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# Healthcare Infrastructure in Bhagawangola II CD Block of Murshidabad District, West Bengal

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### **Article Info**

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### **Abstract**

Sound health improves the quality of human resources of a region. The socio-economic development of any country is never possible without quality human resources. Inadequate infrastructure generally leads to poor quality of health services which is positively dangerous to the health and welfare of the community large. The health care system in rural India has been considered at three-tier level Sub-Center (SC), Primary health center (PHC) and Community health center (CHC). The present study attempts to highlight the present infrastructure of the health care system in Bhagwangola block II of the Murshidabad district, West Bengal and tries to analyses the gap between the existing and expected level of infrastructure and the reasons behind it.

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## Introduction

Sound health helps to create quality human resources, which make an important part of the progress of a country. As a healthy population lives longer, productivity and savings are also higher (WHO Sep 2008). Healthy human resources form the infrastructure of the building of the economic standard of a country or a state. The 9th 5 - Year Plan focused on rectifying the basic health care infrastructure, viz., physical and manpower specially for the poor and marginalized group. It is evident that the achievement of the 5-Year Plans has reached the Lalbagh Subdivision very poorly. The population is steadily increasing but the physical and manpower availability and facilities are still inadequate at the subcenters.

Health care system in rural India is distributed at 3-tier level; Subcenter (SC), Primary Health Center (PHC), and Community Health Center (CHC). The SC is the most peripheral and is the first contact point between the public healthcare system and the community (Lyngdoh. 2015). As per norms, one SC is established for every 5000 people in plain areas and 3000 people for every tribal /hilly /desert area. The Bhore Committee in 1946 recommended the concept of PHC. The SC and PHC are the basic facilities that provide quality health service to the rural population (IPHS- 2012). The first meeting of the Central Council (January 1953) had recommended the PHC in the community development blocks (CD Blocks or Panchayat Samity) to provide health care to the local villagers. According to 6th 5-Year Plan one PHC is established for every 30,000 population in plain areas and 20,000 populations in hilly / tribal / desert areas. There are 6 SCs under one PHC. A PHC provides 24x7 nursing services to the patients. These are the first contact point between the rural community and a medical officer (TAOI et all 2017).

A CHC is the first referral unit between sub-district and district hospital. It provides referral health care for the cases from PHCs and Scs.

As per norms, there is one CHC for every 80,000 population in tribal / hilly / desert areas and 120,000 population in the









plain. There are 4 PHCs under one CHC only.

Rural health care service could not achieve the expected level. Non availability of doctors, nurses, insufficient of health worker, lack of residential facilities, doctors patients ratio, lack of medicine, lack of quality infrastructure can be held as the primary reasons. Thus, insufficiently reformed health care system especially in the former communist countries, inequalities of health care services provoke migration of patients towards EU members states where medical treatment is better in some cases life to save (Kovatcheu, 2014).

Patients migrate from rural to urban area for getting more advantage of health care. Migration will cease when the home medical centers cater quality services naturally with positivity of home advantage (Coming, 2012). Patients often migrate from their home towns to other cities because they choose specialist physician and speciality clinics (Nelson, et al. 1930). About 80% of the population of India live in about 57,000 villages. Often the doctors are reluctant to serve the PHCs and CHCs; they are more inclined to urban areas where all facilities of modern living are available. Therefore, when they are compelled by the law, they are practically novice in the village, not able to understand their social fabric and hence they work quite unprepared(Praser, 1977).

### The Study Area

Lalbagh subdivision is an administrative subdivision of Murshidabad district in the state of West Bengal. Bhagawangola II CD Blocks lies in the Jalangi-Bhagirathi interfluve in Murshidabad district. The Bhagirathi river flows from north to south dividing the district into two physiographic parts. The western part is known as Rarh and the eastern part of the river as Bagri. The Lalbagh subdivision is spread over both these region. It is located in the southeastern part of the district and the Bhagawangola II CD Block is bounded in the west and northwest by Bhagabangola -I CD Block, in the southwest and south by Murshidabad -Jiaganj, Raninagar - I and Raninagar - II CD Blocks and in the east and northeast by the Godagari and Pabna Upazilas of Rajshahi district (Bangladesh). With an area of 175.26 sq km, it has a total population of 158,024, all of which are rural in nature. About 51% is male and 49% is female. Thus it has an average density of  $902/sq\ km$  and a sex ratio of  $958/'000\ male$ . Between 2001 - 11, the decadal growth rate of population in this block was 21.65%.

### Objective

The primary objective of this research is to study the present status of healthcare infrastructure of the Bhaganbangola - II CD Block, Lalbagh subdivision, Murshidabad district.

#### **Database and Methododology**

This study is entirely based on primary and secondary data. The secondary data has been collected from the offices of different Govt. Hospitals, PHC, Sub-Centers, District Statistical Handbook, District Census Handbook (2011) and other relevant reports and records. Primary data has been collected through questionnaire survey method. The healthcare infrastructure of Lalbagh subdivision has been

analyzed in terms of physical infrastructure, residential facilities, human resources, population coverage, doctorpatient ratio, paramedical staff, etc. It is, in fact, a cross-sectional study conducted in the 21 Scs, 2 PHCs and 1 CHC in Bhagawangola CD Blocks II of Lalbagh subdivision in Murshidabad district during the period, January-December, 2018. Observation and interview method were used for quality assessment of the facilities of the 3-tier healthcare infrastructure. Predesigned and pretested questionnaire format was formulated from the IPHS revised guidelines 2012 for the study. Data were collected, stored and analyzed using Ms-Excel 2007.

## **Results and Discussion**

## Physical Infrastructure

Availability of physical infrastructure is one of the important parts of the health care infrastructure system. Adequate infrastructure provides quality service. Unfortunately, the physical infrastructure of the health care system in Bhagawangola Block II is insufficient for the local population. As per IPHS guideline 2012, the physical infrastructure of the sub-centre in the study area is not sufficient. The total number of SC is 21, of which 19 (90.48%) have government buildings, 15 (71.43%) have registration counter, 16 (76.19%) can be easily accessed, 10 (47.62%) has display boards, 12 (57.14%) have suggestions or complaint box of SC and 4 (19%) has boundary wall with gate.

In 17 (80.95%) of SCs, there is electricity connection but electric supply is very irregular. During summer, frequency of power cut is very high. Only 12 (57.14%) SCs have telephone communication system and only 4 have water supply tank, 2 have transport facilities with their own vehicles (NGO), About 19 (90.48%) of the SCs have toilet facilities and only 4 (19.05%) of the 21 SCs have separate male and female washrooms. There is no labour room and laboratory facilities. Even, there is hardly any arrangement for normal delivery.

There are two PHCs in the study area, but both are them are not-bedded. They have neither any laboratory, suggestion box, complaint box, display board, and 24/7 nursing services. The Kolan PHC runs better than that in the Fulpur that is in a very pathetic condition with practically no healthcare facilities.

The study area contains one Community health center in Nashipur. It provides mother care services but lacks all others facilities.

#### Residential Facilities

The Community health center has residential facilities but the living condition is not optimal. Some of the employees live in rented houses outside the campus. The PHC does not have any residential quarter that compels the medical officer, staff nurse, and others to commute daily from either Bhagobangola I or Jiaganj or Beherampore where they stay. The sub centers also do not have residential facilities.

#### **Human Resources**

In the 21 sub-centers, there should be as per IPHS 2012 at least 21 safai karmachari, 21 male health worker and 42 female ANMs. The study shows that there are only 7safai karmachari and 21 female ANMs. There is no male worker. Thus only 50% of female health worker is available, only one-third of safai



karmachari is available. Therefore, the quality of services to be created by the manpower at the sub center to the rural people is very poor.

In each PHC, as per IPHS 2012, there should be one medical officer and three nurse midwife. In this respect, the Kolan PHC lies at a perfectly normal level and functions timely smoothly with the required number of manpower resources but the conditions of Fulpur PHC is quite regressive as there is no medical officer and one nurse- cum- midwife is there to serve the rural people of Fulpur.

In the Community health center, there should be, as per IPHS 2012, two general duty officer, one Block medical officer, one public health specialist, one public health nurse, one general surgeon, one physician, one gynecologist /obstetrician, one pediatrician one dental surgeon, and one medical officer AYUSH. Unfortunately, there is no other personnel excepting one B.M.O. Thus 11 out of 12 posts are lying vacant. This clearly undermines the quality of health infrastructure.

#### **Population Coverage**

As per IPHS 2012 norms, there should be one subcenter for each 5000 population. The total population of the study area is 158,024. Therefore, the total number of sub center is 21 and expected GP wise distribution shows that there is 17 subcenter for catering services to GP with 5000 - 10000 population and four SC for those which are larger having more than 10000 population.

#### **Doctor-Patient Ratio**

On an average in outpatients department, the Kolan PHC is visited by 100 local patients and in Fulpur 80 local patients daily. One medical officer in Kolan examines all the patients while in Fulpur, the pharmacist and the nurse take care of the patients in the absence of doctors. In the CHC, the daily footfall of the patients is about 600, which is served by the Block medical officer only. Thus, sometimes it so happens that the health workers including the officers cannot reach their place of work due to either transport disturbances or other official job in the district head quarter and can not tender their services. Therefore the quality of health services is more degraded when irregular workers.

#### Paramedical Staff

Paramedical staff plays an important role in providing better health care service. According to norms, at least one laboratory technician, one pharmacist need for each CHC and PHC. As per IPHS 2012, there should be 15 paramedical staff. Both in Kolan and Fulpur, this category includes only one medical officer, one pharmacist, one staff nurse, one female ANM, one health worker, one health assistance(male), one female health assistance, one upper division clerk, one lower division clerk, one lab technician, one driver and fourteen Group D staff. Of these, there is only one medical officer, one pharmacist and five staff nurse in Kolan PHC while in Fulpur there is one pharmacist, and one staff nurse. Therefore, 8 of the 15 posts (53%) and 13 of the 15 posts (87%) are lying vacant respectively in Kolan and Fulpur PHC.

The CHC is located in Nashipur that should have a total of 34 nurses and paramedical staff as per IPHS 2012. Category wise there should be 7 group D staff, 6 administrative staff and 21 healthcare staff. Unfortunately, it was observed that there are only 4 Group D staff, 2 administrative staff and 8 health care staff only. Therefore, 20 out of 34 posts (59%) are lying vacant.

Thus, the CHC, PHCs as well as the SC are running short of staff in all the categories.

#### Conclusion

The above discussion shows that there is a huge shortfall of healthcare infrastructure in terms of hard / physical infrastructure, office and healthcare staff, medical and healthcare facilities. The quality of the rural health care services remained poor and pathetic. The state government needs to initiate steps to improve health care infrastructure in Bhagwangola II CD Block. Lack of residential quarters, emergency medicines, pathology lab, ambulance, emergency OT, 24x7 power supply, internet and tele-communication facility, high patient-doctor ratio and huge vacancy of staff compounded the problem abysmally. Patients often have to be taken to towns and big cities for treatment. The budding private nursing homes and polyclinics are simply draining the financial resources of the rural illiterate people while treating the patients. The debt trap has been taking the shape ofa vicious circle.

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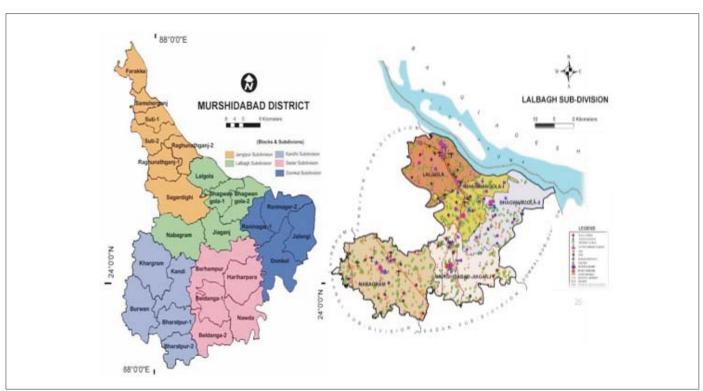


Fig. 1. Location of the Study Area



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