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ECONOMIC BARRIERS AS A LARGE PART OF THE PROBLEM WITH ACCESS TO HEALTHCARE

Abstract:

This study examines the economic barriers to healthcare access, focusing on their impact on vulnerable populations. The study presents the Health Care Access Barriers (HCAB) model and explores financial, structural, and cognitive barriers. Literature analysis and interviews were used to reveal the economic barriers. Results indicate that financial barriers, such as high deductibles and co-pays, are particularly burdensome for low-income individuals. Structural barriers, including limited access to transportation and healthcare facilities, exacerbate these challenges, particularly in rural and underserved areas. Cognitive barriers, such as health literacy and fear of medical debt, further hinder healthcare-seeking behaviors. Understanding the complex interplay of these barriers is crucial for developing effective interventions to improve healthcare access and equity. Expert analysis adds new views such as lost productivity, travel costs, management challenges, or economic disparities.

Keywords:

Economic Barriers, Healthcare access, Disparities, Models

JEL Classification: I00, I12, I13

1 Introduction

Health care is directly dependent on the health-political system adopted in the given country (Bogart et al., 2022). Many publications talk about differences in the care provided within the framework of the availability of care for all persons (Chunara et al., 2021). The typical cause is social and economic determinants directly affecting a person's well-being and the possibility of participation in a healthcare facility. Within this issue, the most discussed topic is still the existence of racial and ethnic differences, which are not tolerated in healthcare facilities. Since this is a multidisciplinary problem, the academic field has also been involved in the whole process, and other studies have been created that deal with the whole issue (Pérez-Urdiales et al., 2019). Not only were these areas problematic, but the topic was given a socioeconomic boundary. A group of people at risk is referred to as a "vulnerable population," and the whole concept is anchored by theories from Health Economics (Murata & Kondo, 2020).

1.1 Potential Barriers and a model for their measurement

Increasingly, multifactorial models are being presented to explain the causes of such disparities (Murata & Kondo, 2020). Healthcare access barriers play an important role in understanding the causes of disparities. The Health Care Access Barriers (HCAB) model facilitates the design of community health interventions by focusing on measurable and modifiable determinants of health status. This differs from Andersen's model, which provides a broad framework of modifiable and non-modifiable determinants and is ideal for large-scale health studies (Carrillo et al., 2011).

The Health Care Access Barriers (HCAB) model facilitates the design of health interventions by focusing on measurable and modifiable determinants of health status. This is precisely how it differs from Andersen's model, which provides a broad framework of modifiable and non-modifiable determinants. HCAB is not a comprehensive model but focuses on modifiable barriers to health care access to serve as a practical tool for root cause analysis. HCAB describes three modifiable barriers to access to health care (financial, structural, and cognitive). From the research results by other authors, we can observe that these three barriers to access to health care are associated with reduced screening, late presentation of care, and lack of treatment, which results in poor health outcomes and health disparities (Carrillo et al., 2011; Chunara et al., 2021; Murata & Kondo, 2020).

1.2 Economic barriers

Elements of health and behavioral economics purposefully look for connections in sociology, psychology and economics and their influence on the overall health of individuals and groups (Carillo et al., 2011). That is why we use a multidisciplinary approach when analyzing economic barriers. We register three categories of barriers

to access to health care: Financial - barriers related to the cost of care and health insurance; Structural – including institutional and organizational barriers; Cognitive - knowledge and communication barriers. These three categories of barriers reinforce each other and influence access to health care individually and in concert. For example, cognitive barriers can exacerbate or compound financial and structural barriers. Similarly, financial barriers can lead to structural or cognitive barriers (Al-Bataineh et al., 2023; Carillo et al., 2011; Murata & Kondo, 2020).

Financial barriers to accessing health care arise when patients are uninsured for vulnerable populations. Research has shown that the impact of uninsured and underinsured disproportionately affects those affected by limiting access to doctors when they are sick, going without prescriptions for needed medications, or forgoing recommended tests or treatment entirely (Bednar & Kaderabkova, 2022; Dimitrov & Hadad, 2022; Kargi et al., 2023). The uninsured population includes many undocumented immigrants who are not registered and, therefore, can only receive basic life-threatening treatment, and in some countries around the world, they are not even eligible for these life-saving services (Al-Bataineh et al., 2023).

Beyond financial barriers, we get to structural barriers, which are defined by the accessibility of the healthcare system, and these barriers can be found inside or outside healthcare facilities. The barriers operate independently or cumulatively, along with the financial barriers that people without insurance already face. Structural barriers can occur outside care processes, such as when people seek access to health care services or inside. In the 21st century, healthcare facilities, state organizations, and cities are improving infrastructure and transportation to health centers. If we focus on internal barriers, we can monitor, e.g., excessive waiting times that can impact caregivers (Carillo et al., 2011; Murata & Kondo, 2020).

Financial and structural barriers can be further exacerbated by barriers to cognitive access, which alone or in combination can adversely affect disease prevention and health care. Cognitive barriers are rooted in the patient's beliefs and knowledge about the disease, prevention, and treatment and in the communication that occurs during a visit to a healthcare facility. Insufficient patient awareness of available health services can also compound health barriers (Dimitrov & Hadad, 2022). Limited health literacy and language and cultural barriers can further prevent the patient from understanding and acquiring the knowledge necessary to implement therapeutic directions (Murata & Kondo, 2020).

2 Materials & Methods

The processing of the study uses qualitative principles in a combination of content analysis of the searched texts and expert opinions on the subject under investigation.

2.1 Objectives

The study aims to identify economic barriers to access to health care and select relevant ones for the Czech Republic.

This objective should bring a comprehensive view of economic barriers in connection with contextual factors affecting potential healthcare facility visitors. The list of values provides relevant data for further possible focus of research investigations, for analysing frequencies and statistically significant connections.

2.2 Design of the study

The methodology of the first part of the study was inspired by the authors of Muk et al. (2020), Page et al. (2021) and Scheidt et al. (2019) and was constructed in 17 steps as follows: defining the clinical question, preparing the search strategy, reviewing the literature, selecting studies, extracting data, evaluating quality, synthesizing data, reporting, presenting results, searching and developing a stimulating discussion, creating appropriate conclusions, checking references, addition of other materials (if necessary), editing and review process, feedback processing, article finalization and publication. For relevant data, we used expert opinion from 9 people (ratio 3:3:3).

2.3 Data Collection and Analysis

The clinical question was: "What are the economic barriers to access to health care relevant to the Czech Republic?" The research question focuses on the listed factors related to the accepted definitions and anchoring according to the direction of Health Economics.

The search was performed in the Web of Science database using the following selection criteria: keyword selection (health economics, barriers, needs, accessibility, differential care), the preferred period was 2024-2020, the publication must be in the Social Science Citation Category Index (SSCI), the journal must be in Q1 – Q3, and we focused only on professional articles (conference contributions, reviews, etc. were excluded).

After the initial selection, keywords, article titles, and abstracts were analyzed. This section assessed the topic's relevance and the accepted study's quality. Furthermore, data synthesis, reporting, and searching for contributions to stimulating discussions and conclusions were carried out. In the initial phase, a total of 197 studies found according to the above criteria were analyzed. After selection, 16 relevant studies related to the target clinical question were included.

This was followed by a control qualitative investigation with experts from sociologists, health professionals, and economists. This part aimed to remove insignificant barriers and create an overview of possible risk areas that can be monitored in the Czech

Republic. After the qualitative investigation, the data were summarized and linked, and the resulting list of barriers for the Czech Republic was created.

3 Results and discussion

The results point to several fundamental areas that are considered in the professional literature as economic barriers to access to health care. Based on common key features, the data were combined into categories: Low number of healthcare facilities or physicians, insufficient financial security of families or individuals, and the healthcare insurance system.

3.1 Low number of healthcare facilities or physicians

In 2005, knowledge about the low number of doctors was identified as a significant barrier to access to health care (Starfield et al., 2005). This is a worldwide problem, with an increasing number of patients in ambulances and hospitalizations. This problem is solved in the US by delegating roles to nursing staff. The function of a "nurse practitioner" has been established, which has expanded competencies from the field of doctors, but further study is required to determine the performance of this profession (Htay & Whitehead, 2021).

Other barriers include the low number of healthcare facilities providing general and specific patient services. Studies point to countries in which the number of medical facilities is low even at this time, which is the cause of incorrect treatment, poor diagnosis, development of complications, or death (Bello et al., 2021). The importance of this problem is solved with the help of professional consultations, during which physical contact with the doctor is not necessary. These mobile ambulances operate online and, based on the legislative measure of each state, have different powers from diagnostics to prescribing medicines. This very conveniently relieves medical facilities, including the board, for treatment (Goncalves-Bradlex et al., 2020). Health workers tend to be overloaded precisely because of their low numbers and the health system of, for example, the Czech Republic. In the fall of 2023, Czech doctors published a protest case that was supposed to draw attention to the bullying of health workers. Many citizens were worried about how the whole case would culminate and how many people would lose their lives. However, the goal was only to stop the approval of political proposals to increase the overtime hours that medical institutions can demand from doctors and nurses (Neugebauer, Vokoun, 2024).

3.2 Insufficient financial security of families or individuals

Based on the results from the literature the low-income or high price for healthcare services is one of the very underestimated factors which lead to problematic access to healthcare. The authors agree with the increasing trendline chart of healthcare prices

and co-payments. It means the price is getting bigger and the number of free healthcare services is getting lower (Zegeye et al., 2021). There are some principles, on how to save an extra co-payment, but it is also a service for money if you are not specialized in the law field. Authors Franzier et al. (2023) declared the practical examples from the families or individuals, who needed the healthcare. They tested how much money people can save in New York City and still get proper healthcare. The healthcare system with high co-payment is handy for low-income people. The older adults saved almost 1000 $ and the young adults with orthodontist issues saved practically 3000 $ on average. There are many examples from the USA, where people are paying a lot of money for healthcare. This system can be destructive for moneyless people. They have to take a loan, sell the property make some extra money (Ngo et al., 2023). If we focus on **age,** we can find some relevant economic factors. Millennials face a unique financial challenge due to rising student loan debt, delayed homeownership, and stagnant wages, making it difficult to build wealth and achieve financial security. The next factor is the **income levels** of families or individuals. Low-income families are disproportionately affected by healthcare costs, often leading to medical debt and bankruptcy, hindering their ability to escape poverty. The third is the **specific healthcare cost factors**. High co-payments and deductibles for prescription drugs force many patients to choose between filling their prescriptions and paying for other essential needs. It is linked to the **drug's prescription**. The exorbitant cost of insulin has become a crisis for millions of Americans with diabetes, causing financial hardship and even death.

Potential solutions and Policy considerations include Healthcare Reform: "Expanding access to affordable healthcare through government-sponsored programs or price controls on prescription drugs could significantly improve financial security for millions of Americans. There are Financial Assistance Programs (FAP), which means-tested programs like Medicaid and the Affordable Care Act provide essential support for low-income individuals and families. Still, enrollment rates remain low due to a lack of awareness and complex eligibility requirements.

3.3 Healthcare insurance system

A significant economic barrier is political-economic decision-making within the health system. Each country can create its legislative framework for health care financing. Since these are purely state mechanisms, combining all systems and creating a unified model is practically impossible. The most affected countries are Nigeria, Ethiopia, India, and Ghana (Eze et al., 2023). Research also points to the importance of private or public health insurance, which is significant in seeking treatment. Many people fear the disease and related measures, such as the inability to go to work, medical expenses, hospitalization, complications, or lifelong consequences (Okuzu et al., 2020). There are cases when, for example, in the USA, hospitalization of persons with tuberculosis was necessary. In most cases, lives are saved, but the family remains in

a very unfavorable situation and has to borrow money from the bank or loan sharks to meet their needs (Annan et al., 2021). In contrast, the health system in European countries wholly or partially covers the requirements for primary health care, including recommendations from a doctor. For example, in the Czech Republic, most diagnostic and therapeutic procedures are covered by public health insurance based on a doctor's instructions. In this case, there is only a co-payment for medication or a symbolic contribution for treatment within 90 Czech crowns (approx. 4 euros).

It would be very helpful if we looked closely into the different insurance models such as **social insurance, mandatory private insurance**, and **voluntary private insurance**. Analyze their impact on access, cost, and quality of care. We also need to know the **socioeconomic status**. It means income, education, and occupation influence insurance coverage rates. There are examples of government subsidies and insurance exchanges in mitigating disparities. It is linked to the **health status** of the population. The insurance system is sometimes focused on the actual health conditions and some people with bad conditions can be excluded. It is a good question who covers the healthcare payment? There are several examples, where the people cover it by themselves and the country will not protect them from the moneyless, taking loans, or staying homeless and without proper care.

3.4 Experts opinions

The expert opinion focuses on support our theoretical basis. In essence, the economic barriers to healthcare access stemming from physician and facility shortages create a vicious cycle. Inadequate healthcare leads to poorer health outcomes, reduced productivity, and increased costs, further limiting the resources available for healthcare improvement. Addressing this issue requires a multifaceted approach that includes investments in healthcare infrastructure, workforce development, and policies that promote equitable access to care. It adds new perspectives such as Direct economic costs, Co-payment, Lost productivity, Delayed or Missed care, Chronic illness management challenges, economic or social disparities, Underdeveloped Healthcare Infrastructure, and reduced Tax Revenue.

In short, **Increased Travel Costs** mean patients in rural or underserved areas must travel greater distances to access care, incurring higher transportation costs, time off work, and potentially childcare expenses. **Higher Out-of-Pocket Costs** mean limited competition among providers can lead to higher fees for services, medications, and treatments. Patients may face difficulty affording necessary care due to these increased costs. **Lost Productivity** means when individuals cannot access timely healthcare, their ability to work and contribute to the economy is compromised, leading to productivity losses for both individuals and society as a whole. **Delayed or Foregone Care** means limited access to care can result in delayed diagnoses, untreated conditions, and preventable hospitalizations, ultimately increasing healthcare costs in the long run. **Chronic Disease Management Challenges** focus

on insufficient access to primary care can hinder the management of chronic conditions, leading to complications and higher healthcare expenditures. **Economic Disparities** show the lack of healthcare access can exacerbate existing economic disparities, as individuals in underserved areas are more likely to experience poverty, unemployment, and reliance on public assistance. **Underdeveloped Healthcare Infrastructure** means insufficient investment in healthcare infrastructure due to economic constraints can perpetuate the cycle of limited access and poor health outcomes. **Reduced Tax Revenue** means a less healthy population is less productive and generates lower tax revenue, limiting the government's ability to invest in healthcare and other public services.

5 Conclusion

The study shows our findings and highlights several key barriers to accessing healthcare. The main barriers can be divided into three categories, low numbers of healthcare facilities or workers, insufficient financial security, and a healthcare insurance system.

There are common other issues that reveal global problems as Inadequate healthcare infrastructure. Its focus and a scarcity of healthcare facilities and physicians pose a significant challenge. This leads to delayed or inadequate care. There are also some financial constraints, which means low income or high healthcare costs prevent many individuals from seeking necessary treatment. This often results in untreated conditions and preventable complications. The last are systemic issues which describe incorrect systems and lead to overburdened healthcare workers and insurance disparities.

Addressing these interconnected issues requires a multi-faceted approach, including investing in healthcare infrastructure to improve accessibility, implementing financial support programs to reduce cost barriers, relieving the burden on healthcare professionals, and streamlining administrative processes.

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