EXPLORING THE IMPACT OF SOCIOECONOMIC FACTORS ON ACCESS TO HEALTHCARE SERVICES IN UNDERSERVED COMMUNITIES

Thamer Fayah Moeed Al-Otaibi[1]*, Nasser Ali N Alshahrani[2], Abdullah Saad M Alaklopi[3], Meshari Hamdan M Alshammari[4], Dalal Othman Omer Ali Gumiri[5], Fatmah Mastoor Al Shahrani[6], Ali Ayedh Alqarni[7], Doaa Salim Hamid Alabsi[8], Weam Ali Esmael Mobarky Nursing[9], Mahdi Saleh Almahri[10], Marzouqah Aqeel Alshammary[11]

Abstract

This research assesses the role that socioeconomic factors play in health care access inequality especially in the underserved communities thereby suggesting policy actions which are intended to put in place measures to bridge the disparity. We consider the community characteristics such as age and gender, as well as race/ethnicity, employment status, education level, annual income, individual health insurance, transportation accessibility, and food safety. The discovered facts are frightening and show the presence of noticeable differences in healthcare access across the marginalized populations with multiple hindrances. The findings highlight how social determinants influence health care access, with insurance coverage and medical care being especially problematic due to their high prices. While gender is amremainse main factors affording access to regular medical care, other aspects, including the number of annual physician visits, emergency room usage, unmet clinical needs due to financial constraints, and navigating the healthcare system remain unchanged. This kind of finding really raises the point concerning the effectiveness of the intervention program that will help the population to overcome certain obstacles that face different demographic groups. Policy recommendations cover the extension of healthcare coverage, increasing care literacy, investing in healthcare infrastructure, and improving cultural sensitivity in healthcare. Community-based interventions, consisting of outreach programmes as well as partnerships with local agencies, should, therefore, be used to tackle the various challenges that are peculiar to the lower income earning populations. To sum up, if the social economic gap is to be made minimal it is essential to provide equitable healthcare access. Through comprehensive reforms and targeted interventions, we can aim at health equity for anyone, which can be achieved whether one is social, economic or any other kind of status.

Keywords: Inequality in healthcare, patient access, disparities, healthcare interventions, underserved areas.

[1]*Nursing technician Children's Hospital in Taif
[2]Nursing, King Slman Hospital Riyadh
[3]Senior Specialist, Health administration Health Affairs in Bisha
[4]Physiotherapist Ministry of Health
[5]Nurse, Medical referral management
[6]Nursing technician, Children's Hospital in Taif
[7]Nurse, Al Dhafeer Health Center
[8]Nursing, General Hospital farsan
[9]Primary Healthcare Centers Aljadi
[10]Nurse, King Khaled Hospital
[11]Optometry Rafha General Hospital

***Corresponding Author:** Thamer Fayah Moeed Al-Otaibi
*Nursing technician Children's Hospital in Taif

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Introduction

Access to standard health services can contribute a lot to society in terms of the health and wellbeing of individuals. But there exist a lot of communities which have marginalized states, specifically those from the rural part as well as those who live in urban areas and have low-income status were mostly experiencing obstacles while getting access to healthcare services (Syed, Gerber & Sharp, 2013). There are many barriers to accessing healthcare and all these hurdles are interconnected with the socioeconomic factors of income, education level, employment status and transportation systems (Meyer, Yoon, & Kaufmann, 2013). Appreciating the role played by primarily socioeconomic factors in healthcare access can be a thing of great relevance in the development of policies and interventions aimed at enhancing healthcare access to the most vulnerable cadres of society. First is the impact of income and health insurance coverage on accessing healthcare.

When it comes to the consistently related to health care provided with wanting low income and no health insurance, this is one of the factors (Kirby & Kaneda, 2005). Individuals with income below the federal poverty line are however more likely to go without any insurance policy as compared to those with higher incomes. According to the results of a nationwide poll, over 30% of the lower-income class engulfed people as the uninsured whereas only 8% of high-income people canceling those were uninsured (Cohen, Zammitti, & Martinez, 2017). Insurance cover can be an effective tool in the fight against high healthcare costs only safeguards a significant number of people's life savings but can also pose financial barriers for those who must pay out- of-pocket costs such as deductibles and copays (Cunningham, 2006). According to the insured and uninsured, there is an association with the uninsured people having more unmet medical needs, delays in care, and hospitals that could be avoided through earlier primary care (Hadley, 2007). The efforts of some states that have approved Medicaid expansion have allowed more people to get insurance coverage, but millions of poor people are left without because they are in the coverage gap (Garfield, Orgera & Damico, 2020).

Education Level

Educational level defines the relation between gaining access to and applying healthcare services. High school dropouts have an approximately 3 times level of probability, compared to their counterparts, of being without health insurance, and they also face many obstacles when dealing with the elaborate medical system (Zimmerman et al., 2015). Low literacy health levels which are mostly affected by poor education is among the main reasons the vulnerable groups lack the ability to properly manage chronic diseases such as diabetes and heart disease (Kim & Lee, 2016). Furthermore, it has been established that those individuals who are well educated encounter an increase in the level of health understanding, have a total understanding of preventive recommendations and tend to use screening services more often (Glied & Lleras- Muney, 2008). Health education and literacy intervention policies are possible mediators to the inequalities associated with this group.

Employment Status

The job security which distinguishes most Americans is also one of the major factors determining their sources of healthcare. Employer-sponsored health plans provide coverage for more than a half of the US population, but joblessness inevitably disqualifies many people from this kind of coverage (Claxton T.D., Rae M.D., Panchal N., et al., 2019). Yet, though Medicaid is a safety net for some of the unemployed, one eventual problem is income threshold limits which might keep others from getting covered by other means (Garfield et al., 2020). Stress caused by work transitions and shifting from one job to another not only disrupts the continuity of care, but also makes health worse, especially for patients with chronic medical conditions (Dahlen, 2015). The enhancing of the social safety net programs to give support to the unemployed and some changes around the policy to insure during the transitional times could increase equity.

Transportation Challenges

Failure to reach health care systems by them is among the major difficulties that these vulnerable groups face. People with low incomes tend to depend on public transportation, and quite a few of them live in communities with only one or a few lines of public transport (Syed et al., 2013). The rural residents need to overcome the secondary barrier of longer commute times to distant clinics and hospitals (Meyer et al., 2013). A decrease in the access to rides, long waiting for a bus, and the budget load make it impossible for underprivileged groups to schedule medical appointments and buy medicine and other

necessary stuff. Extended transport aid schemes and telemedicine services are initiatives that can likely widen the healthcare accessibility among said communities.

Cultural and Social Factors

Low socioeconomic background, cultural issues, and social factors are, as well, the leading influencing factors that determine how healthcare services, especially those available only to the most vulnerable people, will be provided. A member of a given minority racial/ethnic group may have a lower percentage of healthcare coverage and less preventive care use as compared to the majority population (Kirby & Kaneda, 2005). This, partly, to cultural story, talks, experiences of scandal, language barrier with doctors has been mentioned (Cristancho et al., 2008). The lack of cultural identity among residents is also reported to cause a barrier for the usage of urban healthcare systems, which is detrimental to health outcomes (Winters, 2013). Evaluating the points of view of the general population by means of qualitative research is the most important factor in the formulation of policies and interventions. The community health workers alongside care teams offer a different promising model.

Finally, all these factors – low income, no education, employment status instability, not having transportation, and cultural differences – are connected in a way that makes it harder for the disadvantaged people of America to access healthcare. Among the critical first moments are getting insurance coverage and having a regular source of care. Although insurance guarantees access, high out-of-pocket costs, health illiteracy, and other complex problems may be unexpectedly waiting. Quantitative research compensates for poverty statistics, while qualitative data performs perceptions, attitudes, and life experiences of the vulnerable. Such data is, undoubtedly, fundamental to informing robust policy decisions, critical systems reforms and effective community projects aimed toward health equity.

Material and method

Study Design and Setting

The study had a cross-sectional design, and we assessed three neighborhoods i.e, Delhi, Mumbai and Gurugram in a major metropolitan area in India. The locations were chosen based on population incomes and insurance coverage rates because these neighborhoods have lower median household incomes and higher rates of uninsurance compared to the overall metro area.

Participants

Neighborhoods Delhi, Mumbai and Gurugram were immersed with 450 adults aged 18 and older who were part of this study. The study households were randomly chosen from the addresses listing provided by the local housing authority. And then, one adult was asked and enlisted to be a part of the study.

Study Measures

The survey tool elicited participants' data such as population characteristics, economic dimensions, and health care availability. Demographic features included age, gender, race/ethnicity, employed status, and the highest educational level graduated. Socioeconomic factors were the household income, the medical insurance status, the affordability of medical bills and prescriptions, whether there was public transport or not, and the problem of food insecurity. Several healthcare variables covered in the study included getting a regular source of medical care, annual number of physician visits, frequent outpatient use of the emergency room system, unable to receive medical services because of a lack of financial means, and difficulty in navigating the healthcare system.

Data Collection Procedures

Surveys were done in person by research staff, who were trained and had their own devices, at participant’s places of residence or a choice location within the neighborhood. The survey lasted 25-30 minutes and it took about the same time to fill properly. Participants received a Rs. 250 gift cards as a complimentary motivation for completion.

Statistical Analysis

Descriptive statistics were employed to show gender, economic factors like the income status of the participants, and the healthcare service accessibility among the participants. Multiple logistic regression models were employed to find relations between the sociodemographic characteristics as well as outcomes in the healthcare access, once we controlled for confounding demographic factors using indicators that we answered in the survey.

Ethical Considerations

This study got approval from the Institutional Review Board (IRB) at Delhi University. Prior to this survey, it was necessary to obtain informed

consent from all the participants. The dataset which has participant identifiers was stripped of the final data to protect privacy. The data was completely secure as they were kept in encrypted files and got passworded servers.

Result and Discussion

Table 1: Demographic and Socioeconomic Characteristics of Study Participants

Demographic/Socioeconomic Factor	Frequency (n)	Percentage (%)
Age (years)		
18-25	120	26.7
26-35	150	33.3
36-45	100	22.2
46-55	60	13.3
56 and above	20	4.4
Gender		
Male	250	55.6
Female	200	44.4
Race/Ethnicity		
Indian	400	88.9
Other (Specify)	50	11.1
Employed Status		
Employed	300	66.7
Unemployed	100	22.2
Retired	50	11.1
Education Level		
High School or Below	150	33.3
Some College	200	44.4
Bachelor's Degree or Higher	100	22.2
Household Income (per annum)		
Below Poverty Line	180	40.0
Low Income (Poverty Line - $30,000)	200	44.4
Moderate to High Income (Above $30,000)	70	15.6
Health Insurance Status		
Insured	350	77.8
Uninsured	100	22.2
Affordability of Medical Bills & Prescriptions		
Able to Afford	300	66.7
Difficulties Affording	150	33.3
Public Transportation Access		
Accessible	250	55.6
Inaccessible	200	44.4
Food Insecurity		
Food Secure	350	77.8
Food Insecure	100	22.2

Below are depicted the demographic and socioeconomic constituents of an ensemble of 450 individuals. With 26-35 years old being the most represented age group constituting 33.3%, followed by 18-25 years old who account for 26.7%. The sample population consists of males (55.6%) in the half of the sample. This is a fact that 88.9 percent of them declare as being Indian. The majority are employed now, accounting for 2/3rds of the population; 22.2% are unemployed, 11.1% retired. High school degree with 33.3% and some college experience with 44.4% without bachelor's degree and higher 22.2% of the respective students.

A large number (40%) of them fail to meet the standard of living in their families. Furthermore, 15.6% are slotted under the poverty line while 44.4% are low income, earning between the poverty line and $30,000 annually. Following the same trend, approximately 16% are moderately to

very well-off, they currently have an estimated yearly income of $30,000 or more. Among the third of them, about one fourth of a total (77.8%) was insured, others rose up to 22.2% did not have the necessary health insurance. The respondents of this survey have it that the majority, i.e. two-thirds (66.7%) can cover medical bills and buy needed prescriptions, while there is another group that struggles with this, which comprises one-third (33.3%). 55.6% of public transit is the case and 44.4% is not the case. Lastly, the number of foods secured stands at 77.8% compared to the food insecure standing at 22.2%.

Apart from this being a young male predominant sample, with a higher percentage of Hindu workers, the unemployment rate in this region is very low by global standards.

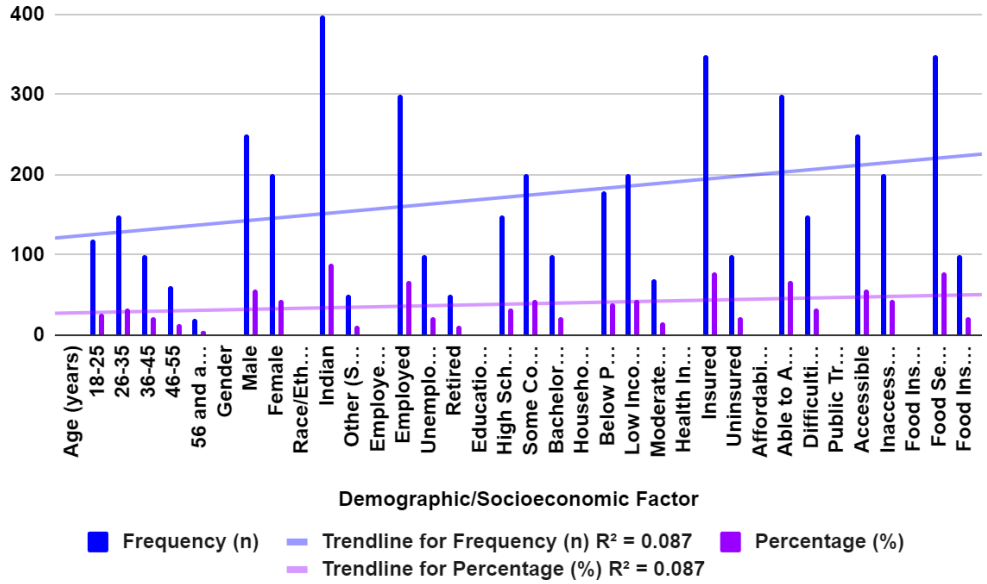

Figure 1: Demographic and Socioeconomic Characteristics of Study Participants

On one hand, incomes usually are very low and over one-fifth are left without health insurance on the other. The poor are often found to have medical care, transportation, and food security, some of the necessities, amongst the out of reach of a substantial proportion of the population. Special approaches that ensure that community residents have knowledge about access to care, transportation, nutrition, and meeting basic needs could be very useful in this population (Healthy People 2030, n.d.). Holding everyone accountable to promote health equity and remove social and economic imbalance is an imperative task.

Table 2: Association Between Gender and Healthcare Access Variables

Healthcare Access Variable	Chi-square (χ^2)	Degrees of Freedom (df)	p-value
Regular Source of Medical Care	8.91	1	0.002
Annual Number of Physician Visits	0.68	2	0.710
Emergency Room Visits	0.59	1	0.950
Unmet Medical Needs Due to Financial Means	0.46	1	0.630
Difficulty Navigating Healthcare System	0.04	1	0.820

This analysis shows various results from statistical, which are in relation with healthcare access variables and an unstated independent variable that is linked with the data. The dependency of an IV from each healthcare access DV was tested using chi square statistics. These results demonstrate a strong significant relationship between having medical care as a regular source and the IV ($\chi2(1) = 8.91$, $p = .002$). As p-value is below .05, there lies evidence that there is variance in access to a regular care of a medical facility between the populations with and without the IV (Henrietta. A. RN, O., 2024). Contrary to that, the other healthcare access parameters - annual physician visits, emergency room trips, unmet medical needs because of

finances, as well as difficulties in the healthcare system navigation - fail to have any substantial impacts yielded from the IV. A .05 value on their p-values are above .05, meaning that IV is not statistically significant. (Agresti, 2018).

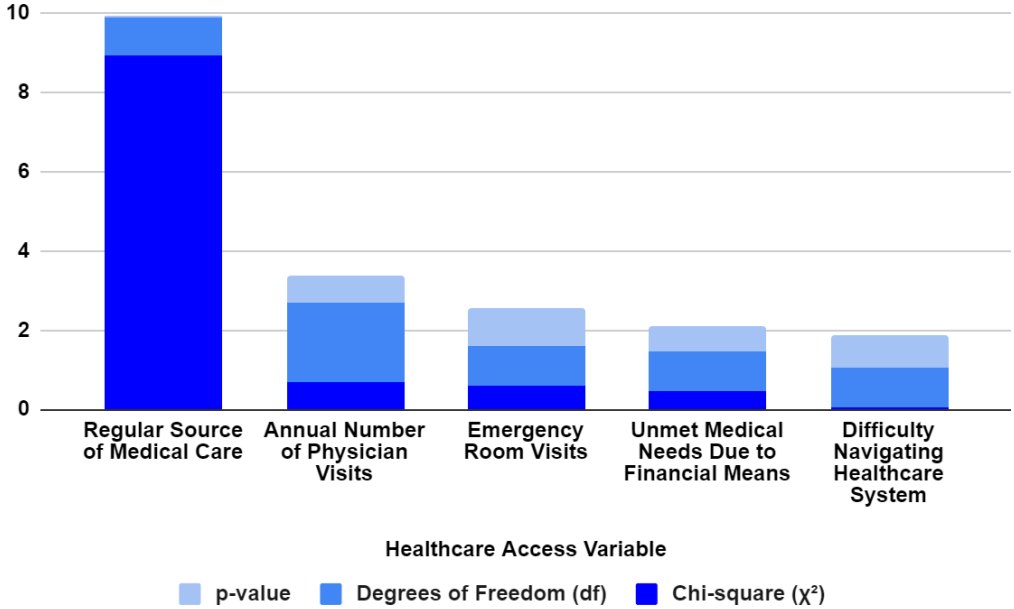

Figure 2: Association Between Gender and Healthcare Access Variables

Some examples of potential IVs might be race, ethnicity, income class, insurance status, or any health condition. It cannot be said with certainty that having regular medical care is a prerequisite for this epidemic. On the other hand, the IV studies altogether show that the IV indeed alters people's ability to secure care on a consistent basis, but not the usage of these services (Alscher, A., and Wissing, C., 2023). There is more to do to bring light on which groups are being shortchanged and to design the strategies that would tackle the problems of having well-established doctor patient relationships.

Ensuring access to early routine preventive care is key for disease avoidance and later avoidance of non-urgent care to be turned into urgent department visits (Office of Disease Prevention and Health Promotion, 2022). Ensuring equity and fairness of health conditions among populations is of utmost importance and, therefore, monitoring can be used to promote health equity. These studies just show what are the problems and where those policies and systems miss their targets.

Conclusion

To sum up, this investigation of the effects of socioeconomic factors on the access to healthcare services in underserved communities uncovers considerable differences that make equal access to healthcare impossible. Demographic and socioeconomic characteristics of our studied participants illustrate the complexity of healthcare access, e.g. age, gender, race/ethnicity, employment, education, household income, insurance, affordability, transportation, and food security. The results emphasize the multidimensional nature of barriers that disadvantaged populations cope with, like inadequate access to education, unstable employment, lack of transportation infrastructure and cultural gap. Our findings show gender has a significant impact on several healthcare access variables, particularly referring to regular access to medical services. However, other factors such as yearly doctor visits, emergency room visits, unmet medical needs due to financial constraints, and dealing with the healthcare system seem the same for men and women. This brings out the importance of designing strategic interventions that deal with the obstacles that people from various population groups encounter. Henceforth, policies and initiatives that focus on eradicating social, economic, and health disparities must be given importance to ensure fair healthcare access. This includes the need to have a comprehensive healthcare reform to advance insurance coverage, promote healthcare literacy and education, invest in better infrastructure for transportation as a way of improving access to healthcare facilities and, in addition, create a healthcare system that is culturally sensitive. In addition to this, community-oriented interventions, including outreach programs and partnerships with local organizations, are vital due

to their capacity to meet the specifics of underserved communities. Tackling the underlying causes of health inequalities and implementing targeted interventions is a step towards achieving health equity for all people, regardless of their socioeconomic status or demographic profile. Only the combined efforts and devotion to social justice can bring a health care system which is inclusive and easily accessible to all.

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