

# **GEOGRAPHICAL ASSESSMENT OF RURAL HEALTH STATUS WITH SPECIAL REFERENCE TO BARDHAMAN DISTRICT, WEST BENGAL**

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## **Abstract:**

The government offers a wide range of healthcare facilities. However, there is still a health disparity in Purba Bardhaman district. Because of its notational resource characteristic, district residents play a vital role in the provision of health care services. All of the people will use this health care in an effective manner. The government should make sure that this district is free from discrimination based on wealth or poverty, or between rural and urban areas, in order for individuals to receive health care. In this article; geographical assessment of rural health status with special reference to Bardhaman district, West Bengal has been discussed.

**Keywords:** Assessment, Rural, Health.

## **INTRODUCTION:**

Planning authorities will improve the workforce by encouraging and sustaining excellent human health if they feel that spending money on family welfare and health care is the most productive investment. More economic development is produced by this workforce in agriculture and other sectors. [1-3]

It is astounding that there is now a lot of interest in the analysis of health service inequity. This makes it easy to grasp why this study is significant. There are extremely few studies that explain

the health sector in Purba Bardhaman. Since health is regarded as the economy's workforce, it is important to have comprehensive knowledge of health-related issues, since this will help the district develop various health programs. [4] In order to understand the reasons for health disparities among district residents, policymakers, academics, research experts, and educators can all greatly benefit from this study. [5] It implements some policies that are related to regional views on health and medical services. [6] These actions address issues that result from and support district growth. It sheds insight on the health sector's issues and challenges, which may be influenced by geography as well as health indicators, infrastructure, and spending. [7, 8] The main aim of the research was to geographical assessment of rural health status with special reference to Bardhaman district, West Bengal.

## **RESEARCH METHODOLOGY:**

Study Area: Purba Bardhaman district. (Formerly Bardhaman district).

To complete any kinds of research work, a large amount of information i.e. data is required. Hence both primary as well as secondary data was used.

### Primary Data:

Through the direct field survey primary data are collected, which has been used in this research. These are data on educational qualification through household survey, individual and family income through household survey, data on health status of Individual and family through household survey, data on various occupational structure through household survey, various data on food habits and drinking water sources are collected from field survey, health hygiene like sanitation, solid wastage and electricity data are collected through household survey.

### Secondary Data:

The secondary data have been collected from various issues of Statistical Abstract of India, Statistical Abstract of West Bengal, Health Information of India / National Health Profiles; Report on Currency and Finance, Economic Survey and Plan Documents etc. The secondary data are

collected from various departments and authorities, such as district Census Hand book of Bardhaman, geological Survey of India, district Statistical Handbook, National Atlas & Thematic Mapping Organization (NATMO), Sample Registration System (SRS Bulletin), Rural Health Statistics, Health Portal of West Bengal, Official Website of the Purba Bardhaman District etc.

#### Sampling Design:

The sampling design for the rural areas consists of following three stages:

- Selections of Sample C.D. Blocks
- Selection of Sample Villages
- Selection of Sample Households

#### Method:

- Pre-field Work
- Field Work
- Post-field Work

### **GEOGRAPHICAL ASSESSMENT, RESULTS AND DISCUSSION:**

Throughout the entire project, certain significant findings were found with the use of statistical techniques. They are listed below:

- The research area is characterized by a large expanse of plain land covered with recently alluvial, fertile soil, and the warm, humid monsoon environment has an impact on regional activity.
- The research area's population prioritizes agriculture. Compared to the other blocks in the research region, Purbasthali-I block uses deep tube well irrigation more frequently in order to produce more crops.

- When compared to other blocks, Raina II Block has the highest rates of both male and female education, while Ketugram II Block has the lowest rates.
- Population Density: Ausgram-II Block has the lowest population density, while Purbasthali-I block has the highest.
- The Ausgram-II Block holds the top spot with the highest value of above 295 according to the child-women ratio.
- The largest dependency ratio is found in the Ausgram-I Block, whereas the lowest dependency ratio is found in Katwa.
- The blocks with the highest nutritional densities are Purbasthali-II, Kalna-I, Memari-I, and Jamalpur. The remaining 10 blocks in the district's western section have the lowest densities.
- It is evident from the health center population ratio that the blocks with the lowest ratios are Galsi-II, Bardhaman-I, Manteswar, Mangalkote, Ketugram-I, and Purbasthali-II.
- The Bardhaman-I, Khandaghosh, Manteswar, Purbasthali-II, and Kalna-II blocks have the poorest conditions when it comes to the doctor-population ratio.
- From the perspective of hospital bed population, Bardhaman-I and Khandaghosh Block have the lowest ranks.
- From the perspective of NGO/private bodies and family welfare centers, Bardhaman-I and Purbasthali-II have the lowest rating.
- From the perspective of the sub-centers, Purbasthali I and II are ranked lowest.

- Additionally, Ausgram-II, Galsi-II, Khandaghosh, and Manteswar all have extremely poor development indices when viewed through the lens of the Health Index.

### **Identified problem in the Study Area:**

It is accurate to say that one of every person's fundamental rights is to enjoy a high standard of health. But achieving that desire in the face of so many obstacles is a difficult undertaking. However, progress will not materialize until we overcome the challenges we encounter on the path to achieving a fulfilling, admirable, and healthy existence. Undoubtedly, there will always be challenges, but they are not insurmountable. Some of the most common issues in the research domain are mentioned in this context.

### **Problems Related to Socio-Economic and Cultural Factors:**

#### **Problems associated with health literacy**

In the past, literacy was limited to the ability to sign documents and know the alphabet. However, this idea has evolved, and now it primarily refers to the capacity to talk and comprehend in addition to reading and writing, to compute some numbers, to adapt to new communication-related devices like computers, etc.

Not everything concerning so-called health is covered in our standard education. Even though we used to get up every morning, wash our bodies with clean water, brush our teeth, and then have to drink tea after lunch and dinner at night before sleeping for a long period and getting up again the next morning, everyone still made an effort to stay healthy. Although it is standard procedure, there are additional safeguards in place to keep us safe from dangerous illnesses. Thus, health literacy is necessary for everyone. Not just that, but also the medical professionals—physicians, nurses, pharmacists, and other staff members—who often give consumers advice and services.

Without the assistance of an educated person, illiterate people are incapable of taking care of themselves. Even if these people acquire some knowledge from society to get by, they find it far harder to obtain the necessities of life—such as food, clothing, and shelter—from the market than it does for educated people. People who lack literacy are less likely to be aware of healthy eating habits and quality foods, which can lead to a variety of health problems. These are a few illustrations of health literacy that are vital for individuals to know.

i) In terms of the concept of numerical skill in health literacy, this includes the ability to read thermometers, determine drug levels, blood pressure, blood sugar, and cholesterol levels.

ii) We use our health literacy reading skills on a regular basis to read drug labels, doctor prescriptions, and pamphlets and posters from various awareness campaigns.

iii) A lot of individuals need to write applications for blood from blood banks, to be admitted as patients in various hospitals, and to see different doctors. All of these require writing abilities.

iv) Discussing different diseases with different doctors, informing the doctors about how the diseases are progressing or worsening, and informing the nurse about their services are all instances of effective communication skills.

v) A lot of crucial decisions, including dialysis and surgery, need to be made.

### **Problems Concerning Health Infrastructures:**

**Absence of Health Centers:** Insufficient health centers are a typical occurrence throughout the study area. In comparison to their needs, there are remarkably few sub-health centers, primary health centers, and community health centers.

**Inadequate Infrastructure:** PHCs lack the appropriate and ideal infrastructure. A severe lack of beds, machines, and other items exists. The state of sanitation is also abhorrent. What does exist, though, is not adequately cared for and supervised.

Lack of Medicine: Although the district hospital provides the majority of the patients' medications, the primary health centers are unable to provide the impoverished patients with medication. They are frequently forced to buy the medication from the store.

Absence of Doctors: This district has a few primary health centers, but not enough of them. There aren't any permanent medical staff members at this facility. It goes without saying that patients in rural areas must visit the district hospital.

Lack of Health Workers: There aren't many health workers in remote areas. As such, they are unable to keep an eye on or tend to every patient in the region.

## **FINDINGS AND CONCLUSION:**

Through this research, an attempt has been made to identify the health state of rural areas, the infrastructure of health care, and the inequality of health status. These have been analyzed with the aid of our proposed statistical technique and the physical and socioeconomic background of the Purba Bardhaman district.

The study finds that Purba Bardhaman district's rural health status is superior to the state average after evaluating a number of indicators. This region has superior health infrastructure to the state level, and occasionally it is equal to but inferior to the federal level. Despite the fact that these criteria are not distributed equally, the district in the research region frequently experiences inequity. While many elements are addressed throughout the paper, rural health receives more attention than other aspects.

➤ Purba Bardhaman's rural areas have been chosen as the study area. With effect from April 7, 2017, it is a recently established district that was separated from the former Burdwan district.

➤ The area is roughly 5,432.69 square kilometers. Purba Bardhaman surrounded by Nadia district on the east; Hooghly district borders it on the southeast; Bankura district borders it on the south; and Paschim Bardhaman district borders it on the west. The two districts in the northern portion of the Purba Bardhaman district are Birbhum and Murshidabad. Its eastern border is



crossed by the Bhagirathi River. In the rural areas of Purba Bardhaman, there are the rivers Damodar and Darwakeswar in addition to Bhagirathi.

➤ With the exception of a few low-lying, undulating lateritic spots in the western portion, the Purba Bardhaman district is largely plain and productive. It is the plateau of Chhoto Nagpur that has been enlarged. The Bhagarathi River flows through the eastern edge of the district, and there are numerous more eastern-flowing rivers that crisscross the entire region, including the Ajoy, Damodar, Kunur, and others. These rivers are all predisposed to flooding. Thus, the district's eastern and central regions, which are more fertile than its western regions, have alluvium soil. The district is therefore sound agriculturally. The main crop grown in the Purba Bardhaman district is paddy. A strong economic base is established for the district's residents by a range of cottage industries, including bricklaying, hand looming, rice milling, and docra. Since this region experiences a warm, humid tropical monsoon, natural reproduction rates are high, even while women's literacy rates are rising daily. In addition, a sizable portion of the population is made up of Muslims, Scheduled Caste and Scheduled Tribe members, and those who belong to higher castes because they have lower incomes and educational attainment than the general population. They are less aware of cleanliness and health than the other group of people for this reason. Many government initiatives, such as Sabuj Sathi, Ruposhri, Aikosri, and Kanyasri, have proven to be effective measures for raising the rate of education, which will eventually slow down the rate of population growth in the studied area.

➤ Compared to the Purba Bardhaman district's urban area, the overall health status of the rural Purba Bardhaman area is modest. However, there are times when Rural Purba Bardhaman's health is better than that of West Bengal's rural areas as a whole. Purba Bardhaman's rural areas are in better shape than West Bengal's general rural areas when it comes to early pregnancy or marriages occurring before the age of 18, but not when it comes to early motherhood (15–19 years old). Surprisingly, family planning techniques are employed more frequently in rural than urban areas in the Purba Bardhaman district, according to observations made during the field survey. In rural Purba Bardhaman, married women between the ages of 15 and 49 utilize family planning



methods more frequently than in other rural districts of the state. In terms of weight and breastfeeding, the health status of newborns is essentially the same throughout the research area. When it comes to prenatal care, pregnant women in rural areas follow the same protocol yet fall somewhat behind their urban counterparts. Since the government already offers a variety of financial assistance, including free ambulance rides to medical facilities and cash payments for the purchase of medications and other nutrient-dense foods, institutional delivery has surpassed home delivery. The level of postpartum health care for women has consequently skyrocketed. Currently, the government's different initiatives in Purba Bardhaman's rural areas have led to the provision of all immunizations for infants, which is significantly more than the state's rural average. However, Purba Bardhaman, a rural area, has extremely inadequate conditions when it comes to child treatment. As of right now, the death rate in rural areas is higher than in metropolitan areas for both newborn and adult cases.

➤ The foundation of rural health care services is the healthcare system's infrastructure. Sub-health centers, primary health centers, and community health centers are the main providers of healthcare services in rural areas. However, there are not enough of these centers to offer health treatment to the rural residents of the Purba Bardhaman area. The study region has a severe shortage of primary health centers, community health centers, and sub-health centers, according to the IPHS (Indian Public Health Standard). Just one primary health center appears to be surplus in Ausgram-II, while one other community health center is located in the Galsi-II block. It is also noted that there are shortages in all blocks when it comes to the number of doctors needed, and the same is true when it comes to hospital beds, which are in excess in all blocks but Galsi-II and Raina-II blocks.

➤ Discrimination on the basis of caste, religion, education, occupation, and income is prevalent in the Purba Bardhaman district under study. Due to the fact that rural areas are poorer than metropolitan areas in terms of wealth and income, education, health, and infrastructure all suffer. Since the majority of government plans and projects are completed and mostly focused on urban areas, rural areas struggle with a lack of doctors, new, contemporary laboratory equipment,

medicine, and other necessities. Since the rural and urban areas are so far apart, it is difficult to find accommodations and contemporary facilities once one enters the urban region. Therefore, medical professionals prefer not to visit rural health centers. Therefore, there is an unequal distribution of health centers, physicians, nurses, and ASHA employees throughout the rural study region. Based on the data analysis, four health index zones have been identified. The first zone is called Comparatively More Developed Block, and it includes the two blocks Ausgram-I and Galsi-I. The blocks in the second zone, Developed Block, are Raina-I and II, Kalna-I and II, Ketugram-I and II, Bhatar, and Bardhaman-I. There are nine blocks under the third zone, which is called the moderately developed block. These blocks are Memari-I and II, Purbasthali-I and II, Katwa-I and II, Mangalkote, Bardhaman-II, and Jamalpur. The Less Developed Block Zone, which includes four blocks—Manteswar, Khandaghosh, Galsi-II, and Ausgram-II—is the fourth zone.

➤ The local, state, and federal governments have adopted a variety of plans, programs, and schemes for development purposes. Certain actions are also conducted in the study region with the assistance of these initiatives. Individuals and the community at large benefit as a result of the research area. Jananyini Suraksha Yojana (JSY), Swaachha Bharat Avijan, Swastha Sathi, Kanyashri, and other programs are a few among them.

➤ The primary goals of the study are to evaluate the state of rural health, identify health care disparities in the Purba Bardhaman district, and examine health infrastructure. Many health-related factors have been taken into account for measuring and evaluating the state of health; these factors were examined using a variety of statistical techniques. This region has been discovered to have health-related regional disparities. The government, non-governmental organizations, business community, and local government entities ought to implement a plan for gauging health care disparities in this area. The government ought to recognize and prioritize underdeveloped and impoverished areas such as Khandaghosh, Manteswar, Galsi-II, and Ausgram-II.

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