

## A CRITICAL STUDY ON THE EMERGING IMPORTANCE OF MEDICAL COLLEGES AND HOSPITALS IN WEST BENGAL

ANANDITA DAWN

Senior Research Fellow, Department of Geography, University of Calcutta kolkata, West Bengal India

### ABSTRACT

The Medical Colleges and Hospitals are those healthcare institutions which are mainly run by the Government of a State. In these institutions all modern healthcare facilities are available at affordable rates especially for the disadvantaged and below poverty line group of population. These hospitals hold a large catchment area serving population from remote rural areas to the slum and shanty dwellers in the urban areas. This paper is an attempt to focus on the emerging importance of medical colleges and hospitals in the medical field of West Bengal. At present there are 13 medical colleges and hospitals scattered in eight districts of the State. These healthcare institutions are flooded with referral patients from neighbouring districts, states as well as countries. One of the highlighting problems faced by these centres includes inadequate infrastructure and lack of trained human resource. The study tries to assess the reasons behind such inadequacy and the Government initiatives in solving crisis of beds, doctors and nurses in these healthcare institutions.

**KEYWORDS:** Bed Occupancy Rate, Bed Turnover Rate, Healthcare Institutions, Referral Patients, Below Poverty Line Group of Population

### INTRODUCTION

The State of West Bengal, considered as one of the 20 Major States of India by the Registrar General of India, plays a significant role whenever the socio-economic scenario of the country is discussed. The State was one of the most important territories during colonial period and played a vital role in the freedom movement of the country. West Bengal holds a place of paramount importance in providing modern and advanced healthcare facilities through public and private healthcare centres and institutions to millions of people who not only visit the State from surrounding States but also from neighbouring countries like Bangladesh, Bhutan, Nepal etc. The Government run healthcare institutions in the State include Medical Colleges and Hospitals (MCH), District Hospitals, Rural Hospitals, Sub-Divisional and State General Hospitals, Block Primary Health Centres, Sub-centres, Dispensaries etc while the private healthcare institutions include the nursing homes, clinics etc. The State has at present 13 Medical Colleges and Hospitals (MCH) scattered in a number of districts with five of them situated in the city of Kolkata. These healthcare institutions serve a vast population suffering from infectious, chronic and fatal diseases. The MCH have performed appreciably in the field of maternal and child health as well and has been outstanding in improving the institutionalization of deliveries.

**OBJECTIVES OF STUDY:** The study has been initiated to fulfil the following objectives

- To trace the emergence of medical colleges and hospitals in different districts of the State
- To highlight the importance of these Government run healthcare institutions in the scenario of health within the

State

- To study on the impact of these institutions on population residing in remote rural areas
- To focus on the role of MCH in providing healthcare amenities especially to below poverty line group of population on one hand and slum and shanty dwellers on the other in the city of Kolkata

## **AREA UNDER STUDY**

The State of West Bengal is comprised of 19 districts though one more district, Alipurduar has been added within the State's territorial jurisdiction in June, 2014. These districts are classed under three administrative divisions namely Jalpaiguri, Bardhaman and Presidency. Among the 20 districts, six districts namely Koch Bihar, Jalpaiguri, Darjiling, Alipurduar, Maldah, Uttar Dinajpur and Dakshin Dinajpur are included under Jalpaiguri administrative division while seven districts namely Bardhaman, Birbhum, Bankura, Puruliya, Hugli, Purba Medinipur and Paschim Medinipur have been incorporated under Bardhaman administrative division. Lastly, six districts like Murshidabad, Nadia, Kolkata, Haora, North 24 Parganas and South 24 Parganas are included under Presidency administrative division.

## **MATERIALS AND METHODS**

The work has been accomplished through primary and secondary data. The secondary data has been collected from State Bureau of Health Intelligence and State Family Welfare Bureau, Government of West Bengal while the primary data has been generated through extensive field investigation conducted in slums and shanties as well as non-slum households within the city of Kolkata following stratified random method of sampling. Slums scattered in 15 Boroughs of the city has been studied in detail. The non-slum communities have also been studied to depict the contrast in availing the healthcare facilities. The analysis and interpretation of the actual scenario has been presented through cartographic and statistical techniques.

## **STATEMENT OF THE PROBLEM**

The medical colleges and hospitals have always played a dominant role in the healthcare infrastructure of the country as well as that in the state of West Bengal. The evaluation of these healthcare institutions is thereby of prime importance if the healthcare scenario of the country is to be understood. In India there has been a steady rise in the number of medical colleges and hospitals with increasing flow of patients as well. The performance of these Government run medical institutions has been praiseworthy in the southern states of Kerala, Tamil Nadu and Andhra Pradesh. In case of West Bengal the number of medical colleges and hospitals has increased over time though majority of these institutions suffer from lack of healthcare infrastructure as well as skilled human resource. These hospitals are flooded with referral patients who cannot afford to carry out treatment in private healthcare institutions. A spatio-temporal fluctuation in performance of District Hospitals and Rural Hospitals could be observed in all the districts of the State barring Kolkata since these two types of medical institutions are absent in the city. The city has five medical colleges and hospitals with varying performance in the field of providing medical treatment to common mass.

## **RESULTS AND DISCUSSIONS**

Health is one of the pre-requisite conditions for attainment of balanced social infrastructure of any country. It is considered as one of the significant parameters of human development and is necessary for building up a strong human

resource base of any nation. The public healthcare facilities are provided by Government of a state. These include the medical colleges and hospitals, rural hospitals, sub-divisional hospitals, state general hospitals, block primary health care centres, sub-centres etc. Among these, the medical colleges and hospitals act like arteries facilitating circulation in healthcare. They are situated at the apex of medical institutions within the state. These are characterized by the availability of all modern age healthcare amenities serving to innumerable population from neighbouring districts, states and countries.

A close analysis of these medical colleges and hospitals within the State has revealed that there has been an abnormal increase in the number of admissions in every medical colleges and hospitals in comparison with the increase in the number of beds. There has been a wide gap observed in the percentage change in admissions to the percentage change in the number of beds during the period 2001-2012 [Fig.1]. The gap in the availability of infrastructure has been acute for the North Bengal MCH where the population from districts like Darjiling, Koch Bihar, Jalpaiguri and Uttar Dinajpur flock for treatment.

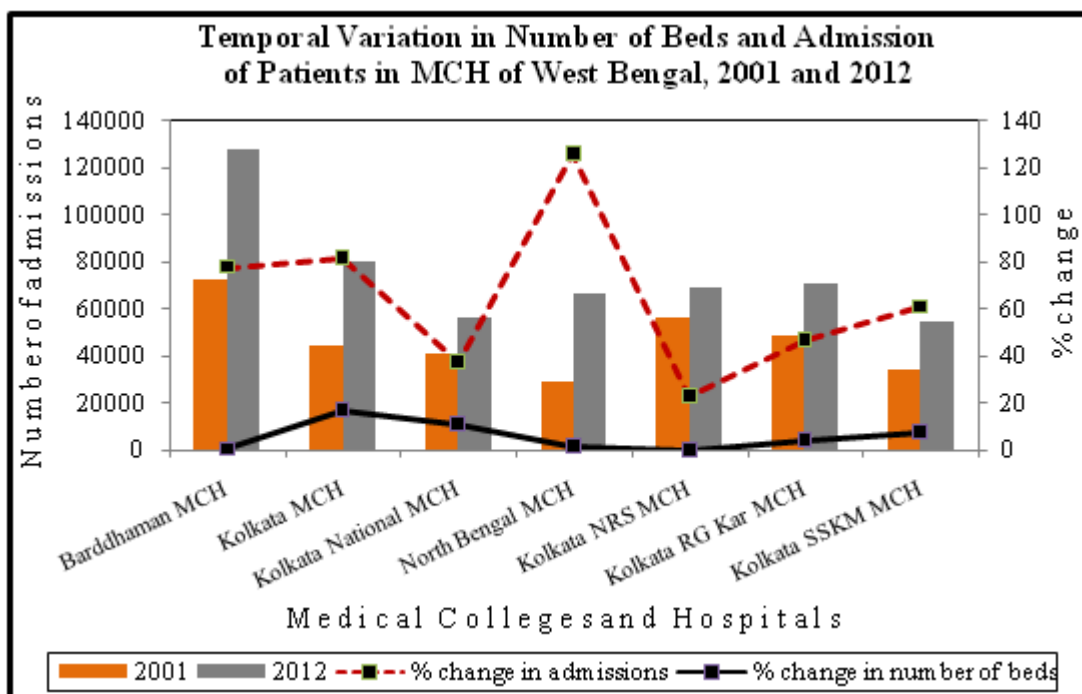
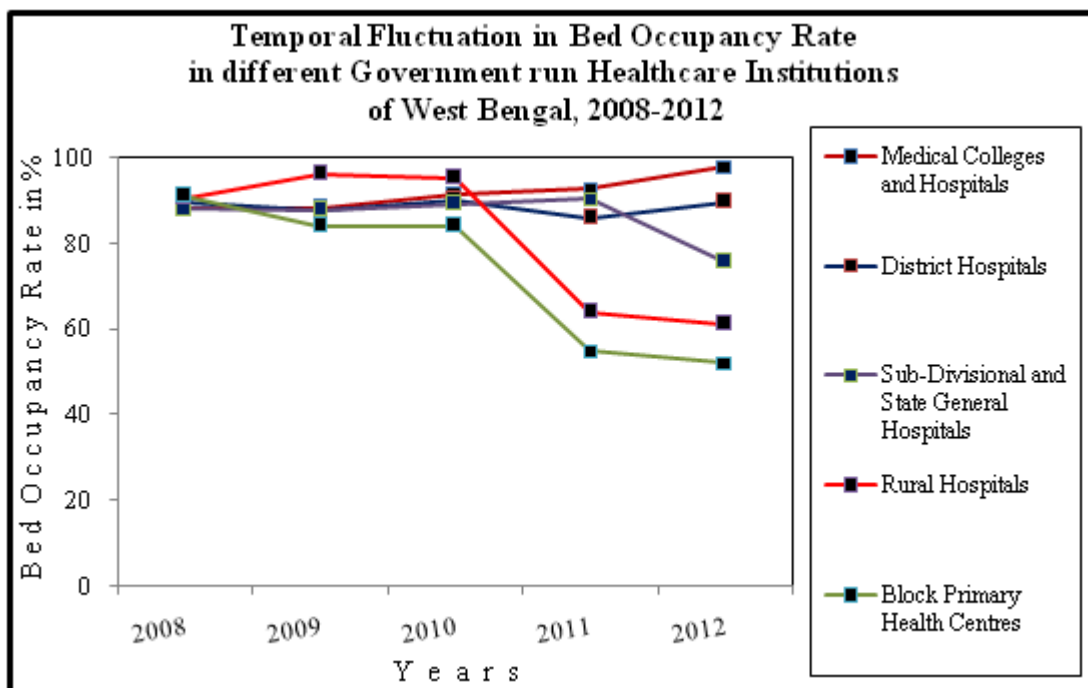


Figure 1: Data Source: Government of West Bengal

The number of admissions has increased in Barddhaman MCH but the availability of beds has almost remained unchanged. However, a gap in availability of beds in MCH is even observed in Kolkata though the city has managed to divide its patients among five medical colleges and hospitals situated within the city. The patients lying on the floor in an untreated condition is a common scenario in all MCH in the State. In 2011, the number of out-patients in MCH in the State was 60.55 lakhs while the figure increased to 71.80 lakhs in 2012 [Government of West Bengal, 2013]. The number of out-patients has improved for all Government run health care institutions except Primary Health Centres where the figure has dropped from 241.56 lakhs in 2011 to 208.11 lakhs in 2012. The number of major surgeries performed in 2011 was highest in Medical Colleges and Hospitals when the figure was 1.25 lakhs which has declined by 8 per cent in 2012. The number of major surgeries performed has however increased in District Hospitals and State General Hospitals in 2012. The Bed Occupancy Rate (BOR) is expressed as percentage of bed days occupied during a given period of time. In 2008, the BOR

of medical colleges and hospitals was 88.3 per cent while the percentage value was 91.3 per cent in case of block primary health centres. However, the percentage figure was 90.7 per cent for rural hospitals and 89.6 per cent for district hospitals in the same year. There was a marginal decline in BOR for District Hospitals, Sub-Divisional and State General Hospitals along with Block Primary Health Centres in 2009 [Fig.2]. The BOR has however increased to 98.1 per cent in MCH followed by 89.9 per cent in District Hospitals in 2012. The BOR has declined for Sub-divisional and State General Hospitals as well as Rural Hospitals and Block Primary Health Centres in 2012. The number of deliveries performed in MCH in 2011 was 1.34 lakhs which has increased to 1.67 lakhs in 2012. The number of deliveries performed in Sub-divisional Hospitals, Rural Hospitals and Block Primary Health Centres has declined in 2012 in comparison with 2011.



**Figure 2: Data Source: Government of West Bengal**

The number of deliveries performed in all the MCH situated within Kolkata Municipal Corporation (KMC) Area has increased except Nil Ratan Sarkar (NRS) Medical College and Hospital situated in Central Kolkata where a marginal decline in number of deliveries could be seen during the period of 2005-2012. An extraordinary rise in the number of deliveries performed has been recorded in Radha Gobindo Kar (RG Kar) Medical College and Hospital situated in North Kolkata during the period of 2005-2012 [Fig.3]. The percentage rise in the number of deliveries during the same period has been approximately 105 depicting that the figure has abnormally increased. In fact, the highest number of deliveries has been recorded in this MCH leaving far behind all other MCH within the city. The number of deliveries performed has also increased in National Medical College and Hospital situated in South-central part of the city where the percentage rise has been 62.48 during the period of 2005-2012. During the period 2000-2011 the number of deliveries has increased in Bankura State MCH as well. The Emergency Admission Rate has increased in Kolkata MCH situated in Central Kolkata with the rate exhibiting an upward trend from 53.9 per cent in 2009 to 55.1 per cent in 2012. The performance of Seth Sukhlal Karnani Memorial Hospital or popularly known as SSKM medical college and hospital situated in South Kolkata has also improved over time. This MCH has been transformed into a super-speciality hospital and is now known as

Institute of Post Graduate Medical Education and Research (IPGMER). The Emergency Admission Rate has however declined for Kolkata National MCH, Kolkata NRS MCH and Kolkata RG Kar MCH during the period 2009-2012. The Bed Turnover Rate (BTR) is expressed as the number of discharges and deaths per bed during a given period of time. The BTR has increased for all the MCH in the State [Table.1]. In 2009, the BTR was 81.2 per cent for Bankura State MCH which has rose to 109.8 per cent in 2012. The rise of BTR has been extraordinary in case of North Bengal MCH where the percentage figure has abruptly raised from 69.4 per cent in 2009 to 160.5 per cent in 2012.

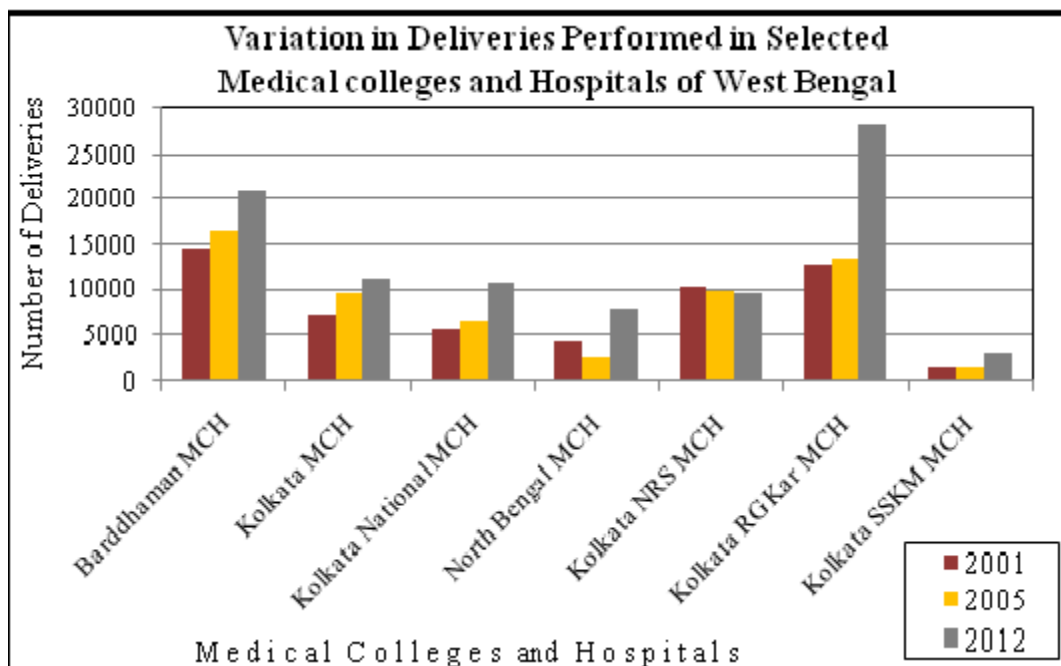


Figure 3: Data Source: Government of West Bengal

Due to high cost involved in carrying out treatment in private health care institutions in KMC Area, the BTR has increased for all the Government run MCH though the percentage rise has somewhat been under control. There are a number of Teaching Hospitals in KMC Area like School of Tropical Medicine and Dr. B.C Roy Post Graduate Institute of Paediatric Sciences which are also performing appreciably in providing sound health care facilities to patients both from inner and outer parts of the city.

Table.1: Temporal Variation of Bed Turnover Rate in MCH of West Bengal, 2008-2012

Year	Bed Turnover Rate (In %)
2008	53.4
2009	60.2
2010	60.3
2011	66.9
2012	75.0

Source: Government of West Bengal

## FINDINGS OF THE STUDY

The medical colleges and hospitals have been the arteries of medical treatment in the State since a long period of

time. Their importance in providing modern healthcare facilities has increased over time. They not only serve the medical requirements of the native population but also to the referred patients from the surrounding districts and neighbouring States and countries. Due to the huge inflow of patients in these hospitals, the healthcare infrastructure often falls far short than the actual requirement. The bed-population ratio as well as the doctor-patient ratio in these institutions is not very favourable and often the number of doctor visits is inadequate for the patients. Though the number of medical colleges and hospitals has increased in the State over time but still there is a huge requirement for improvement of healthcare infrastructure in these medical centres. These centres not only serve the huge urban mass of population but also the rural folk as well. The number of beds as well as the laboratory equipments for conducting different diagnostic tests have increased in all the medical colleges and hospitals over time but they still nowhere matches with the ever increasing number of deliveries, surgeries and diagnostic tests held in these institutions. The bed-occupancy rate has increased as well. These hospitals are now equipped with Sick Neonatal Care Units (SNCU), Intensive Care Units (ICU) as well as Intensive Critical Care Units (ICCU) but due to lack of doctors, nurses and staff they cannot perform to their optimum level.

## CONCLUSIONS

The Government run medical colleges and hospitals in the State not only serve the native people but also serve a large population size of the surrounding states and countries also. The official estimates of the condition in these medical institutions, however, vary widely from ground reality. The State has lagged behind the rapidly advancing southern States of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh. The health infrastructure of West Bengal has suffered a serious setback in last half decade with rising incidences of maternal and infant mortality especially in the backward districts of Maldah, Uttar Dinajpur and Murshidabad. There is a heavy reliance of population on these medical institutions but the actual picture has turned out to be a little dismal as the news of 'crib and cot deaths' in these medical centres often strike media in recent years. Privatization of healthcare facilities is more conspicuous in KMC area while the population of other districts have to rely heavily upon the Government run medical colleges and hospitals. The main problem of health care in the city of Kolkata lies in the huge inflow of referral patients from the surrounding districts, States and countries who come here in search of better medical facilities. The situation of the Government run health care institutions therefore turns out to be miserable though there is much scope for improvement. The Government of the State has been trying hard to cope with the situation and to restore the lost glory of the medical colleges and hospitals in the State.

## REFERENCES

1. Bir, T. (2001): Dynamics of Health Culture: Urban Slum Community and Behaviour, Rajat Publications, Delhi
2. Government of West Bengal (2005): Health on the March, 2004-2005, Central Bureau of Health Intelligence, West Bengal
3. Ibid (2010): Health on the March, 2008-2009, Central Bureau of Health Intelligence, West Bengal
4. Ibid (2011): Health on the March, 2010-2011, Central Bureau of Health Intelligence, West Bengal
5. Ibid (2014): Health on the March, 2012-2013, Central Bureau of Health Intelligence, West Bengal
6. Park, K. (2009): Preventive and Social Medicine, 20<sup>th</sup> edition, Banarsidas Bhanot Publishers, Madhya Pradesh