# **CASE STUDY**

# Human Resource Challenges and Service Delivery in Indian Public Health Centres: A Case Study of Nagpur District

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# **ARTICLE CYCLE**

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# **ABSTRACT**

Primary Health Centres (PHCs) are pivotal in delivering healthcare services to rural populations in India. However, challenges in human resources significantly impact their efficiency. A descriptive study was conducted across 16 talukas in Nagpur district, Maharashtra, covering a population of 772,601. Data were collected using structured questionnaires focusing on infrastructure, accessibility, human resources, and patient care quality. Findings revealed substantial deficits in specialized medical staff, inconsistent availability of medicines, and limited training programs. Despite infrastructural setups, service delivery was compromised due to understaffing and inadequate resource allocation. Addressing human resource challenges is crucial for enhancing the effectiveness of PHCs. Policy reforms focusing on mandatory rural postings, improved funding allocation, and enhanced training for medical personnel are recommended.

# **KEYWORDS**

Public Health Centres, Primary Healthcare, Human Resources, Rural Health, Nagpur

# **INTRODUCTION**

India's healthcare system is structured into three tiers: primary, secondary, and tertiary care. PHCs serve as the first point of contact for rural populations, offering preventive, promotive, and curative services. Despite their significance, PHCs often grapple with resource constraints and systemic inefficiencies, particularly in human resource management. This study aims to investigate the human resource challenges affecting service delivery in PHCs within Nagpur district, Maharashtra.

A descriptive cross-sectional study was undertaken in 16 talukas of Nagpur district, encompassing a population of 772,601. Data collection involved structured questionnaires administered healthcare providers and patients at PHCs. The questionnaire assessed aspects such infrastructure, accessibility, human resources, and quality of patient care. Data were analyzed using identify prevalent descriptive statistics to challenges and patterns.

# **RESEARCH METHODOLOGY**



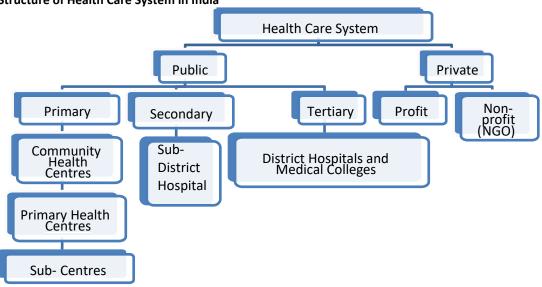
Nagpur District Map: The concentration of research has been Nagpur District covering in all 16 talukas because as Medical Representative in J.K. Pharmaceuticals, I have worked in this area. The areas covered were Narkhed, Nagdhan (Ramtek), Hiwra Bazaar (Ramtek), Bhandarbodi (Ramtek), Kervani (Ramtek), Mansar (Ramtek) Saoner,

Hingna, Kuhi, Mandal, Salwa, Umrer, Bhiwapur, Chicholi (Khar), Kalmeshwar, & Katol. The total population covered was seven lakh seventy two thousand six hundred and one (7,72,601).

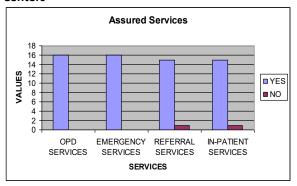
A questionnaire relating to various aspects required by Government with reference to their guidelines was prepared. The questionnaire contained both open ended and close ended questions. The information required to analyze the service condition in various public health centers were received and analyzed in the form of graphs. It was analyzed whether the health center is accessible or not, is it near or far for the villagers to reach. Whether the road conditions leading to the public health center is good or bad.

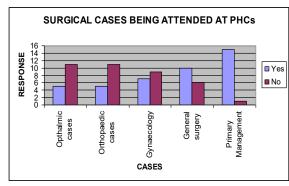
**DATA ANALYSIS:** Population covered (in numbers) The total population covered = 7, 72,601 covering 16 talukas.

Structure of Health Care System in India

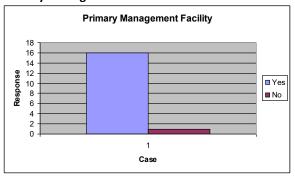


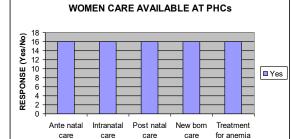
Assured Services Availabe In 16 Public Health Surgical Cases Centers





**Primary Management** 



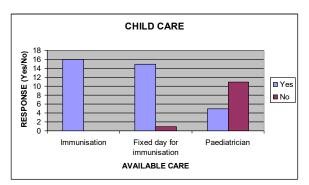


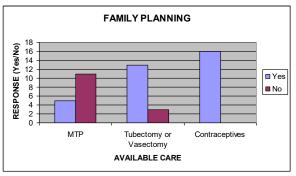
CARE

Child Care

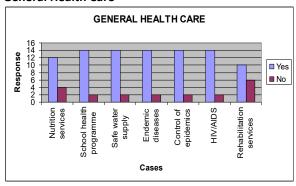
**Family Planning** 

**Women Care** 

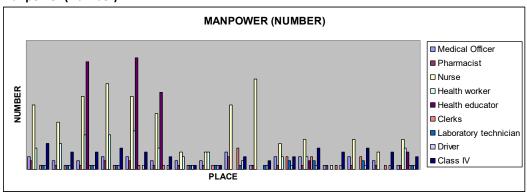




# **General Health Care**



# Manpower (Number)



# Interpretation

The 16 public health center that acted as the sample of the research, the assured services available in these centers like OPD services, Emergency services, Referral services and inpatient services, it was found that these services were available in all the centers.

Only few ophthalmic, orthopedic and Gynecology cases are covered. The general surgery is done on a 50% basis.

The analysis of the findings led to the inference that the Primary Management of wounds, snake bite, insect bite, burns and abscess is regularly done in the public health center.

The facility for women care is enough in all the public health centers. It has been observed that the ante natal care, intra natal care, post-natal care, new born care and treatment for anemia is ample and good. The only problem is the availability of medicine in the public health center is not of high quality. The quality must be good because during

pregnancy and after delivery women need special care. The other observation is that the doctors attending the women patients are not trained or specialized.

The immunization schedule is maintained in all the public health centers and a fixed day has been prescribed. The quality of vaccines is maintained and the pharmacy available in the centers stores it well. The only hitch is that only few of the public health centers has a specialized pediatrician.

To achieve the objective of Government of India to implement a good family planning system contraceptive are freely distributed in all public health centers free of cost. The tubectomy or vasectomy barring some of the PHCs is being done. MTP (Medically terminated pregnancy) is done on a low note. MTP is Medical Termination of Pregnancy. It also called induced abortion. It is the medical way of getting rid of unwanted pregnancy. Any qualified gynecologist (MD/DGO) can perform MTP. Any MBBS Doctor, who has obtained training

in MTP, is allowed to perform this procedure. However, MTP should always be performed at a place recognized by government authorities.

The status of General Health care like Nutrition services, school health program, safe water supply, endemic diseases, control of epidemics, HIV/AIDS, Rehabilitation services are average. Improvement in a large scale is needed.

There is huge requirement of manpower. The population that is covered by the public health center is huge and compared to that each public health center has less manpower. To improve the quality of services ample manpower is required with proper training.

# **CONCLUSION**

After thorough analysis and review of findings it can be concluded –

The 16 public health center that acted as the sample of the research, the assured services available in these centers like OPD services, Emergency services, Referral services and inpatient services, it was found that these services were available in all the centers.

The availability of beds in each public health centers for indoor patients was researched and it was found that an average 13 beds are available in each center.

The bed occupancy rate in the various public health centers has been 50% as compared to the available beds.

Average OPD attendance of Female patients is around 40 per day and of male patients are around 31 per day.

Only few ophthalmic, orthopedic and Gynecology cases are covered.

The analysis of the findings led to the inference that the Primary Management of wounds, snake bite, insect bite, burns and abscess is regularly done in the public health center.

The facility for women care is enough in all the public health centers.

The immunization schedule is maintained in all the public health centers and a fixed day has been prescribed.

To achieve the objective of Government of India to implement a good family planning system contraceptive are freely distributed in all public health centers free of cost.

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# DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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