand for care.	**DV :** Demand for health care in Kenya. **IV :** • Disbursements • Transportation • Severity of illness • Waiting time • Cost • Age • Gender • Level of education	According to this study, gender shows a significant coefficient of 1.23, the other variables, namely, education level, age, income, severity of illness, beliefs show the following coefficients respectively (2.63, 1.02, 1.59, 0.53, 7.53). For the significance of the variables, their p-value is as follows: gender (0.63), education level (0.36), age (0.22), income (0.08), severity of illness (0.15), beliefs (0.00).

Huang et Gan	China ; 2015	This study examined factors influencing the demand for health care in China. The sample consisted of 1,764 urban respondents. Logistic regression was used to examine the determinants of health care utilization.	**DV:** Health care utilization **IV:** • Income • Gender • Marital status • Education level • Age • Place of residence Presence of a chronic disease	The study revealed the following results: The coefficients (p-value) of the explanatory variables are respectively, Age 47.03 (15.62), gender 0.455 (0.498), family status 0.813 (0.39), education level 6.930 (4.491), income 6.001 (6.68).
Kansiime et al.	Ouganda , 2014	This work addresses the factors influencing patient choice of health care in Uganda. The sample size assessed was 245 households. This study covered a period of one year (December 2012 to December 2013). A multivariable logistic regression model was fitted to determine the association between the study variables using odds ratios and 95% confidence intervals (p = 0.05).	**DV:** The demand for health care in Uganda. **IV :** • Gender • Religion • Marital status • Education level • Employment • Household size • Income	Of the 245 respondents, 127 (51.8%) sought care in public facilities and the rest in private facilities. Multivariate analysis, shows that choice of public facility was influenced by primary education (OR: 0.46, CI: 0.22-0.97), family advice (OR:0.64, CI: 0.23-0.91), distance of 10 km (OR:0.44, CI: 0.21-0.92), cost of private care (OR:0.01, CI:0.02-0.15). Women were more likely to seek care in public facilities, whereas those with higher education were less likely to do so.

Ali et Noman	Bangladesh ; 2013	This study focused on the determinants that influence the demand for health care in Bangladesh. A binary logistic regression model is used to identify the determinants of health care demand. A sample size of 276 was obtained from a total of 983 patients and during the period of March to May 2007.	**DV:** The demand for health care in Bangladesh. **IV :** • Cost of care • Cost of drugs • Income • Education level • Age • Quality of service • Distance from home • Waiting time Duration of illness	The results of this study show that: Cox and Snell's R-squared is 0.555 and Nagelkerke's R-squared is 0.950. The price of health care is statistically significant at the 5 percent level. The price variable is negatively related to the demand for care (β = -0.114). The drug cost variable is significant at the 10 percent level (β = 0.039). The coefficient on the education variable has a positive sign (1.020). The age variable is insignificant at the 10% level (β = - 0.136). The income variable is insignificant (β = 0.325). The wait time variable is significant at the (β = 0.657) threshold. The distance variable is significant at the 10% threshold and has a coefficient of 20.918. The quality of care variable is significant at the 5% threshold, (β = 5.098). The duration of illness variable is insignificant at the 5% threshold and has a coefficient of (β =-0.134).

Sarma	India ; 2009	The objective of this study is to examine the factors influencing the demand for health care in India. Nested multinomial logit models were estimated and price and income simulations were conducted to estimate price and income elasticities.	**DV:** the demand for health care **IV:** • Income • Price of care • Distance from home • Access to transportation • Age • Gender • Days of good health • Education level Number of children and adults in the household	The results of this study show that: Demand for health care was found to be inelastic with respect to price and income, which corroborates findings from other developing countries. Distance from formal health facilities had a negative impact on demand for outpatient care. Age, gender, health status, education level, and household size also influenced provider choice in rural India.

Source: compiled by us