

Evaluation of Indian public health standards for CHCs of Ahmedabad District with reference to physical infrastructure and manpower

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Abstract

Background: Three tier system exists in India. The upper most is the CHC. The CHC provides specialist services to the rural people and is usually located at the block level. The CHCs are under constant criticism for their inability to deliver quality services. The main reasons are the lack of proper manpower, inadequate infrastructure. In order to provide optimal level of quality health care, a set of standards called IPHS were submitted. In the above context, the present study was undertaken with the objective to assess the infrastructure facilities & availability of manpower in the CHCs of Ahmedabad district, Gujarat.

Method and Materials: Study was carried out from April 2014 to December 2015. It is Cross-sectional study. Predesigned and pretested questionnaire made from IPHS revised guideline 2012. It was planned to study at least 2/3rd (70%) of the existing means CHCs i.e. 7 CHCs. So, it was randomly selected 7 CHCs by chit method.

Result: 100% CHCs had building but only 57.14% CHCs had male female separate wards and toilets. 100% CHCs had OT and Labour room, but only 28.57% CHCs had Blood storage facility and none of the CHCs had USG facility. The availability of medical staff and support manpower was also poor. 100% CHCs had done Pathological tests. X-ray were done in 71.42% CHCs and ECG were done in 28.57% CHCs.

Conclusion: Pooling of human resources needs to be done especially Specialists and promoting partnership with the private sector in providing human resources. There is need to be strengthen physical infrastructure like male:female separate wards and toilets, investigation facility.

Keywords: IPHS, CHC, manpower, physical infrastructure

1. Introduction

The National Rural Health Mission (NRHM) was launched by the Hon'ble Prime Minister of India in the year of 2005 with the goal of improving the availability and accessibility of the quality health care to the people, especially for those residing in rural areas, the poor, and women ^[1, 2]. Right now, the three tier system exists in all over country in India in rural area ^[1, 3]. The sub centres are the first (lower most) tier of this system. The second one is primary health centre and the upper most is the community health centre.³ The Community Health Centre provides specialist services to the rural people and is usually located at the block level ^[4, 5].

Standards are a means of describing the level of quality that Health care organizations are expected to meet or aspire to. Key aim of these standards is to underpin the delivery of quality services. The performance of health care delivery organizations can be assessed against standards ^[6].

In order to provide optimal level of quality health care, a set of standards called Indian Public Health Standards (IPHS) were submitted the draft guidelines for "Indian Public Health Standards for CHCs in 2006 which was then revised in 2007, 2010 and 2012. IPHS is a novel concept to fix benchmarks of infrastructure, including building, manpower, equipments, drugs, quality, through introduction of treatment protocols, and accountability to the public. The study is to evaluate the functioning of the CHCs of Ahmedabad District and their effectiveness in bringing specialised health care within the reach of rural people ^[7].

The CHCs are under constant criticism for their inability to deliver quality services. The main reasons are the lack of proper manpower, inadequate infrastructure and facilities. In the above context, the present study was undertaken with the objective to assess the infrastructure facilities & availability of manpower in the CHCs of Ahmedabad district, Gujarat.

2. Materials and Methods

The present study was conducted in CHCs of Ahmedabad district. Study was carried out from April 2014 to December 2015. It is Cross-sectional study. Predesigned and pretested questionnaire made from IPHS revised guideline 2012 was used for the study. There were 10 CHCs in Ahmedabad district. List of all the CHCs were obtained from the Jilla Panchayat, Ahmedabad. It was planned to study at least 2/3rd (70%) of the existing means CHCs i.e. 7 CHCs. So, it was randomly selected 7 CHCs by chit method. Before conducting the study, prior permission of Chief District Health Officer, Superintendent and Medical officers respectively of CHCs was taken. For the quality assessment of the facilities at CHCs the observational and interview methods were used. Check list was prepared as per the standard of the IPHS. The respondents of the study were the persons in charge of the health facility. However, in some of the facilities, the person in charge was not available hence, another officer was interviewed

3. Result and Discussion

Table 1: Availability of physical infrastructure facilities at CHCs in Ahmedabad

Infrastructure facilities	Availability of Infrastructure facilities (7)	
	Number of CHCs	Percentage of CHCs (%)
Building	7	100.00
OPD rooms/cubicles	7	100.00
Waiting room	3	42.85
Male : Female Separate wards	4	57.14
Water supply	7	100.00
Electricity	7	100.00
Garden	6	85.71
Transport facilities	7	100.00
Telephone facility	7	100.00
E-mail facility	7	100.00
Fax facility	2	28.57
Male : Female Separate latrine	4	57.14
Board to guide patients	7	100.00
complain box	3	42.85

Table 2: Availability of physical infrastructure

Infrastructure facilities	Availability of Infrastructure facilities	
	Number of CHCs	Percentage of CHCs
Operation theatre	7	100.00
Labour room	7	100.00
Laboratory	7	100.00
Cold chain facility	7	100.00
X-ray Room	7	100.00
Blood Storage	2	28.57
Pharmacy	7	100.00
USG	0	0.00

Table 3: Availability of Medical Staff at Community Health Centres in Ahmedabad district.

Staff	IPHS (2012)	Required number	Availability	Percentage available	Existing Gap
General surgeon	1	7	2	28.57	71.43
Physician	1	7	2	28.57	71.43
OBG	1	7	5	71.42	28.58
Paediatricians	1	7	4	57.14	42.86
Anaesthetist	1	7	2	28.57	71.43
Dentist	1	7	1	14.28	85.72
M.O MBBS	2	14	14	100.00	0.00
M.O AYUSH	1	7	3	42.85	57.15
Public Health Specialist	1	7	0	0.00	100.00
Public Health Nurse	1	7	1	14.28	85.72

Table 4: Availability of Nurses and Paramedical

Personnel	IPHS (2012)	Required number	Availability at CHCs	Percentage available at all CHCs (%)	Existing gap
Staff Nurse	10	70	48	68.57	31.43
Pharmacist	1	7	7	100.00	0.00
Pharmacist – AYUSH	1	7	1	14.28	85.72
Lab. Technician	2	14	8	57.14	42.86
Radiographer	1	7	5	71.42	28.58
Dietician	1*	7*	1	14.28	85.72
Ophthalmic Assistant	1	7	6	85.71	14.29
Dental Assistant	1	7	0	0.00	100.00
Cold Chain & Vaccine Logistic Assistant	1	7	1	14.28	85.72
OT Technician	1	7	0	100.00	0.00
Community Based Rehabilitation worker	1	7	2	28.57	71.43
Counsellor	1	7	4	57.14	42.86

Table 5: Availability of Administrative and Group D Staff

Personnel	IPHS (2012)	Required number	Availability at CHCs	Percentage of available at all CHCs (%)	Existing Gap (%)
Registration Clerk	2	14	7	50.00	50.00
Data Entry Operator	2	14	7	50.00	50.00
Administrative Assistant	1	7	0	0.00	100.00
Account assistant	1	7	2	28.57	71.43
Dresser	1	7	2	28.57	71.43
Ward Boys+ sweeper	5	35	26	74.28	25.72
Driver	1	7	7	100.00	0.00

The present study revealed that 100% CHCs had E-mail facility and only 28.57 % CHCs had Fax facility. Similar study conducted at Bharatpur district, Rajasthan by P.R. Sodani *et al.* (2010) [7], showed that 84.6% CHCs had E-mail and 76.9% CHCs had Fax facility. In present study 100% CHCs had Operation theatre, Labour room, Laboratory and Cold chain facility. Similar finding were observed in study conducted by P.R. Sodani *et al.* (2010) [7], showed that 100 % CHCs had Operation theatre, Laboratory and cold chain facility, while 92.3 % CHCs had Labour room. Study done by Jayanta B Sarma *et al.*, (2011) [8] shows, In Arunachal Pradesh 79.16% CHCs had functional Laboratory and 77.08% had functional OT 95.83% had functional Labour room, while in case of Assam 100% CHCs had laboratory and Labour room and 93.51% CHCs had functional OT.

In this 28.57 % CHCs had General surgeon, Physician and Anaesthetist, while 71.42 % CHCs had OBG and 57.14 % CHCs had Paediatrician. 100 % MBBS Medical Officer and 42.85 % AYUSH present at all 7 CHCs. Study by P.R. Sodani *et al.* (2010) [7], also shows that 30.8% surgeon and paediatrician, while 38.5 % Physician and OBG available at CHCs, while only 41% medical officers present at CHCs, which were contradictory to our findings. Study by Jayanta B Sarma *et al.*, (2011) [8] shows that none of the CHCs in Arunachal Pradesh had all 4 specialist, while in Assam 25.92% had all 4 specialist.

In present study 68.57 % Staff nurse, 100 % Pharmacist available, while 57.14% Lab technician and 71.14% Radiographer available. Study by P.R. Sodani *et al.* (2010) [7], also showed poor availability of human resources. Study revealed only 78.4% Staff nurse, 30.8 % Pharmacist, 66.7% Lab technician and only 50% Radiographer available, which were lower than present study.

In present study 100 % CHCs had Pathological tests facility, while 71.42% had X-ray facility and only 28.57% CHCs had ECG facility. Similar consistence findings were observed in study by P.R. Sodani *et al.* (2010) [7], 100% CHCs had Pathological tests facility, while 69.2% CHCs had X-ray facility and only 23% CHCs had ECG facility.

4. Conclusion

100% CHCs had building but only 57.14% CHCs had male female separate wards and toilets. 100% CHCs had OT and Labour room, but only 28.57% CHCs had Blood storage facility and none of the CHCs had USG facility.

The availability of specialists to provide various specialist services at CHCs was found to be very poor in the study district. However it was observed that there were recommended number of MBBS MO present at PHCs, while only 42.85% AYUSH MO were present.

The availability of support manpower was also poor, but found to be better at the participating CHCs compared to the specialists. 100% CHCs had done Pathological tests. X-ray were done in 71.42% CHCs and ECG were done in 28.57% CHCs. Pooling of human resources needs to be done especially Specialists and promoting partnership with the private sector in providing human resources. There is need to be strengthen physical infrastructure like male: female separate wards and toilets, investigation facility.

5. References

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