

## Public Vs Private Healthcare Disparities In South Asia: A Comprehensive Analysis

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### Abstract

**Background:** South Asia's healthcare systems—particularly in India, Pakistan, and Bangladesh—show significant disparities between public and private sectors in terms of access, quality, and affordability. With high disease burdens and low health spending, these inequities hinder equitable healthcare delivery, especially for rural and low-income populations.

**Materials and Methods:** This six-month study used a mixed-methods design, combining quantitative analysis of national health surveys (2017–2021) and global databases (WHO, World Bank) with qualitative data from case studies of twelve healthcare facilities and thirty semi-structured interviews with health workers. The data were analyzed using SPSS for statistical trends and NVivo for thematic coding.

**Results:** The findings revealed that rural populations rely 40–60% more on public services, while the wealthiest are 3.5 times more likely to use private care. Private hospitals had superior infrastructure but showed high rates of overtreatment, while public facilities outperformed in areas like TB treatment and vaccinations. Private care costs were 3.2–4.2 times higher, leading to catastrophic health expenditures for up to 18% of users.

**Conclusion:** The study concludes that healthcare disparities in South Asia stem from chronic underinvestment in the public sector, weak regulation of private providers, and uneven geographic distribution of services. A three-pronged strategy—strengthening public investment, enforcing private sector accountability, and expanding hybrid models—is essential, supported by a 15-indicator system to monitor access, quality, and financial protection.

**Keywords:** *Healthcare disparities, Public vs private health, South Asia, Access and affordability, Health system reform*

## **1. Definition of the Project**

The project has been conceived in response to the imperative to address growing health inequalities in healthcare delivery in South Asia, a region that is home to one-quarter of the world's population. A cross-country comparison of India, Pakistan, and Bangladesh's public and private health sectors is of concern to our research, as these three nations share a combined agenda and desire that constitutes the region's varied health agendas. Essentially, the project aims to investigate how structural variation across healthcare sectors manifests in quantifiable differences in health outcomes among various population groups.

The study focuses on three principal axes of operation for the health system. First, accessibility examines access to care, considering both geographical and socioeconomic obstacles to access. Second, quality measurement compares clinical outcomes, patient satisfaction, and care volumes across sectors. Third, affordability analysis monitors financial protection interventions as well as catastrophic health expenditure. The axes are scaled in relation to the prevailing policy regimes in each country, with particular emphasis on implementation gaps and regulatory bottlenecks. The contribution of this study lies in its potential to influence health sector reform across South Asia, where healthcare spending accounts for significantly less than global averages, despite high disease burdens. The COVID-19 pandemic highlighted the dire vulnerabilities in the region's health systems, making the study particularly timely. The project's mixed-methods approach combines rigorous statistical analysis with in-depth qualitative insight, providing both macro-level trends and rich insights into systemic problems.

## **2. Overview of Final Project**

The final capstone is a six-month rigorous study that converges a series of complementary methods. Quantitative analysis was the foundation of the research, employing the latest available national health survey information for all focus countries. A survey conducted between 2019 and 2021 by the Indian Medical Family Health provided significant indicators of trends in healthcare consumption. The Pakistan Demographic and Health Survey, as well as the Bangladesh Demographic and Health Survey, in the same year (2017-2018) yielded comparable estimates for cross-country comparison. These were complemented with economic information from World

Bank health expenditure databases and WHO Global Health Observatory reports to support the assessment of spending patterns and financing mechanisms.

Qualitative research components added richness and context to statistical findings. In-depth case studies were conducted in twelve health organizations that were selected to represent the variation in service delivery models within each country. They included tertiary public hospitals, rural primary health clinics, corporate private hospitals, and charity clinics. Thirty health workers were interviewed using semi-structured interviews, which revealed frontline views on system problems and potential solutions. Two expert roundtable workshops brought policymakers, researchers, and practitioners together to test conclusions and refine recommendations.

The research process produced multiple critical outputs intended for multiple stakeholder groups. A comparative analysis report synthesizes in-depth results by thematic topic and country. Three policy briefs distilled these results into actionable policy implications tailored to each country's context. A presentation-capable slide deck enables knowledge sharing to multiple audiences, and an implementation framework provides actionable tools for tracking progress toward closing healthcare gaps.

### **3. New Research Summary**

Deep disparities in healthcare access were uncovered by the study, which aligns closely with geographic and socioeconomic status. Rural populations in all three countries showed significantly higher reliance on public facilities, having usage rates 40-60% higher than in urban centers, according to the latest national survey reports. The rural-urban disparity is evident even after accounting for population density, reflecting underlying service level imbalances. Wealth was a similarly overriding determinant of access to health care, with the most affluent quintile being 3.5 times more likely to access private providers than the poorest, even in rural settings. The geographical distribution of health facilities revealed appalling clusters of private providers in city areas, with 78% located in districts with state capitals, and peripheral zones disproportionately dependent on frequently under-resourced public providers.

Comparisons of quality across health sectors determined multi-dimensional patterns that cannot be easily described. Private hospitals scored better in infrastructure ratings, with a mean of 4.2 out of 5 as compared to 2.8 for public hospitals in normalized ratings. But these apparent advantages were tempered by concerning trends of over-treatment, most significantly in India

and Pakistan, where proportions of Caesarean sections in private hospitals were 120% and 85% higher than WHO recommendations, respectively. Public facilities demonstrated better performance where national schemes were better organized, with 75% treatment completion for TB, compared to 62% in private facilities, and 89% for vaccination coverage, compared to 82% in the private sector. Patient satisfaction surveys paradoxically showed higher rates for public facilities among low-income populations, despite objectively inferior facilities, suggesting the impact of affordability and cultural aspects on service perception.

Barriers to financial access emerged as arguably the most serious inequality. Out-of-pocket expenditure accounted for a daunting 62% of total health spending in the region, according to WHO estimates. The disparity in cost between sectors was staggering, with the cost of private hospital care being 4.2 times higher than public in India, 3.8 times higher in Pakistan, and 3.2 times higher in Bangladesh. These cost differences directly translated to financial collapse, with 18% of families that used private care experiencing catastrophic health expenditure compared to 7% for the public scheme. The research highlights particularly vulnerable groups like rural women, informal sector employees, and the elderly with no family care, who are left with a choice of financial collapse or forgoing care.

#### **4. Project Implementation Summary**

The research was underpinned by a carefully planned implementation schedule across four well-established phases. The initial literature review phase involved systematic identification and analysis of 120 potential sources from academic libraries, government reports, and organizational publications. This was reduced to 45 critical sources through stringent selection criteria to inform the creation of a conceptual framework in alignment with the WHO's building blocks model of health systems. This initial work ensured that the study remained grounded in established public health theory as it addressed regionally unique knowledge gaps.

Data collection attempts employed multiple complementary methods to ensure comprehensive coverage. Datasets of national health surveys were obtained from a nation's ministry of health and bureau of statistics through official channels and underwent careful normalization to enable cross-country comparisons. Facility assessments were conducted at twelve healthcare sites, integrating structured observation procedures with document reviews of operational logs and quality assurance reports. Semi-structured interviews were conducted among healthcare workers

in local languages, supplemented by trained interpreters as necessary, to facilitate the careful recovery of nuanced perspectives. Interviews possessed a standardized protocol but allowed for flexibility to follow up on emergent themes unique to each environment.

The analysis phase integrated quantitative and qualitative strategies to produce robust, multi-dimensional results. Statistical analysis was conducted using SPSS software to examine utilization patterns, expenditure trends, and outcome differences while adjusting for confounding factors. Qualitative data from case studies and interviews were coded and explored with the use of NVivo software, with a particular emphasis on defining recurring themes and outlier cases.

Two validation workshops brought together authorities from the university sector, government, and civil society to review early findings and consolidate interpretation.

Final synthesis and reporting focused on offering high-end research findings in clear, actionable form. The policy recommendation matrix was developed through successive iterations guided by all members of the research team and selected stakeholders. Visualization tools were specially designed to report great disparities without oversimplifying complex realities.

## **5. Project Analysis, Evaluation, and Recommendations**

The research identified three primary explanations for healthcare inequities that require targeted policy interventions. The most significant challenge remained being structural underinvestment in public health facilities, with regional average spending remaining at a paltry 1.4% of GDP compared to the minimum WHO threshold of 5%. This chronic underfunding manifests itself through crumbling infrastructure, stockouts of high-priority medicines, and a demoralized staff that dilutes public system output. Loopholes in the regulation of the private sector present similar challenges, allowing for considerable leeway in service quality and facilitating predatory pricing that renders necessary care inaccessible to the majority. Disparities in human resources exacerbate these challenges, with four times the density of doctors in urban areas compared to rural areas, forcing already vulnerable groups to rely on under-equipped public facilities.

The answer is a three-pronged strategy to health system reform tailored to regional particularities. Strengthening the public system forms the imperative basis, requiring immediate health budgetary raises to at least 3% of GDP alongside systemic reforms. These include introducing mandatory rural service commitments for medical graduates to reduce geographic maldistribution and establishing provincial drug purchasing pools to exploit economies of scale

in the supply of essential medicines. Private sector regulation must be enhanced in parallel through the creation of national accreditation systems for all providers, the introduction of price ceilings for essential services, and mandatory disclosure of quality indicators to enable informed patient choice.

Hybrid arrangements offer promising ways to bridge existing gaps while building more integrated health initiatives. Bangladesh's public-private partnership models in NGO clinics, for example, may be replicated and scaled up regionally. Arrangements for cross-subsidization would enable a proportion of private sector profit to be invested in the development infrastructure of the public sector. Shared health information systems in both sectors would enhance coordination and continuity of care, while enabling better data for evidence-based policy-making.

To guide ongoing reform, the project developed a comprehensive monitoring system of fifteen key indicators in the areas of access, quality, and financial protection. These encompass measurement of public-private utilization ratios by income quintile to monitor equity improvements, tracking trends in out-of-pocket spending to assess financial protection, calculation of quality concordance scores between sectors, and analysis of geographic distribution measures to foster balanced expansion of services. The model incorporates both quantitative goals and qualitative metrics to capture the multidimensionality of healthcare system performance.

## **6. Materials Delivered**

The capstone project has produced five significant deliverables designed to maximize the utility of research across different audience types. The fifty-page, comprehensive comparative analysis report, complete with data visualizations, is structured to facilitate sequential reading and focused reference. It includes a summary for those who read and have limited time, as well as technical appendices that document methodologies and provide supplementary analyses.

A professionally created thirty-five-slide PowerPoint presentation supports knowledge transfer to stakeholder groups. The presentation slide deck includes notes and is designed to meet the needs of both technical and non-technical audiences, with modular flexibility for adaptation to different presentation contexts. The implementation toolkit provides practical, step-by-step guidance for

establishing disparity monitoring systems, including indicator tracking templates and adaptation recommendations for different organizational settings.

The annotated bibliography provides researchers with a customized list of forty-five core sources, each accompanied by an analytical summary of its contribution to the understanding of South Asian healthcare systems. Themed and organized by method, this resource is helpful in orienting researchers to the field while demonstrating the research's grounding in extant literature. All sources are styled to APA conventions and provide complete citation information for convenient attribution and further reading.

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