Regional Pattern of Health Services through Health Personnel in Sonitpur District of Assam

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ABSTRACT
Introduction: Health workers or health personnel attains a great significance in the field of Medical Science, and the followers of medical science are interested to study the health personnel as it deals with the availability of doctors, nurses, pharmacists, radiographers, lab technicians and other health workers in a particular region. They make important contributions and are critical to the functioning of most health systems. Patient safety strategies are the main focus of health care personnel. The availability of these health workers reflects the status of health services in a specific region.

Aims & Objectives: The main objective of the study is to examine the role and importance of health workers in the field of medical science in the Sonitpur District of Assam. The study is also undertaken to analyze the distribution of different health personnel in different health blocks of the district.

Methodology: The whole study is mainly based on secondary data. In few cases, internet links are also taken into consideration for detail analytical study. The study will explain the role and distribution of health personnel in the district. Moreover, an analysis of the existing health personnel will give an idea about the availability and adequacy or otherwise of the same in the district.

Results: The health blocks with less number of Health Workers are characterized by heavy population pressure on Health Personnel whereas, the health blocks where higher number of health workers exist are characterized by less population pressure on Health Workers.

Conclusion: The entire study has given an idea about the distribution pattern of health workers in different health blocks of the region. The study also reflects the adequacy as well as deficiency of the same in the study area. The study will help the medical and other health experts to take crucial steps for better health planning in the region.

Key Words: Health Workers, Role, Services, Distribution, Deficiency, Sonitpur

INTRODUCTION
Medical Science deals with the study of the distribution of diseases as well as health care institutions along with the spatial distribution or availability of health personnel in a particular area. The study of health workers or health personnel attains great significance, and medical experts are interested to study the health personnel in the field of Medical Science as it deals with the availability of doctors, nurses, pharmacists, radiographers, lab technicians and other health workers in a particular region. They make important contributions and are critical to the functioning of most health systems. Patient safety strategies are the main focus of health care personnel. The availability of these health workers reflects the status of health services in a specific region. Rais Akhtar and Learmonth also have stated in their book ‘Geographical Aspects of Health and Diseases in India: “Political and economic factors play a dominant role in the shaping of the health services of the community, for instance, and the degree to which the health services are to be available and accessible to the population”.’

Good health care personnel are considered to be good communicators. Community Health Workers are effective in improving public health. They are generally able to listen to their respective patients and provide information about the diagnosis. They often serve as coaches to improve clients’ healthy lifestyle behaviours. They also provide required treatment in such a way that patients will easily understand.
In other words, good health personnel are always ready to put their patients’ needs first. Moreover, good health workers usually have a strong sense of service, willing to help people feel better.

Health care is fundamentally associated with the promotion, maintenance, monitoring and restoration of the health of individuals or communities by agents of health services. Health Personnel or Health Care Personnel are defined as all paid and unpaid persons working in a health institution. They have the potential for exposure to patients and/or to infectious materials including body substances, contaminated medical supplies and equipment etc. Health workers are people whose job is to protect and improve the health of their communities. Together these health workers, in all their diversity, make up the global health workforce.

According to World Health Organization (WHO), “Health workers are people whose job is to protect and improve the health of their communities. Together these health workers, in all their diversity, make up the global health workforce.” The WHO defines health workers to be all people engaged in actions whose primary intent is to enhance health. Health Personnel is sometimes defined as all people engaged in the promotion, protection or improvement of the health of the population. Health Personnel are commonly referred to as Community Health Workers (CHW) who work either for pay or as volunteers in association with the local health care system in both urban and rural environments. They usually share ethnicity, language, socio-economic status and life experiences with community members they serve. They offer interpretation and translation services, provide culturally appropriate health education and information, help people get the care they need, give informal counselling and guidance on health behaviours, advocate for community and individual health needs, and provide some direct services such as first aid and blood pressure screening.

MATERIALS & METHODS

In the study, only secondary data are used. To collect relevant data, many sources have been taken into consideration. Data concerned with the spatial distribution of various diseases in the study area have been collected from the Office of the Health & Family Welfare (IDSP i.e. Integrated Disease Surveillance Project), Sonitpur District, Assam. Data about the distribution of health care facilities or health institutions in the study area have been collected from National Health Mission (NHM) office, Sonitpur District, Assam. Moreover, books, as well as journals related to Medical Geography, are also taken for detail analytical study. In few cases, internet links have also been taken into consideration for further study.

In the study, the spatial distribution of some selected diseases along with the distribution of health care facilities are proposed to be analyzed at the block level of the Sonitpur District. The study is carried out by taking seven health blocks with certain specific diseases. Analysis has been done with absolute data of incidence of diseases. The collected data have been systematically tabulated to show the temporal as well as spatial variation of the incidence of diseases in all the health blocks of the district. Taking into consideration of the above methods, the proposed study has been done correctly.

RESULTS

Spatial Distribution of Health Personnel in Sonitpur District

In Sonitpur district health personnel or health workers play an important role in the field of Medical Science. Health personnel in the study area mainly include Medical Officers, GNM (General Nursing & Midwifery), ANM (Auxiliary Nurse Midwifery), Pharmacist, Lab Technician, Radiographer etc. Moreover, recently ASHA (Accredited Social Health Activists) workers, as well as ASHA Supervisors, are playing their vital role in the concerned field. There is a great variation in their distribution among the health blocks of the district. Some health blocks contain a sufficient portion of health personnel, while some others have less portion of the same. An attempt has been made here to analyze and understand the spatial distribution of health personnel or health workers in the study area.

Distribution of Medical Officer

A medical officer normally refers to a doctor in charge of the health services of a civilian or military authority or other organizations. It may include all types of doctors, e.g. allopathic doctors, Ayurveda doctors, homoeopathic doctors etc. Generally, the post of Medical Officer is held by a physician who serves to advise and lead a team of public health professionals such as environmental health and public health nurses on matters of public health importance. Medical Officers generally serve as advisors on the issues of health and control of the disease. They provide medical support and investigate health-related problems. They analyze records, reports as well as examine data to help patient’s conditions. They will order the extra test if needed and consult it with other physicians on the patient’s previous healthcare professionals.

In the district, the total numbers of Medical officers are 164, of which 92 are working on regular mode and 72 are working under NHM (National Health Mission). The average density of Medical Officer per lakh population in the district is about 9. This total number of Medical officers is unevenly distributed among the health blocks of the district (Table-1). Some health blocks contain more Medical officers while some others are characterized by fewer portions of the same.
**Distribution of GNM (General Nursing & Midwifery)**

GNM usually stands for General Nursing & Midwifery which generally emphasized educating nursing students on the matter of general health care and midwifery. They generally work in both the public as well as private health care sectors. They may also operate in hospitals, nursing homes, the armed forces, medical colleges and other health care settings. The main tasks of GNM are basically to prepare nurses with good educational programs in nursing to enable them to work as efficient members of the concerned health team. They also help nurses to develop their ability to co-operate with other members of the health team in the prevention of disease, recovery of health etc.

In the study area, GNM are seen to be in good number compared to Medical Officers. In Sonitpur district the total number of GNM is 173, of which 69 are working regularly, while 104 are working under NHM (National Health Mission). The average density of GNM per lakh population in the study area is very close to 9, which is the same as the average of Medical Officers. This total number of GNM in the district is unevenly distributed among the health blocks of the study area (Table-1).

**Distribution of ANM (Auxiliary Nurse Midwifery)**

ANM usually stands for Auxiliary Nurse Midwifery, which is generally a village-level female health worker in India. They are known to be the first contact person between the community and the health services. ANM generally works at health sub-centres that provide primary health care to the people or community.

In the study area, the number of ANM is found to be quite good than GNM. In Sonitpur the total number of ANM is 590, of which 297 are working on regular mode and 293 are working under NHM (National Health Mission). The average density of ANM per lakh population in the district is about 31, which is much higher than the average of GNM. This total number of ANM is unevenly distributed among the health blocks of the study area (Table-1).

**Distribution of Pharmacists**

Pharmacists are considered vital health care professionals who practice in pharmacy and focuses on safe and effective use of medication. They are seen to be directly involved with patient care. The basic role of pharmacists is to provide drugs to physicians or doctors for medication that is prescribed to patients. Their main role may include clinical medication management, monitoring the state of disease, compounding medicines, supervising pharmacy technicians and other staff, providing patients with health monitoring and advice including treatment of common diseases etc.

In the study area, the number of pharmacists is seen to be very less compared to GNM and ANM. The total number of pharmacists in the study area is only 89, of which 61 are working regularly and 28 are working under NHM (National Health Mission). The average density of pharmacists per lakh population in the study area is almost 5, which is very low. The total number of pharmacists is unevenly distributed among the health blocks of the study area (Table-1).

**Distribution of ASHA and ASHA Supervisor**

The term ‘ASHA’ normally stands for Accredited Social Health Activists who is generally a community health worker. ASHA is generally a local village woman who trained under NRHM (National Rural Health Mission) for 28 days in health, water and sanitation, and also trained in maternal and child health issues. They generally support ANM (Auxiliary Nurse Midwifery) in the health care system, and each ANM is supported by four or five ASHAs. ANMs are considered supervisors of ASHA. ASHA supervisors are generally the

| Health Blocks | Medical Officer | Nurses | Pharmacists | ASHA Supervisors | ASHA Workers |
|---------------|----------------|--------|-------------|------------------|--------------|
| Gohpur        | 38             | 34     | 126         | 19               | 24           | 279         |
| Behali        | 13             | 19     | 54          | 7                | 13           | 123         |
| Biswanath Chariali | 30         | 36     | 79          | 12               | 200          | 22          |
| North Jamuguri | 20            | 31     | 96          | 13               | 226          | 20          |
| Balipara      | 20             | 18     | 65          | 9                | 256          | 25          |
| Bihaguri      | 19             | 12     | 86          | 11               | 229          | 22          |
| Dhekiajuli    | 24             | 23     | 84          | 18               | 346          | 36          |

Source: Office of the NHM, Sonitpur, Assam
educated men and women who are characterized with experience and understanding of working in the health system. They identify and encourage the strengths and correct the weaknesses of ASHAs. ASHA supervisors support in organizing maternal and child health-related training for the ASHAs and made ASHAs build a good rapport with ANM. They keep records and submit the same to the concerned authorities.

In the study area, both ASHA and ASHA Supervisors play a vital role in their respective fields. In the Sonitpur district, there are 1659 numbers of ASHA workers and 162 numbers of ASHA supervisors distributed in different health blocks of the study area (Table-1). The average density of ASHA per lakh population in the district is about 88, which is far greater than any other health personnel’s average in the study area. On the other hand, the average number of ASHA supervisors per hundred ASHA workers is about 10, and 1 per ten ASHA workers.

**DISCUSSION**

The study undertaken here mainly deals with the health personnel or health workers in different health institutions in the district of Sonitpur. The entire study is based on the regional pattern of a few health personnel namely Medical Officer, GNM (General Nursing & Midwifery), ANM (Auxiliary Nurse Midwifery), Pharmacists, ASHA (Accredited Social Health Activists) Supervisor and ASHA Workers in seven health blocks of the district.

The study found that there is a great regional variation of Health Personnel in different regions of the district. Among the health personnel, ASHA Workers and ANM (Auxiliary Nurse Midwifery) are the ones that exist in large numbers in the district. On the other hand, Pharmacists and GNM (General Nursing & Midwifery) exist in fewer numbers in comparison to the rest of the health personnel. Almost all the health blocks of the study area are deprived of health services. Gohpur BPHC is the only health block that is well-served by medical health personnel.

**CONCLUSION**

Health Personnel or health workers as the backbone of the health system is essential to sustainable development. In any health system, improving health service coverage and health outcomes depend on the availability, accessibility, and capacity of health workers to deliver quality services. Without them, the proper functioning of health institutions would not be possible. Hence, any health institution must contain sufficient numbers of health workers. In the study area, Medical Officers are found to be fewer. The number of GNM (General Nursing & Midwifery) compared to ANM (Auxiliary Nurse Midwifery) was also found to be less. What is needed for health blocks in which the number of health workers is found to be less is proper and careful health planning. Systematic as well as careful health planning by the Government should be made in the deprived health blocks to improve the health status. More and more health personnel including Medical Officers should be appointed in deficient health blocks to improve the health condition and also to reduce the population pressure on the same.

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