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Analyzing the Influence of Socioeconomic Status on Public Healthcare Access: An Interdisciplinary Framework

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Abstract: The interplay between socioeconomic status and access to public healthcare is a complex and multifaceted concern that requires an interdisciplinary methodology. By integrating perspectives from economics, sociology, public health, and policy analysis, this paper aims to establish a holistic framework for examining the impact of Socioeconomic Status (SES) on healthcare accessibility and proposing specific policy measures that could effectively reduce disparities in healthcare. This study examines the influence of socioeconomic status on healthcare access, highlighting the exacerbation of social inequalities and economic disparities in social sciences, public health, and economics. It employs a mixed-method approach, including household survey data, medical records, case studies, and interviews, to examine the socio-economic features of children's acute illness care facilities (FHCs). Beneficiaries are those who access these services, and data is collected daily from those approaching FHCs for any services on the day of the researcher's visit. Results indicate that financial barriers, geographic isolation, and lack of health insurance are the main hurdles faced by lower socioeconomic status (SES) groups in accessing care. In addition to these inherent differences, structural factors such as lack of access to health infrastructure, as well as legal and administrative barriers, further compound the widening equity gap. The paper recommends policy measures aimed at improving health insurance, suggesting that access is a key driver of this shift in utilization patterns. Lower-SES populations face knowledge, financial, and geographic barriers, whereas higher-SES populations generally have more resources, greater awareness, and better access.

Keywords: Socioeconomic Status, Healthcare Access, Equity Gap

Type: Research paper

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1. Introduction

Socioeconomic Status (SES) is one key factor that influences a person's overall health. In addition, it has an impact on the services available to the person, as well as the quality of care a person is receiving. Nonetheless, for a public health measure to be successful, it is crucial to understand the determinants that contribute to the differential health status across communities of different

socioeconomic groups. This study employs a multidisciplinary approach comprising public health, sociology, and economics to explore the variables involved in healthcare accessibility and its relationship with SES. The aim is to present a comprehensive context that stresses the need to address the social inequalities so that the egalitarian principle underpinning the health system is realized through an analysis of traditions, differential access, and health practices associated with different socioeconomic statuses.

Studies have repeatedly shown that less-advantaged populations across different socioeconomic strata still encounter considerable barriers to seeking care, thereby exacerbating health inequities in themselves (Pampel et al., 2010). For achieving universal healthcare as developed nations globally are trying to make a move toward, formulating equitable policies necessitates knowledge of the impact that SES imposes on access to health.

The COVID-19 pandemic has further exposed and amplified such inequalities in the recent past and thus made the issue even more pressing. For instance, Little et al. (2021) found that low-income populations in the United States are experiencing disproportionately higher rates of COVID-19 infection and mortality due to limited healthcare access, crowded living conditions, and pre-existing health conditions. Similarly, in developing countries, in which state-financed healthcare provisions are seldom well-equipped, SES becomes the much stronger determinant of the outcomes of healthcare (Peters et al., 2008). It has also highlighted the multi-dimensional nature of SES, which entangles with other social determinants of health such as race, gender, and age in synergizing complex barriers to healthcare access.

Various policy initiatives, including public health programs, have been undertaken to reduce the disparities; however, mixed results are observed. Barnes et al. (2023) express that even though healthcare reforms improved access for some people in certain regions, the causes of SES-related health inequities were not adequately addressed. This calls for a more holistic and interdisciplinary approach that incorporates insights from public health, economics, sociology, and urban planning toward systemic barriers in the case of lower-income groups.

Using a mixed-method approach, the study combines quantitative information from beneficiary surveys, and key informant interviews by using structured questionnaires and medical records with qualitative insights from case studies and interviews. To guarantee the sample's representativeness, it was collected using the stratified random sampling approach, and the sample size was determined using the appropriate formula.385 samples were collected and analyzed. The level of income, educational achievement, type of occupation, social capital, and health literacy are important determinants. Document reviews, focus groups, and semi-structured interviews have all been used to gather qualitative data. A systematic questionnaire was used to gather quantitative data, which was then analyzed using the econometric method of logistic regression and the statistical package SPSS.

In this respect, using such a cross-cut approach enables not only an understanding of the challenges faced by the lower SES groups regarding healthcare access but also pinpoint specific areas that require addressing in efforts to promote health equality. The main objective of this research is to analyze the role of interdisciplinary factors in establishing the relationship between access to public healthcare services and the characteristics of socioeconomic status (SES).

The first section of the research includes the background of the study followed by reviewing the existing literature. After reviewing the literature, the analysis has been carried out based on the hypothesis which is to be proved with the help of stated methodology. Section 3 explains the methods, Section 4 presents the results, while Sections 5 and 6 discuss the findings and conclude the paper, respectively.

2. Literature Review

Public healthcare provision is one of the most visibly important problems worldwide; one that has SES as a determining factor when it comes to quality and ease of accessibility that patients have available. It was over the last two decades that a huge collection of studies researched the very complex relationship between SES and healthcare, highlighting fundamentally economic, social, and policy-related aspects that influence health outcomes.

Several studies show that income disparities play an important role in deciding healthcare access. Marmot (2005) first introduced the concept of social determinants of health and proved that people from the lower SES groups face a consistent disadvantage in accessing health services and health care results. This concept is supported by recent studies also, such as Braveman et al. (2011) which reaffirmed the relationship between income inequality and limited access to healthcare services and stated that these are continued inequalities in different geographic areas.

Education is significant for developing access to health care according to Cutler and Lleras-Muney (2008). Such people tend to spend a lot of time performing preventive health behaviors as well as being offered the very best kind of health services. Education increases health literacy through better provision of people to understand more complex services properly. Phelan et al. (2010) expanded upon this analysis by proposing the "Fundamental Cause Theory," which posits that, socioeconomic determinants, such as education, act as essential obstacles to obtaining healthcare services. Their research underscores that despite advancements in healthcare technologies, individuals in lower socioeconomic status (SES) categories persistently encounter challenges in accessing these innovations because of limitations in resources.

Systemic inefficiencies and poverty further compound the link between SES and healthcare access in developing countries. Victora et al. (2016) analyzed maternal and child health services across low-income countries, finding that SES plays a determining role in access to core services despite attempts at universal healthcare policies. These issues are usually exacerbated by government policies, according to an analysis by Wagstaff (2022) on health inequalities in low- and middle-income countries published in 2002.

Policy interventions are being suggested to address such inequalities. According to Daniels (2013) extending health insurance coverage to more vulnerable groups could minimize SES-based inequalities. Similarly, Krieger (2001) supported addressing SES as an important determinant in public health policy to emphasize socioeconomic equity in enhancing healthcare access among vulnerable populations.

Public health reforms, such as the Affordable Care Act (ACA), implemented in the United States (Blumenthal & Collins, 2014), have shown promise regarding

the improvement of access to care for the poor (SES). However, several studies by Sommers et al. (2014) and Frean et al. (2017) reveal that while the ACA is somewhat reducing the disparities across income groups, significant holes still exist for the individuals with the lowest incomes.

Recent studies have broadened the discussion of health disparities to include the interaction of socioeconomic status (SES) with other key social determinants such as race and gender. For instance, Williams et al. (2019) argued that although SES is a foundational factor influencing access to healthcare services, its effects are often exacerbated by race- and gender-based disparities. Similarly, Adler and Stewart (2010) contended that SES-related health inequalities are deeply intertwined with systemic racism and other forms of social exclusion.

These disparities are even more pronounced in international contexts. For example, Nandi et al. (2016) examined healthcare access in India and concluded that SES is the primary driver of inequities in the health system. Ataguba and Kabaniha (2022) echoed this concern in a comparative analysis of health inequities in South Africa, highlighting the substantial impact of SES and racial factors on healthcare outcomes.

The spatial distribution of health facilities also significantly influences access. Guagliardo (2004) noted that healthcare disparities between urban and rural areas are strongly tied to SES, with under-resourced districts often lacking adequate medical infrastructure. This aligns with the behavioral model of healthcare use proposed by Andersen and Davidson (2007), which outlines how SES factors—such as income and education—interact with physical accessibility to shape healthcare utilization.

Gordon et al. (2020) conducted a study on healthcare access in South Africa, revealing marked socioeconomic disparities. They found that individuals with higher SES reported better health outcomes, while those with lower SES experienced unmet healthcare needs and delayed treatments. Financial capacity and affordability were identified as the primary barriers. In Philadelphia, Hussein et al. (2016) investigated how neighborhood SES influences healthcare access. Although they found no direct evidence of reduced access in low-income neighborhoods, their results indicated a higher dependence on safety net providers and a lower reliance on private physician services.

McMaughan et al. (2020) explored the relationship between healthcare access, socioeconomic status, and healthy aging in older populations. Their findings underscored the urgent need for interventions and research-driven policy to address the trend of lower SES among the elderly correlating with reduced healthcare access and poorer health outcomes.

Earlier, Andrulis (1998) identified disparities in healthcare access between affluent and poor populations, especially in the context of diseases like HIV/AIDS. He emphasized that the elimination of such disparities could significantly improve treatment access and financial aid through medical insurance programs.

The Guidance for the National Healthcare Disparities Report further challenges the common assumption that health determines SES. Instead, it posits that SES significantly determines health outcomes. Although access to medical care contributes to reducing health disparities, most research indicates that its role is relatively minor in explaining socioeconomic health inequalities. These

disparities are observed in both treatable and untreatable conditions, with deaths from treatable illnesses representing only a small proportion of total mortality.

Debnath et al. (2023) assessed the availability and accessibility of reproductive healthcare services in India's Aspirational Districts. Their study found that districts with high accessibility scores did not necessarily rank high in terms of healthcare availability, suggesting that both dimensions are crucial determinants of health outcomes.

Finally, Fisher and Alderwick (2024) analyzed the performance of general practice in the English NHS using Starfield's framework for primary care. The findings recommend that policymakers prioritize funding for general practices and provide support to local teams to enhance the quality of healthcare services at the community level.

The present literature suggests that SES is an important determinant of accessibility to healthcare. Some of the key issues regarding determinants of income, education, place of residence, and policy framework determine access to healthcare among the people. In addition, other intersecting factors that come along with race and gender make these disparities worse by weaving a complex weave of inequities regarding access to public health care. Sketching through the above reviews, it is also important to understand that, to analyze the influence of socioeconomic status on public health care access it is important to study whether variables like income, education, and occupation, among the target demographic groups influence the public health care access or not.

3. Materials And Methods

The study's methodology is exploratory because it scores the variables. The collected data include both qualitative and quantitative data. As a result, the study analyses data using both qualitative and quantitative methods. Two stages made up the statistical analysis. The reliability and validity of the measures used in this study were evaluated in the first step by using the descriptive statistics of the variables being measured. The apparent variables' path coefficients were evaluated for their contributions and significance as part of the second stage of testing the suitability of the methodology. Data analysis was done using SPSS 20.0 for Windows. The demographic characteristics of the sample collected from the respondents were summarized and described using descriptive statistics. For comparison of the factors taken into account between various levels of the demographic data, parametric statistics including one-way ANOVA and Z-test were used.

The terms used in the research paper are defined as follows:

- Beneficiary: Beneficiaries are those people who access the services of the family health centers at least once. Accessibility: Accessibility is the ease with which the population can locate the provider, and it also constitutes the term 'availability' which refers to the presence of resources for the provider to offer the necessary care.
- Affordability: Financial access, or if the healthcare is offered following the population's capability and willingness to pay for the treatments, is referred to as affordability.
- Continuity: Continuity of care refers to the coherent, interconnected, and consistent experience of healthcare events.

- Comprehensiveness: Comprehensiveness involves offering a wide range of services to meet all the patient's physical and mental healthcare needs.
- People-Friendliness: It means a patient-friendly hospital with good staff, good facilities, adequate grounds, visual appearance, and no unpleasant smell.
- Communication: Communication assesses patient satisfaction with interpersonal relationships in family health centers.
- Hygiene: It refers to the neatness of the family health center from different perspectives.
- Public hospital: It is a hospital that is fully funded by the government, owned by the government, and operates solely on revenues collected to help healthcare initiatives.

3.1. Participant (Subject) Characteristics

The study's primary participants were the beneficiaries and the key informants. Beneficiaries are those people who use and access the services that the FHCs offer. The data from beneficiaries were collected daily (from those who are approaching FHC for any services on the day of the visit by the researcher) till the time it accounts for the sample size intended to be collected from each FHC. Regarding getting the responses from palliative care patients, the researcher visited the FHC on the day each FHC was offered to the needy exclusively for palliative care patients. The socio-economic features have been examined using this data. The persons who give public healthcare to the beneficiaries are considered key informants. The key informants consist of doctors, nurses, the Aardram Mission nodal officers, officials of the Directorate of Health Services as well as those of the District Medical Office, etc.

3.2. Sampling Procedures

To obtain a suitable sample, data were acquired using a multi-stage random sampling procedure. Thiruvananthapuram, Idukki, and Kannur are the three Kerala districts that were initially chosen at random. In the following stage, five Family Health Centers were then selected in each of these districts using the lottery method of simple random selection. Beneficiaries have now been chosen at random for the third stage. The selected FHCs were Chemmaruthy FHC, Kilimanoor FHC, Navaikulam FHC, Ottoor FHC, and Pazhayakunnummel FHC from the District of Thiruvananthapuram; Peruvanthanam FHC, Elappara FHC, Kumili FHC, Ayyappancoil FHC and Vattavada FHC from Idukki; and Cherupuzha FHC, Alakode FHC, Kankol-Alappadamba FHC, Peringome-Vayakkara FHC and Eramam-Kuttur FHC from Kannur respectively. Five consecutive months, i.e., the period from 29 December 2022 to 5 May 2023 were used to conduct the survey. The Thiruvananthapuram data-gathering process began in December and finished on January 30. From 20 February to 5 May 2023, statistics from additional districts were gathered.

3.3. Sample Size, Power, and Precision

Population is a set of events or elements relevant to a given question or experiment. The finite population equation needs to be adjusted when considering a finite population, as the (N-n)/(N-1) term in the equation needs to be adjusted. In the study, it is evident that the population who are accessing these

particular services provided by the Government through the Aardram Mission is unknown. Mission Aardram is designed to transform primary health centers into family health centers by providing comprehensive health services at low cost. As a result, anyone can access the medical care offered by the family health centers, regardless of any form of discrimination. Therefore, it is uncertain what population uses the family health centers. The population accessing the family health centers is unknown. Hence, the only possibility to find an adequate number of observations (sample) could be selected only through the equation mentioned above by assuming the confidence interval of 95%; then there would be a 5% chance for the researcher to commit an error. The Z score can be 1.96 as the 95% confidence level has -1.96 and +1.96 standard deviations. Hence the sample size could be approximately =385

3.4. Measures and Covariates

Data has been collected from beneficiaries through a structured questionnaire and interviews have been conducted to collect data from key informants. Using Cronbach's alpha, the questionnaire's reliability is assessed. The initial Cronbach's alpha for each of the structures taken into consideration is shown in Table 1.

Table 1: Reliability check

Variables	Cronbach's Alpha	No. of Variables
Accessibility	0.810	7
Continuity	0.826	5
People-friendliness	0.852	6
Comprehensiveness	0.823	3
Communication	0.831	4
Hygiene	0.873	4

Source: Primary Data

The findings indicate that most constructs have reliability levels over 0.8. So, it is possible to continue with the analysis. Before doing any statistical analysis, it is imperative to assess the data's normality since the statistical processes and tests for normal and non-normal data are different. In other words, distribution- free approaches for non-normal data and parametric test processes for normal data were applied. The Kolmogorov-Smirnov test was applied to examine normality, and then the following hypotheses were tested.

3.5. Research Design

This study employs mixed methods exploratory design because it uses both qualitative and quantitative data. This study compares attributes across different demographic levels and it has been analyzed to find the relationship between SES and the impact of the same on public healthcare access.

4. Results

Among a sample of 385 people (136 men and 249 women), the cross-tabulation table contrasts gender with the preference for healthcare (Public Hospital, Public Dispensary, or Private Hospital).

Table 2: Cross tabulation-Gender and preference towards healthcare

	Preference for healthcare			Total
	Public Hospital	Public Dispensary	Private Hospital	

Gender	Male	Count	104	18	14	136
		% within Gender	76.5%	13.2%	10.3%	100.0%
	Female	Count	188	28	33	249
		% within Gender	75.5%	11.2%	13.3%	100.0%
Total		Count	292	46	47	385
		% within Gender	75.8%	11.9%	12.2%	100.0%

Source: Primary Data

According to the findings, public hospitals are the healthcare option of choice for both genders, with 76.5% of men and 75.5% of women admiring them, while private hospitals are marginally preferred. The cross-tabulation in Table 2 shows how 385 people's preferred method of receiving healthcare—public hospital, public dispensary, or private hospital—relates to their level of education.

Table 3: Cross tabulation- Education and preference towards healthcare

			Preference for healthcare			Total
			Public Hospital	Public Dispensary	Private Hospital	
Education	Illiterate	Count	19	0	3	22
		% within Education	86.4%	0.0%	13.6%	100.0%
	Primary	Count	77	12	8	97
		% within Education	79.4%	12.4%	8.2%	100.0%
	Secondary	Count	96	21	20	137
		% within Education	70.1%	15.3%	14.6%	100.0%
	Higher Education	Count	100	13	16	129
		% within Education	77.5%	10.1%	12.4%	100.0%
Total		Count	292	46	47	385
		% within Education	75.8%	11.9%	12.2%	100.0%

Source: Primary data

Table 3 shows that public hospitals are the most preferred healthcare option across all education levels, with higher education showing a preference for private hospitals. Education influences perceived quality and preference for healthcare facilities.

Table 4: Cross tabulation- Employment and preference towards healthcare

			Preference for healthcare			Total
			Public Hospital	Public Dispensary	Private Hospital	
Employment	Student	Count	29	3	4	36
		% within Employment	80.6%	8.3%	11.1%	100.0%
	Daily Worker	Count	75	8	7	90
		% within Employment	83.3%	8.9%	7.8%	100.0%
	Government Employee	Count	30	9	10	49
		% within Employment	61.2%	18.4%	20.4%	100.0%
	Private Employee	Count	44	18	18	80
		% within Employment	55.0%	22.5%	22.5%	100.0%
	Other	Count	114	8	8	130
		% within Employment	87.7%	6.2%	6.2%	100.0%
Total		Count	292	46	47	385

	% within Employment	75.8%	11.9%	12.2%	100.0%

Source: Primary Data

According to the research, private hospitals are favored by those with higher education, while public hospitals are the most popular choice for healthcare across all educational levels. Perceived quality and choice of healthcare facilities are influenced by education.

The study found a positive relationship between household income and the availability of public health services. Better access to specialized services, shorter wait times, and general satisfaction with public healthcare facilities were reported by higher-income groups. The use of healthcare was also significantly influenced by education level, with individuals with higher education levels being more aware of the options that were accessible. Professionals had easier access to public health facilities because they could afford ancillary expenses and seek care when they needed it. The absence of official social safety nets and erratic incomes presented greater challenges for the informal economy. Table 4 explains the distribution of beneficiary satisfaction levels at different paces by accessing the services rendered by the public health care center nearby.

Table 5: Distribution table based on the level of satisfaction of the respondents

Beneficiary satisfaction	Frequency	Percent
Medium	140	36.4
High	245	63.6
Total	385	100.0

Source: Primary Data

Table 6: Initial Log likelihood result

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	415.071	88.746	7	<0.001
Final	326.325			

Source: Primary Data

Out of the 385 beneficiaries investigated 140 indicated a medium level of satisfaction, while 63.6% reported a high level of satisfaction. 63.6% of the 385 respondents said they were very satisfied, and 36.4% said they were moderately satisfied. The majority expressed either moderate or high levels of satisfaction with the service or benefit, suggesting that people generally had a favorable opinion of the program or service under review.

The log-likelihood model was created initially and the result is shown in Table 6. The first log-likelihood value, 415.071, represents a model with simply a constant or intercept and no independent variable. A model's true log-likelihood value, which takes into account all independent variables, is 326.325. It can be concluded that there is a significant relationship between the dependent and independent variables if we set the significance at the 0.05 level. The model chi-square value, which is obtained as 88.746 and has a significance of $p < 0.001$, is the difference between these two measures.

To fit a model and ascertain the impact of several demographic parameters (gender, age group, education, employment, marital status, religion, and place of

residence) on a particular outcome or dependent variable, a Likelihood Ratio Test is performed, and the results are shown in Table 5 The degrees of freedom (df), Chi-Square, -2 Log Likelihood of Reduced Model, and Significance (Sig.) are the primary markers.

Table 7: Likelihood ratio test

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	339.950	13.625	1	0.000
Gender	332.016	5.692	1	0.017
Age group	341.416	15.091	1	0.000
Education	333.908	7.584	1	0.006
Employment	351.409	25.084	1	0.000
Marital Status	326.526	0.201	1	0.654
Religion	352.195	25.870	1	0.000
Place of residence	332.471	6.146	1	0.013

Source: Primary Data

The impact of different factors on the outcome variable was investigated in the study. The findings in Table 7 demonstrated the substantial effects of gender, age group, education, employment, religion, and place of living on the outcome variable. The baseline model significantly described the variation in the outcome variable, as indicated by the intercept, which was statistically significant. The age group had a big influence on the result and was quite crucial. The outcome variable was significantly impacted by education, which was likewise significant. Employment status had a major influence on the model and was extremely significant. The fact that marital status was not significant suggests that it had no impact on the outcome variable. Religion had a major effect on the result and was quite significant. Residence location had a statistically significant impact on the outcome variable.

Table 8 shows the results of a logistic regression study that was done to look at the association between the likelihood of having "high" beneficiary satisfaction and several predictor variables, including gender, age group, education, occupation, marital status, religion, and place of residence. Based on these indicators, the regression model calculates the likelihood of a high degree of satisfaction as they have high accessibility of the services.

Table 8: Parameter estimates

Beneficiary satisfaction-group		B	Std. Error	Wald	df	Sig.	Exp(B)
High	Intercept	18.530	0.833	495.280	1	0.000	
	Gender	0.608	0.255	5.704	1	0.017	1.837
	Age group	-0.895	0.238	14.153	1	0.000	0.408
	Education	-0.362	0.133	7.379	1	0.007	0.696
	Employment	0.455	0.094	23.508	1	0.000	1.576
	Marital Status	-0.087	0.194	0.201	1	0.654	0.917
	Religion	-0.823	0.165	25.013	1	0.000	0.439
	Place of residence	-16.090	0.000		1		0.000

Source: Primary Data

The impact of independent variables on high levels of accessibility is examined in this study. It concludes that a person's level of pleasure is highly influenced by their gender, age group, education, employment, marital status, religion, and place of living. While older age groups are less likely to indicate high satisfaction, men are more likely than women to report high satisfaction. While residency has a negative coefficient, religion is also significant.

The following equations are related to the multinomial logit model displayed in the table:

$$Log\ (p(Medium)/p(High)) = 18.530 + 0.608\ (Gender) - 0.895\ (Age\ group) - 0.362\ (Education) + 0.455\ (Employment\ status) - 0.087\ (Marital\ status) - 0.823\ (Religion) - 16.090\ (Place\ of\ residence)$$

An alternative interpretation of the outcome relies on the Exponential beta. The dependent variable's odd ratio is provided via exponential beta. This odd ratio allows us to calculate the probability of the dependent variable. The likelihood of the other category (High group) grows when the exponential beta value is larger than one, and the reference (middle) category probability increases when the exponential beta probability is less than one. When interpreting an exponential beta value, one uses the reference category to determine the likelihood that the dependent variable will rise or fall. When dealing with continuous variables, an increase or decrease of one unit in the independent variable is understood as equating to the same amount in the dependent variable. Based on this, it can be concluded that, for beneficiary satisfaction of the health services accessibility, gender and employment are the factors positively influencing the high satisfaction group as compared to the medium satisfaction group (See column Exp(B)).

Access to healthcare is greatly impacted by cultural norms and beliefs, especially for vulnerable groups. Particularly in the case of indigenous populations, traditional beliefs in rural and low-income areas can cause delays in the use of contemporary services. Although they increase access, policy frameworks such as government healthcare programs are not always well-communicated or used. Access to healthcare is also influenced by geographic location, with rural communities having less access because of poor infrastructure, problems with transportation, and a lack of medical experts. A divided geographical sense of the availability of healthcare emerges.

This study elucidates how the relations between socioeconomic position and public healthcare access are largely moderated by particular frameworks of policy-making, circumstances of the milieu, and cultural norms. Daily cultural impediments work against receiving contemporary healthcare treatments, especially in rural and indigenous communities. Similarly, programs instituted by the Indian government to cut healthcare costs often remain underutilized, especially in rural and lower-class communities. This is compounded by the failure of effective communication strategies on public health policies. Policymakers may develop new healthcare interventions that are aware of cultural differences; educate providers about building rapport with patients from various cultural backgrounds; improve communication strategies on public health policies; and reduce the divide between rural and urban healthcare via infrastructure and transport enhancement. This systematic strategy could serve

to combine within it how policymakers may proceed with culturally sensitive interventions that might lead to legislative amendments and infrastructure improvements to bring public healthcare systems into a direction that is accessible and embracing extension-like.

5. Discussion

The present study was conducted to investigate factors through which socioeconomic factors affect availability. The socioeconomic factors include the distribution by income groups and educational and professional status, among others, with spatial heterogeneity. This section provides a review of the research results against the background of other relevant research works, presents theoretical and applied significance for the works, and introduces several lines of further research inquiry.

The results reveal a high SES correlation with access to health care, which is consistent with most conclusions drawn by several studies in the same sphere. Specifically, patients representing higher classes of SES tend to have a greater opportunity to receive timely and wholesome healthcare services than people with lower classes of SES: the same conclusion was drawn by Wagstaff and Neelsen (2019) and Marmot (2015), who considered the role of economic differentiation in the generation of inequalities in terms of access to health services.

However, the study brings forth several complexities that contrast with previous research findings. One important finding is the impact of education as a determinant for healthcare access and, in some cases, tends to be even more crucial than income, particularly in urban populations. This conclusion is somewhat contrary to the assumptions of Galobardes et al. (2007) who reported that income usually is the leading variable while predicting healthcare accessibility. This study shows that increased educational levels make it easier for patients to navigate through the healthcare system. In other words, their health literacy becomes a critical tool for refining healthcare results when income levels seem stable. The educational interventions, therefore, need to be backed by other economic support programs toward achieving more even healthcare access.

Moreover, although previous studies emphasized the geographical barriers that exist in rural settings, our study revealed an emerging trend of healthcare access issues in semi-urban areas. This may be related to the new trends of urbanization and healthcare facilities, which have been relatively less discussed in academic literature. In brief, the traditional distinction applied to rural and urban accessibility of healthcare may need a reevaluation, particularly concerning changes in public health policy impacts on semi-urban areas.

This study's findings in areas of socioeconomic determinants of health access reveal complex characteristics and challenge the assumption that income is the direct causal influence on disparities. The significantly positive effect of educational status reveals that health literacy should be a key target for public health interventions, especially at reduced income levels, since this can dramatically affect the intake of healthcare. These results have immediate policy implications: interventions aimed at healthcare access should be multifaceted, focusing not only on income-related constraints but also on education-related gaps.

It further nourishes the theoretical models on disparities in health research, especially by enriching the knowledge of the interaction between socioeconomic factors. The interdisciplinary research approach, combining the factors of economics, public health, and sociology here, can provide a more holistic outlook on access-related disparities. This concurs with the postulation of Andersen (1995) that access to medical care is a function of the interaction of predisposing, enabling, and need factors; however, our study implies that educational determinants deserve more prominence than traditionally assigned.

This study applied the utilization of regression models to analyze the association that exists between various SES factors and access to health care. The model was quite robust, and it did adjust for potential confounders; however, in some ways, this study is limited by reliance on self-reported data and potential bias. This cross-sectional design limits our ability to draw causal relationships between SES and access to health care, which should be longitudinal in design. Future studies should address these limitations by using longitudinal approaches and assessing other factors, such as cultural or behavioral, which could better explain the inequalities in access to health care.

This research opens up multiple avenues for further study. In the first instance, more research needs to be carried out to see how the importance of semi-urban areas relates to improving healthcare facilities since, apparently, it has somewhat different issues compared to merely rural or purely urban. In addition, the results imply that further research should be conducted to identify specific mechanisms through which education affects access to healthcare services, such as health literacy and empowerment. Ultimately, more research concerning the accessibility of health care for these at-risk populations—mainly ethnic minorities and migrants—would add to the existing knowledge regarding how intersectional factors affect disparities in healthcare.

In brief, this current study focused on how socioeconomic status played a significant role in predicting healthcare access while calling for evaluation that includes further determinants like education and geographical components. These results indicate that there is a need for more targeted strategies within public health policy initiatives that will reduce economic disparities as well as educational disparities so that all can have measurable improvements in overall health outcomes and increased access to healthcare.

6. Conclusion

The study points out how socioeconomic status relates to public health care in accessing accessible public healthcare, whereby patients with low SES face serious barriers such as financial constraints, education, and fewer facilities, thus raising the issue of health inequities.

Public access to healthcare is constrained by wealth and socioeconomic status, religions, patterns of living, policies, and environmental effects, studies reveal. An integrated approach in the form of policy adjustments, cultural education, and infrastructure renovation is important for achieving inclusive healthcare. This holistic understanding may provide the solicitors and health professionals with a template to grasp the actions. Access to public health provision is greatly influenced by socio-economic classes, with occupation, education, and income all playing roles. Higher socio-economic groups have

access because they are better informed, flexible in their work regimen, and much more able financially. Low SES populations face systematic barriers like limited job opportunities, lack of awareness, and affordability. The policy implications include funding low-income populations, investing in public education about available health services, and allowing informal and unskilled workers flexible access to health care. This program will additionally facilitate improved access to health care and give some relief from out-of-pocket liabilities.

The study highlights the significant impact of socioeconomic status (SES) on people's access to public healthcare services. People from lower SES are generally at a disadvantage in accessing basic healthcare services, adversely impacting their health condition. Cultural, political, and environmental factors also mediate the relationship between SES and healthcare accessibility. The effect of SES on healthcare consumption may be moderated or worsened by immediate factors such as the availability of healthcare facilities, the offer of health programs, and environmental issues. The study demonstrates the need for integrated policy approaches enveloping economic, and sociocultural factors behind health as well as environmental determinants of health. The inclusive public health systems, cognizant of multiple dimensions of SES, shall contribute to achieving a major reduction in health inequalities.

This research will eliminate the barriers that stand between healthcare policy and coverage, and resource allocation by using an interdisciplinary framework. Study Limitation Socioeconomic variables mostly affect the data, thus creating a potential source of bias. More longitudinal research is therefore needed in light of how social policies affect people longitudinally.

Further studies might investigate the long-term effects of policy shifts on healthcare access and patient health outcomes, as well as the role of private providers in ameliorating those disparities. This research study points out the necessity of an interdisciplinary approach toward understanding and solving the disparities between public access to healthcare and more general levels of healthcare access.

References

Adler, N. E., & Stewart, J. (2010). Health disparities across the lifespan: Meaning, methods, and mechanisms. *Annals of the New York Academy of Sciences, 1186*(1), 5–23. https://doi.org/10.1111/j.1749-6632.2009.05337.x

Andersen, R. M. (1995). Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? *Journal of Health and Social Behavior*, *36*(1), 1–10. https://doi.org/10.2307/2137284

Andersen, R. M., & Davidson, P. L. (2007). Improving access to care in America: Individual and contextual indicators. In R. M. Andersen, T. H. Rice, & G. F. Kominski (Eds.), *Changing the U.S. health care system: Key issues in health services policy and management* (3rd ed., pp. 3–31). Jossey-Bass.

Andrulis, D. P. (1998). Access to care is the centerpiece in the elimination of socioeconomic disparities in health. *Annals of Internal Medicine, 129*(5), 412. https://doi.org/10.7326/0003-4819-129-5-199809010-00012

Ataguba, J. E., & Kabaniha, G. A. (2022). Characterizing key misconceptions of equity in health financing for universal health coverage. *Health Policy and Planning, 37*(7), 928–931. https://doi.org/10.1093/heapol/czac041

Barnes, L., Hall, P. A., & Taylor, R. C. R. (2023). The structural sources of socioeconomic inequalities in health: A cross-national perspective. *Socius Sociological Research for a Dynamic World, 9*, 237802312311748. https://doi.org/10.1177/23780231231174832

Blumenthal, D., & Collins, S. R. (2014). Health care coverage under the Affordable Care Act - A progress report. *New England Journal of Medicine, 371*(3), 275–281. https://doi.org/10.1056/NEJMhpr1405667

Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: Coming of age. *Annual Review of Public Health, 32*(1), 381–398. https://doi.org/10.1146/annurev-publhealth-031210-101218

Cutler, D. M., Lleras-Muney, A., & Vogl, T. S. (2008). *Socioeconomic status and health: Dimensions and mechanisms* (NBER Working Paper No. 14333). National Bureau of Economic Research. https://doi.org/10.3386/w14333

Daniels, N. (2013). Healthcare resources, distribution of. *The International Encyclopedia of Ethics*. https://doi.org/10.1002/9781444367072.wbiee494

Debnath, T., Barman, B., Barman, K., & Roy, R. (2023). Accessibility and availability of reproductive health care services at primary health centre level and association with health outcome in Aspirational Districts of India. *Clinical Epidemiology and Global Health, 23*, 101385. https://doi.org/10.1016/j.cegh.2023.101385

Fisher, R., & Alderwick, H. (2024). The performance of general practice in the English National Health Service (NHS): an analysis using Starfield's framework for primary care. *Health affairs scholar*, *2*(3), qxae022. https://doi.org/10.1093/haschl/qxae022

Frean, M., Gruber, J., & Sommers, B. D. (2017). Premium subsidies, the mandate, and Medicaid expansion: Coverage effects of the Affordable Care Act. *Journal of Health Economics, 53*, 72–86. https://doi.org/10.1016/j.jhealeco.2017.02.004

Galobardes, B., Lynch, J., & Smith, G. D. (2007). Measuring socioeconomic position in health research. *British Medical Bulletin, 81–82*(1), 21–37. https://doi.org/10.1093/bmb/ldm001

Gordon, T., Booysen, F., & Mbonigaba, J. (2020). Socio-economic inequalities in the multiple dimensions of access to healthcare: the case of South Africa. *BMC public health*, *20*(1), 289. https://doi.org/10.1186/s12889-020-8368-7

Guagliardo, M. F. (2004). Spatial accessibility of primary care: Concepts, methods and challenges. *International Journal of Health Geographics, 3*(1), 3. https://doi.org/10.1186/1476-072X-3-3

Hussein, M., Diez Roux, A. V., & Field, R. I. (2016). Neighborhood Socioeconomic Status and Primary Health Care: Usual Points of Access and Temporal Trends in a Major US Urban Area. *Journal of urban health : bulletin of the New York Academy of Medicine*, *93*(6), 1027–1045. https://doi.org/10.1007/s11524-016-0085-2

Krieger, N. (2001). Theories for social epidemiology in the 21st century: An ecosocial perspective. *International Journal of Epidemiology, 30*(4), 668–677. https://doi.org/10.1093/ije/30.4.668

Little, C., Alsen, M., Barlow, J., Naymagon, L., Tremblay, D., Genden, E., Trosman, S., Iavicoli, L., & Van Gerwen, M. (2021). The impact of socioeconomic status on the clinical outcomes of COVID-19: A retrospective

cohort study. *Journal of Community Health, 46*(4), 794–802. https://doi.org/10.1007/s10900-020-00944-3

Marmot, M. (2005). Social determinants of health inequalities. *The Lancet, 365*(9464), 1099–1104. https://doi.org/10.1016/S0140-6736(05)71146-6

Marmot, M. (2015). *The health gap: The challenge of an unequal world.* Bloomsbury Publishing USA.

McMaughan, D. J., Oloruntoba, O., & Smith, M. L. (2020). Socioeconomic Status and Access to Healthcare: Interrelated Drivers for Healthy Aging. *Frontiers in public health*, *8*, 231. https://doi.org/10.3389/fpubh.2020.00231

Nandi, A., Hajizadeh, M., Harper, S., Koski, A., Strumpf, E. C., & Heymann, J. (2016). Increased duration of paid maternity leave lowers infant mortality in low- and middle-income countries: A quasi-experimental study. *PLoS Medicine, 13*(3), e1001985. https://doi.org/10.1371/journal.pmed.1001985

Pampel, F. C., Krueger, P. M., & Denney, J. T. (2010). Socioeconomic disparities in health behaviors. *Annual Review of Sociology, 36*(1), 349–370. https://doi.org/10.1146/annurev.soc.012809.102529

Peters, D. H., Garg, A., Bloom, G., Walker, D. G., Brieger, W. R., & Rahman, M. H. (2008). Poverty and access to health care in developing countries. *Annals of the New York Academy of Sciences, 1136*(1), 161–171. https://doi.org/10.1196/annals.1425.011

Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities: Theory, evidence, and policy implications. *Journal of Health and Social Behavior, 51*(1_suppl), S28–S40. https://doi.org/10.1177/0022146510383498

Sommers, B. D., Musco, T., Finegold, K., Gunja, M. Z., Burke, A., & McDowell, A. M. (2014). Health reform and changes in health insurance coverage in 2014. *New England Journal of Medicine*, *371*(9), 867-874.

Victora, C. G., Requejo, J. H., Barros, A. J., Berman, P., Bhutta, Z., Boerma, T., Chopra, M., de Francisco, A., Daelmans, B., Hazel, E., Lawn, J., Maliqi, B., Newby, H., & Bryce, J. (2016). Countdown to 2015: a decade of tracking progress for maternal, newborn, and child survival. *The Lancet*, *387*(10032), 2049-2059, https://doi.org/10.1016/S0140-6736(12)61427-5

Wagstaff A. (2002). Poverty and health sector inequalities. *Bulletin of the World Health Organization*, *80*(2), 97–105.

Wagstaff, A., & Neelsen, S. (2019). A comprehensive assessment of universal health coverage in 111 countries: A retrospective observational study. *The Lancet Global Health, 8*(1), e39–e49. https://doi.org/10.1016/S2214-109X(19)30463-2

Williams, D. R., Lawrence, J. A., & Davis, B. A. (2019). Racism and health: Evidence and needed research. *Annual Review of Public Health, 40*(1), 105–125. https://doi.org/10.1146/annurev-publhealth-040218-043750