

# Assessment of Health Centers As Per Indian Public Health Standards in Chandigarh Tricity, India.

KEYWORDS	Indian Public Health Standards				
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ABSTRACT Objectives: To assess the status of health centers as per Indian Public Health Standards in Tricity of Chandigarh, India. Method: A cross sectional study was done from April 2012 to September 2013 at randomly selected 18 health centers including Community Health Centers (CHCs), Primary Health Centers (PHCs) and Sub Centers (SCs) in Tricity of Chandigarh i.e. Chandigarh, Panchkula and Mohali. The data was obtained from 60 service providers, supplemented by on the spot observations and record checking. Descriptive analysis was done. Results: Medical Officers were available at 25% of the PHCs in Mohali. There were no physician, pediatrician, general surgeon and anesthetist at CHCs in Mohali. Only 35% and 78% of drugs were available at CHCs in Chandigarh and Panchkula, respectively. Conclusion: Identified gaps should be addressed as per Indian Public Health Standards at all levels of health centers at the earliest to achieve the desired goals.

# INTRODUCTION

Primary healthcare is the vital strategy that remains the backbone of health care service delivery system. The health care services are designed to meet the health needs of the community, and these are now seen as a part of the basic social services of a country.<sup>1</sup> Upgrading public health infrastructure to measurable standards of quality was a key strategic intervention under the National Rural Health Mission (NRHM). In year 2012, there were 1,48,366 Sub-centers (SCs), 24,049 Primary Health Centers (PHCs) and 4,833 Community Health Centers (CHCs) functioning in the country.<sup>2</sup> In order to provide optimal level of quality health care, in commensuration with universal best practices and are also responsive and sensitive to the client needs or their expectations, a set of standards were developed for health centers to be called Indian Public Health Standards (IPHS) following the launching of the NRHM.<sup>3</sup>

IPHS is a novel concept to fix benchmarks of infrastructure, including building, manpower, equipments, drugs, quality and accountability to the public.<sup>4</sup> The present study was conducted with the objective to assess the status of health centers as per Indian Public Health Standards in Tricity of Chandigarh, India.

# METHODS

The cross-sectional study was conducted during April 2012 to September 2013 in the Tricity of Chandigarh, India. Chandigarh along with two satellite cities viz. Panchkula in Haryana and Mohali in Punjab collectively constitute the Chandigarh Tricity. Two available CHCs and four SCs at random were taken in Chandigarh. No PHC is available under Chandigarh health care delivery system. Mohali district is divided into three blocks. So, two out of three CHCs, two out of 12 PHCs and two out of total 78 SCs were selected at random. Panchkula is divided into four blocks and two CHCs that came under Panchkula district along with one PHC under each CHC and one SC under each PHC were taken. So, total number of six CHCs, four PHCs and eight SCs were assessed. The data was collected by author herself by visiting all the selected health centers. The pre-designed, structured and pre-tested schedule designed as per IPHS norms were used to interview. Total 60 service providers including Medical Officers (n=10) along with paramedical staff i.e. staff nurses (n=8), ANM (n=18), MHW (n=3), pharmacists (n=9), laboratory technician (n=8) and X- ray technician (n=4) were interviewed. The information was supplemented by on the spot observations and checking of registers maintained at health centers. Data was entered into SPSS version 19. Discrete data was analyzed using percentages. Approval from Institution Ethics & Research Committee was obtained.

## RESULTS

Human resources were maximum (88%) at SCs in Chandigarh. All the SCs in tricity had ANMs while male health worker (MHW) was present only in 50% SCs in Mohali and none in Panchkula. SCs in Mohali had their own buildings while half of centres in Chandigarh and Panchkula run in own buildings. Sphygmomanometers and weighing scales were available at all SCs in tricity. Thermometers were available at 50% of SCs in tricity. All the SCs in tricity had vaccines and contraceptives. Drug kit A & kit B were available at only 38% and 50% of SCs in Chandigarh and Mohali, respectively. (Table 1).

Table 1:	Status of	Sub	centers in	Chandigarh tricity
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S. No	Criteria	IPHS norms	Chandigarh (n=4) No. (%)	Panchkula (n=2) No. (%)	Mohali (n=2) No. (%)
١.	Human Resources	02	07 (88)	02 (50)	03 (75)
11.	Infrastructure availability	06	05 (21)	07 (58)	05 (42)
III.	Equipments	14	38 (68)	25 (89)	21 (75)
IV.	Drugs	06	12 (50)	11 (92)	07 (58)
V.	Record Maintenance	12	33 (69)	22 (92)	21 (88)

# **RESEARCH PAPER**

Human resources were adequate at PHCs in Panchkula (81%) while it was poor at PHCs in Mohali (59%). There was no Block Health Educator & Information officer and no Clerk. All PHCs had their own building. The availability of equipments for laboratory (50%) and eye care & testing (50%) was found to be deficient at PHCs in Panchkula and Mohali. Among drugs it was observed that 93% of drugs were available at PHCs in Panchkula and 64% in Mohali (Table 2).

Table 2: Status of Primary Health centers in Chandigarh tricity

S. No.	Criteria	IPHS Norms	Panchkula (n=2) No. (%)	Mohali (n=2) No. (%)
١.	Human Resources	16	26 (81)	19 (59)
П.	Infrastructure availability	16	31 (97)	27 (84)
III.	Equipments	06	10 (83)	10 (83)
IV.	Drugs	07	13 (93)	09 (64)

Overall, specialists and General duty doctors at CHCs in Chandigarh were more in number as compared to prescribed norms. General surgeon and anesthetist were available at 50% of CHCs in Chandigarh and Panchkula, but none in Mohali. Physician and Paediatrician posts were lying vacant at CHCs in Mohali. Public health programme manager was not posted at CHCs in tricity. Nurses and para-medical staff were in excess at all CHCs in tricity. Support manpower was found to be poor only being 50%, 44% and 39% CHCs in Panchkula, Mohali and Chandigarh respectively. Infrastructure facilities were adequate in all CHCs. Availability of equipments was found to be maximum in Chandigarh (94%) followed by Panchkula (75%) and Mohali (69%). Ayurvedic medicines and drugs for new born & child care were available only in 50% CHCs in Chandigarh and Mohali (Table 3).

Table 3: Status of Community Health centers in Chandigarh tricity

S. No.	Criteria	IPHS Norms	Chandigarh (n=2) No. (%)	Panchkula (n=2) No. (%)	Mohali (n=2) No. (%)
١.	Human Resources	33	69 (104)	54 (82)	39 (59)
a.	Specialists	05	15 (150)	09 (90)	02 (20)
b.	General duty officers	08	18 (112)	10 (62)	07 (44)
с.	Nurses & Para-medical	10	29 (145)	26 (130)	22 (110)
d.	Support Manpower	09	07 (39)	09 (50)	08 (44)
II.	Infrastructure facilities	01	02 (100)	02 (100)	02 (100)
III.	Equipments	16	30 (94)	24 (75)	22 (69)
IV.	Drugs	518	364 (35)	1011 (98)	806 (78)
V.	Record maintenance	10	20 (100)	18 (90)	18 (90)

#### DISCUSSION Sub-centers

All SCs in Mohali had their own government building while only 50% SCs in Chandigarh and Panchkula were being run in own buildings. These findings were better than studies by Kumar A<sup>5</sup> in District Jhajjar, Haryana and by Sadana R<sup>6</sup> in Jhansi district, where only 6.67% SCs and 29% SCs had government building, respectively. MHW was available only in 50% to 75% SCs in Chandigarh and Mohali but none in Panchkula. A study in district Jhajjar, Haryana found significant gaps in manpower specially MHW was observed in 60% of SCs.<sup>5</sup>

# Primary health centers

Medical officers were available at 100% PHCs and 25% PHCs in Panchkula and Mohali, respectively. No block HE and clerk was present in any of the PHCs. Similar findings were observed in a study by Zaman FA<sup>7</sup> where 80% PHCs in Assam and 90% PHCs in Karnataka had MOs but clerk were available in 40% and 30% PHCs in Assam and Karnataka respectively. Functional labor room and new born care equipments were present in all the PHCs in our study while in a study by Zaman FA7 functional labor room was available in 80% and 90% of PHCs in Assam and Karnataka respectively, and new born care services were found to be completely absent in the district of Assam while in Karnataka 70% of PHCs were providing services. In Ambala district, Harvana, availability of a well-equipped and fully functional labor room was in 84.6% of PHCs.<sup>8</sup> Almost all the drugs under RCH were available at PHCs in Panchkula and at 50% PHCs of Mohali. In Assam, the availability of prophylactic drugs was very poor. Tablets IFA and Vitamin A syrup was available in 10.1% and 8.8% of the centers, respectively.9

# Community health centers

In our study it was found that specialists were more than prescribed norms at CHCs in Chandigarh, while there was no pediatrician, physician, surgeon or anesthetist at CHCs in Mohali. Sodani PR<sup>10</sup> in Bharatpur district of Rajasthan found poor availability of specialists in all CHCs, 38.5% physician and gynecologist and 30.8% surgeon and pediatrician and 7.7% anesthetist were available. All the CHCs had labor room and operation theatre facility. Sodani  $\mathsf{PR}^{\mathsf{10}}$  found availability of labor room in 92.3% CHCs. P. SatyaSekhar<sup>11</sup> in Andhra Pradesh found that operation theatre was available in 87% of CHCs. In the present study it was observed that almost all the equipments were found to be adequate in all the CHCs. In a study conducted by P. SatyaSekhar<sup>11</sup> in Andhra Pradesh, found that all the CHCs in the state have more than 50% of equipment under the normal delivery kit, equipment for operation theatre and equipment for labor room.

# **CONCLUSION & RECOMMENDATIONS**

At the time of study, significant gaps were observed in the facilities available at various peripheral health centers of Chandigarh Tricity. Due to inadequate active community participation in their own care, the health care would remain a dream to be fulfilled till these health institutions are provided all the infrastructure, human resources and logistics as per IPHS norms. It is therefore recommended that identified gaps including infrastructure, human resources, equipments and drugs should be addressed on priority basis to achieve desired gaps a envisaged by National Health Mission.

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**REFERENCE** 1. World Health Organization. Tech Rep Ser. no 472. 1971:3. | 2. Ministry of Health and Family Welfare. Rural Health Statistics in India. New Delhi: Ministry of Health and Family Welfare, 2010. | 3. Govt. of India. Indian Public Health Standards (IPHS) for Primary Health Centers. Directorate General of Health Services, Ministry of Health and Family Welfare, GOI, New Delhi. 2007. | 4. Sodani PR, Sharma K. Strengthening Primary Level Health Service Delivery: Lessons from a State in India. J Family Med Prim Care 2012;1(2):127-131. | 5. Kumar A, Goel MK, Jain RB, Khanna P. Gaps in facilities available at health sub-centers as per Indian public health standards in a district of Haryana. Asian J Manage Research 2011;2:651-658. | 6. Sadana R, Fort A, Pasricha R, Henry R. Assessment of sub-centers in Jhansi district in preparation for Clinic-Based Family Planning (CBFP) Training and Upgrading Technical Report; New Delhi: PRIME Regional Office for Asia/Near East, 1998;23:9. | 7. Zaman FA, Laskar NB. An application of Indian Public Health Standard for evaluation of Primary Health Centers of an EAG and a Non-EAG state. Indian J Public Health 2010;54(1):36-39. | 8. Population Research Center, Panjab University, Chandigarh. Rapid Appraisal of NRHM, Ambala District, Haryana report. 2009. Available: http://164.100.52.110/NRHM/PRC\_RA\_Reports/ Haryana/Ambala.pdf. (Accessed 29 Aug 2011) | 9. Advent Healthcare Group. Facility Survey of Public Health Institutions in Assam 2007; [Report] Submitted to: National Rural Health Mission, Government of Assam, 2007:16-24. Available: www.nrhmassam.in/pdf/2\_5\_3.pdf (Accessed on 21 Aug 2011) | 10. Sodani PR, Sharma K. Assessing Indian Public Health Standards for Community Health Centers: A Case Study with Special Reference to Essential Newborn Care Services. Indian J Public Health 2011;55(4):260-266. | 11. Sekhar PS, Rajeswari NV, Punetha A, Rao VS. Facility Survey of Public Health Institutions in Andhra Pradesh Report; Indian Institute of Health and Family Welfare (H