

CATASTROPHIC HEALTH EXPENDITURE IN RURAL AREAS OF PUNJAB AND IMPACT OF SEHAT SAHULAT PROGRAM

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ABSTRACT

This study uses the ability-to-pay method to look into the disparities in catastrophic health expenditure. In order to examine socioeconomic disparities in CHE, both conventional and generalized concentration indicators were utilized. The findings showed that Punjab's impoverished were disproportionately to CHE. The primary cause of this inequality was wealth status with higher wealth quantiles contributing more heavily. Furthermore, factors such as the employment and educational status of the household head, private healthcare provision, and access to inpatient care negatively impacted CHE inequality in rural areas of Punjab. The Sehat Sahulat Program (SSP) is highlighted as one of the country's most significant achievements in healthcare.

Keywords: Catastrophic Health Expenditure, Sehat Sahulat Program, Rural area in Punjab

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INTRODUCTION

As of 2022, Pakistan's population stands at 235,824,858, with a current health expenditure of 2.91% of GDP in 2021 [1]. Financial protection relates to how household well-being is impacted by out-of-pocket payments. This necessitates data from household surveys regarding out-of-pocket healthcare spending, as well as measures of total consumption, expenditure, and poverty lines. Aligned with the United Nations Sustainable Development Framework, developing countries have made notable strides toward achieving Universal Health Coverage (UHC), which aims to ensure that everyone has access to healthcare regardless of their financial situation [2, 3]. Financial challenges create a significant

barrier to equitable healthcare access, especially when a substantial portion of healthcare costs is paid out-of-pocket [4]. Out-of-pocket (OOP) medical expenses are direct payments individuals or households make for healthcare services. In low-income countries, OOP expenses account for 41% of total healthcare expenditures, significantly higher than the 22% observed in high-income countries. In lower-middle-income and upper-middle-income nations, out-of-pocket health expenditures constitute 40% and 31% of overall healthcare spending, respectively [5]. These figures highlight the heavy reliance on private financing for healthcare in low-income countries, with out-of-pocket expenses being a major contributor.

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Due to the restricted provision of public healthcare services in Pakistan, a sizable amount of healthcare expenses are borne by the private sector. Data on healthcare financing for the 2019–20 fiscal year indicates that the general government pays for about 40% of healthcare costs, with the private sector bearing the remaining 59.5%. [6]. Out of the expenses incurred by the private sector, a substantial 89% are paid out-of-pocket by individuals. In Baluchistan, the share of total OOP expenditure in Pakistan is 23%, but within its provincial healthcare expenditure, OOP expenses rise significantly to 52%). This heavy dependence on out-of-pocket payments leaves individuals vulnerable to financial hardship and unmet healthcare needs, exacerbating socio-economic inequalities in health and contributing to an overall decline in health status [7]. Catastrophic health expenses are defined as those that surpass 40% of non-food expenses or 10% of total household expenditures [8]. Catastrophic healthcare expenditures can potentially push households into poverty [9]. When households rely on OOP financing for healthcare, they risk depleting their savings or resorting to borrowing. This financial strain occurs when healthcare costs surpass a household's financial capacity, significantly diminishing their quality of life [10].

Socioeconomic health disparities are exacerbated by catastrophic health expenditure (CHE). From 2002 to 2009, for example, there was a large growth in socioeconomic inequality in Brazil (CHE), with the poorest facing a 5.2-fold increase and those with the lowest levels of education facing a 4-fold increase [11]. Poor households in Hanoi, Vietnam, were more likely to experience CHE in both slum and non-slum areas; however, the likelihood of slipping into poverty owing to healthcare expenditures was higher in slum areas alone [12].

Over the last ten years, the average out-of-pocket health expenditure in India has

increased. In general, wealthier households spend more on inpatient treatment, whereas lower-income households spend more on outpatient care.

As of right now, no research has been done on socioeconomic disparity in Pakistan that addresses this problem. Thus, by examining socioeconomic disparities in catastrophic healthcare costs in Pakistan's Baluchistan area, this study seeks to close that gap. In particular, it looks at how common CHE is and how much socioeconomic inequality there is in this setting. The contributing elements to this inequality are also examined in the study.

METHODOLOGY

Catastrophic Health Expenditures CHE

There are two commonly used approaches to calculate catastrophic health costs. The first approach, referred to as the budget share method, determines if a household's out-of-pocket (OOP) healthcare costs are greater than 10% of their total consumption expenditures [10]. The second approach, known as the capacity-to-pay strategy, examines out-of-pocket medical costs for OOP patients that surpass 40% of non-food spending. Studies show that the budget share technique tends to overestimate for wealthier households and underestimate catastrophic health spending for poorer households. On the other hand, most people agree that the capacity-to-pay strategy is better suited for low- and middle-class households [8]. The objective of this research is to quantify health disparities in catastrophic medical costs by evaluating all household expenses and using only the capacity-to-pay approach.

RESULTS

The capacity to pay approach was used to calculate Catastrophic Health Expenditure (CHE), accounting for 40% of non-food expenses. We also looked at other criteria of 10%, 15%, and 20% of total expenditures, including 20% of non-food expenditure, to confirm the validity of our findings. 3.2% of the population, according to the capacity to pay method, had CHE during this time. The results are shown in

Table 1 according to various cutoffs. Using a 20% non-food expenditure cutoff resulted in greater CHE rates, but a 20% total expenditure cutoff produced lower rates. According to the report, 68% of the impacted households are located in Punjab's rural districts. Furthermore, male-headed households have a higher prevalence of CHE than female-headed households. Additionally, households headed by people without a formal education are more susceptible to CHE than households with educated heads. In addition, a higher percentage of CHE occurrences occur in smaller families as opposed to bigger ones. According to the findings, households in Punjab's rural areas that have the lowest socioeconomic status—that is, the poorest—are more likely to have CHE.

The results show that those with low socioeconomic status (poor) accounted for a disproportionate share of catastrophic health expenditures (CHE), as shown by the concentration index's negative values.

The study found that living in an urban area and wealth quantiles were important factors in the disparity in catastrophic health expenditures (CHE). Preference for the wealthy was associated with a favorable effect, but the impoverished had similar drawbacks. On the other hand, a decrease in CHE inequality was linked to variables including having a head of household who attended school, using private healthcare, and receiving inpatient care; these indicators suggested that the poor were given preference over the rich. Additionally, unexplained factors significantly and positively influenced CHE inequality, further favoring the better-off and disadvantaging the poor. These unexplained factors accounted for 5% of the overall inequality in CHE. Possible explanations for these factors may include household income (given that consumption expenditure was used for wealth quantiles), marital status, the presence of elderly or children in the household, and the prevalence of diseases.

DISCUSSION

Catastrophic Health Expenditure (CHE) in Punjab is mainly concentrated in poorer socioeconomic areas, according to the data, as shown by negative concentration index values. This implies that people in lower socioeconomic categories face more disparities in catastrophic health care costs than do people in wealthier demographic groups. 60% of Pakistan's healthcare budget is allocated to private financing, which is a significant dependence [6], may contribute to the financial burden on the poor. Insufficient investment in affordable healthcare leads to significant out-of-pocket (OOP) spending, often incurred at private facilities, further widening the gap in healthcare access between affluent and impoverished individuals [14].

Higher wealth quantiles are shown to be the main causes of disparity in CHE in Punjab, according to the study. Having a head of home who is educated or employed, depending on private healthcare providers, and having access to inpatient care are all factors that reduce the disparity in CHE. Living in an urban area increases the likelihood of CHE inequality, but not as much as living in a wealthy area. Disparities between various social groups in urban centers endure despite the fact that access to healthcare services is better in urban areas than in rural ones [15].

Inequality in CHE remains a significant issue in Punjab, disproportionately affecting poorer segments of the population. To provide essential financial risk protection to the most vulnerable individuals, it is crucial to implement integrated healthcare policies that involve multiple sectors.

In terms of health metrics, Pakistan lags behind its surrounding countries overall. The nation can lower socioeconomic disparities in healthcare spending and improve health outcomes by emphasizing the expansion of social health protection for its citizens [13]. Targeted interventions are also necessary to address regional variations and financial gaps that worsen

health inequalities.

SEHAT SAHULAT PROGRAM: UHC INITIATIVE

UHC, or Universal Health Coverage, is a concept introduced by the WHO aimed at providing essential health services to everyone without causing financial hardship. As part of the Sustainable Development Goals (SDGs) adopted by the United Nations (UN) in 2015, UHC is particularly emphasized in Goal 3 of the UN 2030 Agenda, which focuses on health. It represents a fundamental right for citizens and serves as a critical step toward achieving comprehensive healthcare access. The most significant accomplishment of the Public Health System (PHS) in Pakistan is the UHC initiative known as the Sehat Sahulat Program (SSP) [14].

The SSP is a publicly sponsored health insurance program that aims to protect all residents financially against uninsurable medical costs. It is funded by both the federal and provincial governments. The SSP, which was first introduced in 2015 by the provincial administration of Khyber Pakhtunkhwa (KPK), focused on providing free health insurance coverage to vulnerable and disadvantaged communities in particular. The SSP was extended to new areas in 2019 by the Pakistani federal government working with provincial governments. Government funding is used to administer the program, which is overseen by the Ministry of National Health Services, Regulations, and Coordination. It consists of two primary parts: (i) a network of participating hospitals and clinics where these households can receive healthcare services, and (ii) free health insurance for qualifying households. Social insurance was first only provided by the SSP to families. Initially, the SSP offered social insurance solely to families below the poverty line, but it is now gradually aiming to extend coverage to all citizens. The SSP was implemented in 36 districts in Punjab, 35 districts in Khyber Pakhtunkhwa, 10 districts in Azad Jammu

and Kashmir (AJK), 10 districts in Gilgit Baltistan (GB), the Islamabad Capital Territory (ICT), and the Hardaker district in Sindh. By 2022, approximately 44.6 million households had benefited from the program. The Public Sector Development Program (PSDP) covers premium payments for ICT, AJK, GB, the Federally Administered Tribal Areas (FATA), and Thar Parker districts; Punjab and Khyber Pakhtunkhwa, on the other hand, receive full funding for their premium contributions from a number of sources. Households that participate in the SSP obtain health insurance cards that give them access to medical care at partner hospitals and clinics for up to one million rupees annually. A wide range of inpatient therapies, including as heart surgeries, cancer care, and burn treatments, are covered by the program [15, 16].

Due to the SSP's tiered benefit system, households with more vulnerable members—such as women, children, and the elderly—are eligible for higher payments. Beneficiaries can access care from any of Pakistan's more than 1,030 paneled hospitals, regardless of where they live. Additionally, the initiative has greatly increased marginalized populations' financial safety. This project includes people who identify as transgender and people with disabilities who are registered with the National Database and Registration Authority (NADRA). This represents a major advancement in the inclusion of historically underrepresented populations [17].

Over 60% of all medical expenses in Pakistan are paid for out-of-pocket (OOP) treatments. As the first health insurance program in the nation's history, the SSP has served 154 million people and reduced this financial load at all levels of healthcare. More than 3.2 million hospital visits have been documented under the SSP's health cards as of March 8, 2022. In addition to increasing access to medical services—which many individuals had previously avoided owing to their high costs—this

shared health spending has also enhanced general health and wellness.

CONCLUSION

This study looks at Punjab's socioeconomic disparities in catastrophic health expenditures (CHE) and pinpoints the causes of these differences. The results show that lower socioeconomic groups are consistently the focus of inequality, with wealth status serving as the main driver although other factors also play a role. To emphasize the well-being of economically disadvantaged households in Punjab, initiatives that address the underlying causes of socio-economic inequality in CHE must be developed. These treatments address broader socio-economic gaps and seek to lessen the financial burden caused by high healthcare expenditures. Acknowledging the complex interplay between socioeconomic position and health is essential to addressing these disparities. The ongoing disparity in catastrophic health care costs in Punjab disproportionately impacts the poorer sections of society, which is cause for

serious worry.

Enacting all-encompassing healthcare regulations that involve various stakeholders might offer vital financial risk mitigation for the most susceptible folks.

The healthcare system in Pakistan is confronted with various obstacles, such as inadequate finance, inadequate facilities and manpower, a deficiency of focus on preventative health, and an uneven allocation of resources.

For underserved communities, the SSP project has improved access to healthcare services and lessened the burden of medical costs.

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