

# An Overview of the Regional Pattern of Health and Education Service Consumption Deprivation in India

Dr.Eritriya Roy

<sup>1</sup>(Assistant Professor,Economics,Social Science Department, Hidayatullah National Law,University,Raipur,Chhattisgarh,India)

---

## Abstract:

The low body mass, female literacy rate, poverty all contribute to health deprivation, while education deprivation highlights the insights of school dropouts and non-enrollment.

Background: India's economy has grown more than 20 years ago, but the country has underperformed in terms of the human development and health indices. The Health and Education outcome indexes remain excessively high, especially when compared to other South and East Asian countries with similar income levels and economic growth rates.

There is still a great deal of educational and health disparity within communities and between areas. The research investigates the spatial distribution of service deprivation in healthcare and education by developing a comprehensive deprivation scale and evaluating its relationships among the Indian states.

**Key Word:** Intrathecal; Bupivacaine; Buprenorphine; Nalbuphine; Postoperative analgesia.

---

Date of Submission: 10-01-2024

Date of Acceptance: 20-01-2024

---

## I. Introduction

Diabetes is now commonly recognized as a coronary heart disease risk equivalent<sup>1,2,3,4</sup>. This is mainly attributed to the high rates of dyslipidemia among diabetic patients which is believed to be one of the major factors accounting for the high percentage of deaths among diabetics due to cardiovascular disease (CVD)<sup>5</sup>. Numerous epidemiological studies and randomized controlled trials have documented the association between elevated LDL-C levels with increased CVD risk in both diabetic and non diabetic populations.<sup>6,7</sup> Thus reducing LDL-C levels is the primary goal of therapy for diabetic dyslipidemia.<sup>5,8</sup> Statins are considered the first pharmacological line of treatment of dyslipidemia in diabetic patients<sup>9</sup>. Lowering of LDL-C levels is thought to be the main beneficial effect of statin treatment. In India currently no guidelines available for treating diabetic dyslipidemia and no previous study has documented the efficacy. The current study aims to build growing awareness of atherosclerosis specific care of diabetes patient by examining efficacy of two most commonly prescribed statins in India. (10)

## II. Objectives of the study

The Primary objectives behind the study are:

- i. To examine the size and kind of service consumption disparities amongst Indian states, as well as their origins and consequences, in order to identify the fundamental factors that contribute to them.
- ii. To examine the Indian policy framework pertaining to the distribution of health and educational services and confirm that it is effective in meeting the requirements of the various Indian states.
- iii. To identify the distinct and difficult circumstances that various Indian states face while trying to obtain healthcare and education, and to investigate the impact of these obstacles on their progress.
- iv. To identify methods for preserving consistency and minimizing differences in how states use health and education services, with an emphasis on community-based approaches, social mobilization, and the participation of relevant stakeholders.

## III. Research Method

### Selection of Variables

It is important to create a deprivation index using the fundamental methodology used by UNDP in order to compare the differences in service consumption throughout the nation's regions. The deprivation index for the study is determined by taking the average of these two factors into account:

1. Deprivation from Health Services
2. Deprivation from access to knowledge

A healthy life is determined by factors including infant mortality rate (IMR), number of primary health centers (PHC), and life expectancy at birth. An area's population would live a long and healthy life if its birth rate was higher, its IMR was lower, and its PHC content was higher. The quantity of PHCs reflects the basic medical services that people can get.

### **Deprivation Index: Synoptic View of Variables Chosen**

#### **Deprivation from Healthy Life**

1. Life expectancy at birth
2. PHCs availability
3. Infant mortality rate

#### **Deprivation from knowledge**

4. Illiteracy rate
5. Gross enrollment ratio in class I-VIII (age 6-14 years)

### **Data Source**

Over the past 40 years, studies evaluating deprivation have looked at health, welfare, education, housing, and development (Durán and Condor 2019; Fu et al 2015; Ward et al 2019). Deprivation in any location or community can be assessed using a deprivation index, a geographic representation of an individual's standard of life (Pampalon et al. 2009). Researchers have proposed multiple sets of variables since the 1970s, using varying standards, weights ascribed to distinct indicators, and selected cut-off positions.

Diverse social, economic, or political shocks have the shown ability to deprive one region of a range of qualities seen in distinct sections of an economy. It is highly doubtful that any one set of measurements will be sufficient to represent the overall level of deprivation. Consequently, there is a causal relationship and correlation between many indicators of poverty or ill health.

The data for these indicators were compiled from three of the most reliable state-level data sources in India: the Socio-Economic Caste Census (SECC) 2011, the Multiple Indicator Survey 2021 of the National Sample Survey Office (NSSO), and the Census of India 2011. During the study period, an attempt was made to make use of the most recent authorized state-level data, since it contains the most recent information about the factors that add up to the composite index of deprivation.

### **Review of Literature**

Excellent work by Sen (1992) encouraged the use of an index known as the Human Development Index (HDI). It is a tool that takes into account per capita income, life expectancy and literacy to assess a nation and country as a whole. The Human Poverty Index (HPI) expands on the Human Development Index (HDI) by focusing on the weaker sections of society and looks at deprivation in three key areas: life expectancy, knowledge and acceptable quality of life.

In his research, Sarkar (2013) analyzed the variation in patterns of deprivation and suggested that a common first step in illustrating social or economic inequality is to consider variation between geographic areas or social groups. The sensitivity of the development process can be explained spatially by examining the patterns of lack of areas.

Mishra (2019) in his work analyzed that, when depicting social or economic inequality, it is customary to start by examining the differences in deficit across different geographical regions or socioeconomic groupings. It is possible to geographically describe the susceptibility of the development process by looking at the patterns of insufficiency in the subregions.

Basu and Das (2020) defined the concept of deprivation in their study. They analyze the lack in two aspects: The first includes qualitative research. According to Basu and Das, the second is more practical and includes components related to social and economic conditions. Consider differences in deficits between geographic regions or socio-cultural groups as a general starting point for highlighting social or economic inequality. The vulnerability of the development process can be described geographically by looking at regional deficit patterns.

#### IV. Constitutional Mechanisms Guaranteeing Right To Health And Education

The right to health and education are considered as intrinsic human rights that are inherent to a human right from the birth and are provide under *Article 21*<sup>1</sup> of the Indian Constitution. These rights are protected by several legislation and regulatory measures in India and are inscribed in the Indian Constitution.

These rights are basic and fundamental for humanitarian welfare and dignity of an individual.

The fundamental rights of life and liberty in addition to personal freedom are guaranteed under Article 21 of the Indian Constitution. The Indian judiciary has broadened the scope and nature of this right. Its' definition through evolution and judicial activism has come up to include the right to have a dignified life, which apparently includes having access to food, clean water, and appropriate nourishment.

As per *Article 47*<sup>2</sup> of the Constitution of India, the government has a liability to elevate and improve the standard of living, nutritional level, and general public health and welfare. Although DPSPs are not enforceable in court, they provide the government direction when formulating policy.

Though the Constitution of India protects the right to health and education as a fundamental right, still there is huge variation in the consumption of services related to these rights across states in India which is analyzed later in this paper.

#### V. STATISTICAL ANALYSIS OF DEPRIVATION INDEX

Deprivation index is the relative measure of multiple deprivation expressed at small area level and covering an entire country.

**Table-1: Deprivation Index (For all States)**

States	Deprivation Index of Long & Healthy Life	Deprivation Index of Knowledge	Deprivation of Index of A Decent Standard of living	Deprivation Index of Basic Amenities	Overall Deprivation Index	Final Ranking
Andhra Pradesh	0.181	0.383	0.568	0.697	0.457	13
Arunachal Pradesh	0.613	0.345	0.333	0.606	0.474	11
Assam	0.502	0.507	0.517	0.628	0.538	8
Bihar	0.373	0.608	0.621	0.666	0.567	6
Chhattisgarh	0.454	0.693	0.719	0.686	0.538	2
Gujarat	0.24	0.436	0.407	0.493	0.394	20
Haryana	0.174	0.218	0.212	0.325	0.232	25
Himachal Pradesh	0.134	0.156	0.155	0.339	0.196	27
Jammu & Kashmir	0.192	0.268	0.253	0.356	0.267	23
Jharkhand	0.427	0.904	0.545	0.597	0.618	4
Karnataka	0.473	0.314	0.324	0.514	0.406	18
Kerala	0.193	0.268	0.118	0.45	0.257	24
Madhya Pradesh	0.401	0.71	0.693	0.678	0.62	3
Maharashtra	0.334	0.329	0.566	0.428	0.274	17
Manipur	0.345	0.339	0.563	0.396	0.376	19
Meghalaya	0.447	0.543	0.712	0.55	0.315	7
Mizoram	0.385	0.356	0.668	0.453	0.262	15
Nagaland	0.385	0.404	0.594	0.473	0.380	12
Orissa	0.441	0.816	0.686	0.648	0.390	1
Punjab	0.185	0.151	0.327	0.217	0.266	26
Rajasthan	0.273	0.643	0.557	0.516	0.361	9
Sikkim	0.441	0.153	0.472	0.345	0.261	22
Tamil Nadu	0.365	0.487	0.498	0.456	0.253	14
Tripura	0.378	0.555	0.679	0.511	0.376	10
Uttar Pradesh	0.178	0.648	0.526	0.448	0.443	16
Uttarakhand	0.246	0.353	0.448	0.373	0.322	21
West Bengal	0.487	0.685	0.671	0.581	0.406	5

Source: Authors' Calculations (as per the formula mentioned in selection of variables under the Research Methodology)

<sup>1</sup> INDIAN CONSTI. art.21.

<sup>2</sup> INDIAN CONSTI. art.47.

The National Sample Survey Organization (NSSO)<sup>3</sup> provided the data for 2020–21 on basic amenities, and each indicator's contribution to the Deprivation Index was equalized using an average-weighted method.

Regional health and educational disparities are influenced by both natural phenomena and recent innovations that make them even more pronounced. However, when the discrepancy is substantial and extensive, it can cause serious societal issues.

All of the states in India have been divided into four distinct deprivation categories: extremely high, high, moderate, and less deprived (Table 2) in order to facilitate better analysis.

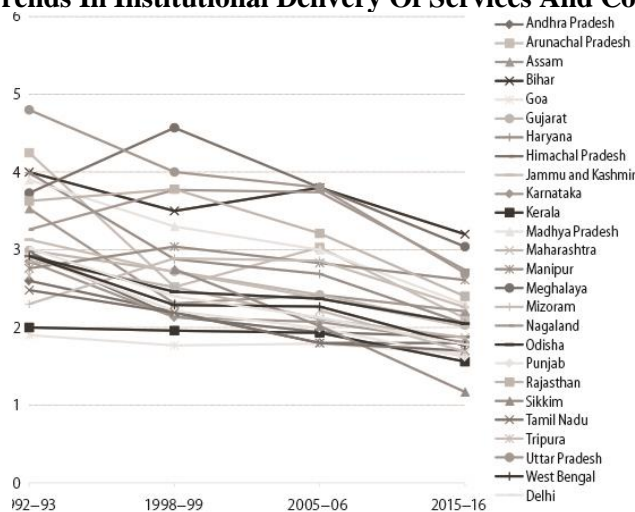
**Table No.2**

Categories	Range	No.	States
Very Highly Deprived	>0.530	8	Odisha, Chhattisgarh, Madhya Pradesh, West Bengal, Jharkhand, Bihar, Assam, Meghalaya
Highly Deprived	0.410-0.530	9	Rajasthan, Tripura, Arunachal Pradesh, Tamil Nadu, Mizoram, Uttar Pradesh, Maharashtra
Moderately Deprived	0.290-0.410	5	Karnataka, Manipur, Gujrat, Uttarakhand, Sikkim
Less Deprived	<0.290	6	Jammu and Kashmir, Punjab, Goa, Himachal Pradesh, Goa

Source: Authors' Calculations (as per the formula mentioned in selection of variables under the Research Methodology).

According to the Deprivation Index, Odisha, Chhattisgarh, Madhya Pradesh (MP), Jharkhand, West Bengal, Bihar, Meghalaya, Assam, Rajasthan, and Tripura continue to have very high levels of deprivation. The nation's most impoverished state is Odisha. However, among the rural occupational categories, Odisha, Chhattisgarh, and MP have seen quicker expansion in rural healthcare facilities and higher rise in monthly per capita spending (MPCE) throughout the post-reform era.<sup>4</sup> Similar to Odisha, Chhattisgarh is badly deficient in a lot of indices. MP, another state in central India, too presents a picture of severe deficit.<sup>5</sup>

## VI. Trends In Institutional Delivery Of Services And Consumption



Source: NSSO

Despite the significant decline in under-five mortality rates (U5MR), state-level patterns indicate unequal advancement across the time period. The majority of states have fallen short of meeting the U5MR objective for the Millennium Development Goals (MDGs), along with the overall average for India. Only Goa

<sup>3</sup> Ministry of Statistics and Programme Implementation, National Sample Survey Office (NSSO), Government of India.

<sup>4</sup> Sahoo, Priyabrata, Dibakar Sahoo and Subhash Chandra (2020): "Changes in Rural Poverty among Occupation Groups in Odisha: An Analysis of Post-Reform Period," *Journal of Land and Rural Studies*, Vol 8, No 2, pp 150–65.

<sup>5</sup> Sahoo, Priyabrata and Asis Kumar Senapati (2022): "Poverty Alleviation and Pro-poor Growth in Odisha: A Disaggregate Analysis," *Economic & Political Weekly*, Vol 57, No 46, pp 45–52.

and Kerala had U5MR levels below the SDG target of 12 fatalities per 1,000 live births in 2015–16. In Kerala and Goa, the U5MR had the largest fall (more than 200%). In specifically, from 1992–1993 to 2015–16, Kerala's U5MR decreased by 357%. With this speed of reduction, some states risk missing the SDG target of 12 deaths per 1,000 live births. The current annual drop rate across the states ranges from 4% to 0.9% U5MR.

Not the average increase in demographic and health indices during the past ten years in India, but the geographical variability of such development, is the main cause for concern. Because of the varying rates of development throughout India's states, there exist regional inequities. The inequities might theoretically be eliminated over time if the government chooses an appropriate course of action and keeps a close eye on its implementation. The notion of convergence draws attention to the equity of the provided measures. Equity among states and districts within states has long been a focus for Indian policy, across a range of measures.

The goal of the current study was to assess the regional heterogeneity of multidimensional deprivation while accounting for factors such as housing, access to necessities, social factors, and material elements. As can be seen, there is still a significant discrepancy between the states in several sectors.

The most deprived districts in India are located in the central and north-eastern parts of the country, while the least deprived districts are located in the southern (Tamil Nadu and Kerala), northern (J&K, Punjab, and Himachal Pradesh), and western (Goa and Gujarat) parts of the country. This is an interesting fact about the regional deprivation pattern in India. Because of this, the spatial depth of regional disparity in the pattern of multidimensional impoverishment forces a re-evaluation of current development planning schemes, which eventually introduces certain unique issues and poses difficulties for decision-makers.

For the past few decades, research on deprivation has centred on the "BIMARU" states (Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh). The study demonstrates that in addition to these four states, the general level of deprivation is just as severe in Odisha, Chhattisgarh, Jharkhand, West Bengal, Meghalaya, and Assam. Special efforts are needed in these states to minimize the intensity of deprivation on multiple dimensions.

## **VII. CONCLUDING ANALYSIS AND SUGGESTIONS**

In a nutshell the Indian Constitution's Article 21 guarantees the fundamental and inherent human rights of health and education, which are essential to a person's dignity and wellness. India is committed to protecting the fundamental rights of life and liberty, including individual liberty, because these liberties are important to humanitarian wellbeing. With the passage of time and judicial activity, the Indian judiciary has broadened the definition of Article 21 to include not just the right to life but also the right to a dignified existence, which includes the provision of basic requirements like food, clean water, and adequate nutrition. The right to health and education are protected by the constitution, yet there is still significant variation in the standard and accessibility of these services amongst Indian states. This regional disparity is concerning because it highlights the significant regional differences regarding growth rather than merely the median increase in demographic and health indicators over the previous ten years. The disparities in development across Indian states are the cause of regional inequality. If proper action is taken by the authorities and its execution is continuously monitored, these disparities can eventually be corrected. Convergence constitutes a key idea in resolving these differences. It emphasizes the necessity of maintaining justice between states as well as between districts, which has been for years a priority of Indian policy by a number of measures. The purpose of this research was to evaluate the multifaceted deprivation in different places by accounting for elements including housing, material characteristics, social determinants, as well as access to essentials. The results show significant regional differences, with the poorest districts located in the southern, northern, and western regions of India and the most impoverished districts clustered in central and northeastern regions. This spatial heterogeneity in trends in impoverishment emphasises the necessity of reassessing current planning for development plans. Planners have particular difficulties since resolving regional inequalities calls for customised approaches that take into account the distinct requirements of various regions. While deprivation assessments have traditionally focused on the "BIMARU" states, the research indicates that extreme degrees of deprivation along different facets are also experienced by numerous other states, including Odisha, Chhattisgarh, Jharkhand, West Bengal, Meghalaya, and Assam.

The constitution of India bears witness to the country's affiliation with the right to health and education. Nevertheless, the uneven distribution of these basic rights across regions calls for a more concentrated and region-specific look at towards growth and policymaking. By tackling these disparities, India can make substantial progress towards guaranteeing the overall welfare and respect of all its citizens, as required by the constitution. Spatially connective policies, which attempt to link distant regions to markets, easing the flow of people, commodities, and services and so fostering interregional convergence, could prove a beneficial addition to these initiatives. For instance, investments in information and communication networks and transportation infrastructure, as well as policies aimed at promoting migration by lowering housing prices in high-migration areas and improving the geographic mobility of social benefits. Furthermore, policies that are place-based and spatially oriented can play an important part in generating regional employment, especially in places where

there are major barriers regarding mobility, such as people moving to more active areas or businesses moving to lower-wage regions. Public investment initiatives with a regional focus, the relocation of government offices and research facilities, and site-specific tax and regulatory breaks are a few examples.

### **References**

- [1]. Basu,Das (2021), Formulation Of Deprivation Index For Identification Of Regional Pattern Of Deprivation In Rural India, Socio Economic Planning Sciences, Volume 74.
- [2]. Bhatta (1998), Educational Deprivation In India: A Survey Of Field Investigations, Economic And Political Weekly, Vol 33, No.8 Pg 1858-1869.
- [3]. Census Of India 2011
- [4]. Majumdar,Roy Understanding Regional Disparities In Healthcare Quality And Accessibility In West Bengal, India: A Multivariate Analysis (2023),Regional Science Policy & Practice ,Volume 15, Issue 5,Pg 1086-Pg1114.
- [5]. Dwivedi (2020), Does Affordability Matter? Examining The Trends And Patterns In Health Care Expenditure In India, Sage Journal, Health Services Management Research, Volume 33, Issue 4
- [6]. Pal,Ghosh (2007), Inequality In India: A Survey Of Recent Trends, DESA Working Paper No. 45 Pg 1-45.
- [7]. Janssen (2018), Determinants Of Takeaway And Fast Food Consumption: A Narrative Review, Nutrition Research Reviews, Cambridge University Press, Volume 31, Issue 1, Pp16-34.