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Original Research Article

Assessment of sub-centres of Belagavi district according to Indian public health standards 2012 guidelines: a cross sectional study

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ABSTRACT

Background: In the public sector, a sub-health centre (sub-centre) is the most peripheral and first point of contact between the primary health care system and the community. The current level of functioning of the Sub-centres is much below the expectations. Objective: To assess sub-centres of Belagavi District according to Indian public health standards 2012 guidelines.
Methods: A facility based cross-sectional study was conducted in Belagavi district of Karnataka. forty SCs, four SC from each of the 10 Talukas of Belagavi district were selected by simple random sampling. Study period: 1st January to 31st December 2014. Data collected - using a predesigned and structured questionnaire for IPHS facility survey.
Results: The study showed 35% of SCs were catering the services for population as per the norms. Services like ante-natal clinics, post-natal clinics and immunization sessions were conducted regularly in all the SCs. About 33% of SCs had no buildings. A deficiency worth highlighting in the present study was the absence of residential facilities for the staff in half of the SCs. Proper supervision and monitoring of the service delivery activities of the SC staff was done only in 70% of SCs.
Conclusions: IPHS guidelines are not being followed at SC level in the district. Recruitment of SC staff especially the Health Worker Male post should be filled at all the SCs for efficient functioning of the SCs. The SC should be periodically surveyed to identify the deficiency and necessary action could be taken to correct it.

Keywords: Sub-centres, Indian public health standards, Assessment

INTRODUCTION

In the public sector, a sub-health centre (sub-centre) is the most peripheral and first point of contact between the primary health care system and the community. A Sub-centre provides interface with the community at the grass-root level, providing all the primary health care services. As sub-centres are the first contact point with the community, the success of any nationwide programme would depend largely on the well-functioning sub-centres providing services of acceptable standard to the people.[1]

The purpose of the health sub-centre is largely preventive and promotive, but it also provides a basic level of curative care. As per population norms, there shall be one sub-centre established for every 5000 population in plain areas and for every 3000 population in hilly/tribal/desert areas.[1] The health planners in India have visualized the PHC and its sub-centres (SCs) as the proper structural units to provide health services to the rural population.[2]

The current level of functioning of the sub-centres is much below the expectations. In order to provide quality care in these sub-centres, Indian public health standards

(IPHS) are being prescribed to provide basic primary health care services to the community and achieve and maintain an acceptable standard of quality of care. They have been used as the reference point for public health care infrastructure planning and up-gradation in the States and union territories. The IPHS documents have been revised in 2012 keeping in view the changing protocols of the existing programmes and introduction of new programmes especially for non-communicable diseases.[3]

METHODS

The Belagavi district, situated in North West Karnataka, has 10 Talukas and 140 Primary Health Centres and 616 sub-centres. A facility based cross-sectional study was conducted over a period of one year from 1st January 2014 to 31st December 2014 and total Forty SCs, four SCs from each of the 10 Talukas of Belagavi district were selected by simple random sampling.

The permission letter was obtained from the District Health Officer (DHO) of Belagavi before initiating the study and also from the Principal of the J. N. Medical College, Belagavi. The study was approved from the Institutional Ethics Committee for Human Subject's Research, of the institution. Written informed consent was obtained from all the participants. The data collected in the questionnaire was coded and entered in a Microsoft Excel sheet. Tables and Charts were prepared. Rates, Ratios and percentages were calculated.

RESULTS

In the studied Subcentres, 35% of SCs were catering the services for population as per the norms, i.e., between 3,000 to 5,000 (Table 1). 95% of SCs had ANMs, Male Health Worker was available in 42.5% of the SCs and Voluntary Worker was available in 2.5% of SCs.

Table 1: Distribution of SCs according to size of population (N=40).

S. No.	Population covered by SCs	Number of SCs	Percentage (%)
1	3,000-5,000	14	35
2	5,001-8,000	20	50
3	8,001-12,000	4	10
4	12,001-15,000	1	2.5
5	> 15,000	1	2.5
	Total	40	100

In all the SCs the MCH services like antenatal care, intra-natal care, postnatal care, child care during immunization, family planning and contraception and adolescent health care were given. Medical officer's visits to the SCs once in a month was done in 70% of the SCs. Regular visits of health assistant male or lady health visitor for at least once a week was done in 72.5% of the SCs (Table 2).

Table 2: Availability of services at SCs (N=40).

S. No.	Services	No. of SCs	Percentage (%)
1	MCH Services	40	100
2	Visits by - MO	28	70
	- Fixed visit day/timings	2	5
	- Awareness of the Residents about the Doctors visit	5	12.5
3	Visits by HA/LHV	29	72.5
4	Facility for referral	4	10
5	Immunisation services	40	100
6	Treatment of Minor illnesses	27	67.5
7	Facility for taking Peripheral blood	19	47.5
8	DOT centres	39	97.5
9	Other functions and services	34	85
10	Monitoring and Supervision activities	33	82.5
11	Record maintenance	39	97.5
12	Village Health Plan	30	75

Other functions and services like disease surveillance, control of local endemic diseases, promotion of sanitation, field visits and home care and national health programmes including HIV/AIDS control programmes were done in 85% of the SCs. Monitoring and supervision activities like Monitoring of water quality, unusual health events, training of ASHA workers and coordinated services with Anganwadi Workers, ASHA and VHSNC (village health sanitation and nutrition committee) were present in 82.5% of the SCs. (Table 2).

All the Sub-centres were located within the village locality. In 47.5% of the SCs, the distance of the farthest village in the coverage area was less than 5 km from the SC.

Overall 55% of the SCs had designated government buildings, 12.5% of SCs were running in the rented building and 32.5% of SCs had no buildings. In 27.5% of the SCs, the building area was adequate as per IPHS 2012 norms for SC (SC building area should be 85 square meter).

Prominent display boards in local language were present 70% of the SCs where the buildings were present, Suggestion / complaint box in 15%, labour room in 48%, but no deliveries were conducted in SCs. No SCs had their own telephone and transport facilities. Residential facility for ANM was available in 85% of SCs with building. Less than 50% of the required equipments, drugs and furniture were present in the 81% of the SCs with the building (Table 3).

Table 3: Availability of physical infrastructure in SCs with the buildings (N=27).

S. No.	Physical infrastructure	Number of SCs	Percentage (%)
1	Prominent display boards in local language	19	70
2	Separate public utilities for males and females	0	0
3	Suggestion / complaint box	4	15
4	Labour room	13	48
5	Examination room	22	81
6	Water Supply – Piped Source	26	96
	-No water supply	1	4
7	Waste disposal By Incineration and dumping	6	15
	Sent for incinerators outside for disposal	34	85
8	Power supply - Regular power cuts	27	100
9	Residential Facility for ANM	23	85
10	Equipments	22	81
11	Drugs	22	81
12	Furniture	22	81

Whereas in sub centres without the building, the equipments like sphygmomanometer, stethoscope and weighing machines were present in all the SCs and less than 50% of drugs were present in SCs without building.

Citizen's charter was available in 42.5% of SCs. Internal monitoring by MO and male/female supervisors was done in 70% of SCs and external monitoring by Village Health and Sanitation Committee and evaluation by independent external agency was done in only 2.5% of the SCs. In 7.5% of SCs there was availability of various guidelines issued by Govt. of India or Govt. of Karnataka.

DISCUSSION

In this study, 65% of SCs were catering the services for population more than 5,000 (Table 1), which is more than the IPHS norms for SCs indicating more burden on the existing SCs for service delivery. 95% of SCs had ANMs, 42.5% had male health worker available at the SCs and Voluntary Worker was present in 2.5% of SCs. The rural health statistics 2015 data reported, 85% of SCs had ANMs, 72% of SCs had male health worker available at the SCs and in 8% of SCs there were no ANMs or male health workers available.[4]

In a study conducted to Assessment of Health Centers as per Indian Public Health Standards in Chandigarh Tricity showed, human resources were maximum (88%) at SCs in Chandigarh. All the sub centres in tricity had ANMs while male health worker (MHW) was present only in 50% SCs in Mohali and none in Panchkula.[5] In an another study conducted in Chittoor district of Andhra Pradesh on the availability of physical infrastructure and manpower facilities in 34 sub-centres (SC) in 2009-2010 revealed that the deficiency in the availability of health workers male and female were found to be 67.7% and 27.5% respectively.[6]

In the present study, in all the SCs the MCH services like ANC care, Intra-natal care, PNC care, child care during immunization, family planning and contraception and adolescent health care were given. Medical officer visits to the SCs once in a month was present in 70% of the SCs. Regular visits of health assistant male or lady health visitor for at least once a week was present in 72.5% of the SCs (Table 2).

Treatment of the minor illnesses was available in 67.5% of the SCs, in 47.5% of the SCs there was facility for taking peripheral blood. 97.5% of the SCs were the DOTS centres. Other functions and services like disease surveillance, control of local endemic diseases, promotion of sanitation, field visits and home care and national health programmes including HIV/AIDS control programmes were done in 85% of the SCs (Table 2).

Monitoring and supervision activities like Monitoring of water quality, unusual health events, training of ASHA workers and coordinated services with anganwadi workers, ASHA and VHSNC (village health sanitation and nutrition committee) were present in 82.5% of the SCs. Record maintenance was there in 97.5% of the SCs and 75% of the SCs there was Village Health Plan. (Table 2)

A study conducted in Jhajjar district of Haryana to find the gaps in facilities available at health sub-centres as per IPH Standards in 2011 showed, Services regarding ante-natal, natal and post-natal care, immunisation, family planning and contraceptive services, Oral Rehydration Solution (ORS) and other drugs for minor ailments, smear preparation for malaria, etc were available at all the sub-centres. All the sub-centres were also functioning as Directly Observed Treatment, Short course (DOTS) centres. National health programs, disease surveillance, control of locally endemic diseases, promotion of sanitation and field visits for home care were being carried out at all the sub-centres. At least one multipurpose health worker female [MPHW (F)] was available in all the sub-centres, multipurpose health worker male [MPHW (M)] at 9 sub-centres and additional MPHW (F) at 3 sub-centres were available.[7]

In this study, all the SCs were located within the village locality. In 47.5% of the SCs, the distance of the farthest

village in the coverage area was less than 5 Kms from the SC. About 55% of the SCs had designated government buildings. In 27.5% of the SCs, the building area was adequate. This was less when compared with Rural Health Statistics 2015 data which reported, 79% of SCs had Govt. building, 15% SCs had rented building and 6% had rent free Panchayat building in the country. 67% o of SCs had Govt. building, 21% SCs had rented building and 11% have rent free Panchayat building in the Karnataka state.[4]

The study conducted in Jhajjar district of Haryana showed that the locality of sub-centres were in the middle of the villages and were easily accessible. Out of 15 study sub-centres, only one had designated building, in other two it was under construction. Rest all were running in the rented buildings and space was not adequate.[7] Chandigarh Study revealed, SCs in Mohali had their own buildings, while half of centres in Chandigarh and Panchkula ran in own buildings.[5]

In this study, prominent display boards in local language were present 70% of the SCs where the buildings were present. In 15% of SCs the waste disposal method practiced was incineration and dumping. In 85% of SCs solid waste was sent to outside for incineration (Table 3).

No sub-centres had the telephone and transport facilities. Residential facility for ANM was present in 85% of SCs with building [Out of 40 SCs, 27 SCs had buildings], and less than 50% of the required equipments, drugs and furniture were present in the 81% of the SCs with the building (Table 3). This is similar to rural health statistics 2015 data, which reported that 56.5% of SCs in Karnataka have the ANM quarters and among these in 90% of the SCs the ANMs resided. 54.7% of SCs in India have the ANM quarters and among these in 65% of the SCs the ANMs resided.[4]

The study conducted in Chittoor district of Andhra Pradesh showed that the residential facility for health workers was available only in 26.4% SCs.[6] The Haryana study showed that, citizen's charter was available in only 3 sub-centres out of 15 studied SCs, while guidelines for provision of services were available in 6 sub-centres only. Internal monitoring was being carried out in all the sub-centres but, external monitoring was being carried out in 8 sub-centres. Significant gaps existed in the facilities available at sub-centres. One of the key factors responsible for non-utilisation of health services was the lack of adequate infrastructure and logistics at the sub-centre level.[7]

CONCLUSION

In about more than half of the SCs only two thirds of total required staff was available, indicating the increased workload on the existing staff. Recruitment of SC staff especially the Health Worker Male post should be filled at all the SCs. Services like Ante-natal Clinics, Post-natal Clinics and Immunization sessions were conducted regularly in all the SCs. Most of the SCs were located at easily accessible areas to general public as well as to the ambulances. About one third of the SCs had no buildings. A deficiency worth highlighting in the present study was the absence of residential facilities for the staff in half of the SCs.

The medical equipment as well as the general equipment was found lacking in many aspects in the SCs. Serious deficiencies were observed in supply of drugs and only a little more than half of the essential medicine list was available on an average in the SCs. Service delivery will be compromised if there is such a deficiency. The SC should be periodically surveyed to identify the deficiency and necessary action could be taken to correct it. Proper supervision and monitoring of the service delivery activities of the SC staff should be done by medical officers, health assistant (male) and lady heath visitor.

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.

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REFERENCES

1. National Rural Health Mission. Ministry of Health and Family Welfare. Government of India. Indian Public Health Standards-2012 for Sub Centres. Available at: http://nrhm.gov.in/images/pdf/guidelines/iphs/iphs-revised-guidlines-2012/sub-centers.pdf Accessed on 15 February 2017.
2. National Rural Health Mission. Ministry of Health and Family Welfare. Government of India. Indian Public Health Standards-2012 for Primary Health Centres. Available at: http://nrhm.gov.in/images/pdf/guidelines/iphs/iphs-revised-guidlines-2012/primay-health-centres.pdf Accessed on 11 February 2017.
3. National Rural Health Mission, Ministry of Health and Family Welfare, Government of India. Indian Public Health Standards. Available at: http://nrhm.gov.in/about-nrhm/guidelines/indian-public-health-standards.html. Accessed on 15 February 2017.
4. Ministry of Health and Family Welfare (Govt. of India), Rural Health Statistics in India 2015 (updated up to March, 2015); New Delhi: Statistics Division, 2015.
5. Dhiman A, Goel NK, Walia DK, Galhotra A, Navpreet. Assessment of Health Centers As Per Indian Public Health Standards in Chandigarh

Tricity, India. Ind J of Applied Res. 2014;3(7):420-1.
6. Reddy BN, Prabhu GR, Sai TSR. Study on the Availability of Physical Infrastructure and Manpower Facilities in Sub-centres of Chittoor District of Andhra Pradesh. Ind J of Public Health. 2012;56(4):290-2.
7. Kumar A, Goel MK, Jain RB, Khanna P. Gaps in facilities at health sub-centres as per Indian Public Health Standards in a district of Haryana. Asian J Management Res. 2011;2(1):651-8.

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