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RESEARCH ARTICLE

FACILITIES AVAILABLE AT HEALTH SUB CENTRES AFTER LAUNCH OF NRHM. A COMPARATIVE STUDY.

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Abstract

Background: Sub centre is the first contact between community and the health care provider. Since then ten years had been passed with the launch of National Rural Health Mission(NRHM), many changes has been seen regarding infrastructure, equipment, supplies etc. This study is done to assess the facilities available at health sub–centre as per Indian Public Health Standard (IPHS) after launch of NRHM and to compare the same between two blocks of different districts. **Material and methods**: Main objectives of this study were to assess the availability of manpower, physical infrastructure and services availability at sub- centers as per Indian Public Health Standard (IPHS) and to compare between two blocks of Kashmir divisions one rural block (Leh) and one urban block (Hazratbal). It was a health facility based cross-sectional study. Two stage sampling technique was used to draw the sample. **Results:** Almost all parameters were comparable between both blocks except for few parameters. Services like ANC registration, immunization, JSY, promotion of sanitation, field visit and treatment of minor ailments, it has been found that the coverage in all sub-centre's were satisfactory. On other hand services like conducting delivery, intranatal care, postnatal care, and referral of high risk pregnancies were very poor in most of sub-centre in both blocks. ASHA training and supervision of work of ASHA was satisfactory. Adequate FMPHW were seen in both blocks, but gaps were seen in male health workers and voluntary workers. Most of sub centre's were designated government building and within the villages, but gaps were seen in continuous electricity and water supply in most of sub-centre. Gaps were also seen in internal and external monitoring of sub-centres.

INTRODUCTION

Sub centre is the first contact between community and the health care provider. One sub- centre has been established for every 5000 population in general and one for every 3000 population in hilly, tribal and backward areas. Sub-centre provides packages of services like immunization, antenatal, natal and postnatal care, prevention of childhood diseases, family planning, counseling and many others(1).

To execute all these packages of services, the human resources, infrastructure, equipment, and supplies would be needed to deliver quality services to peoples. The level of functioning of the Sub-centre's is much below the expectations. 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 (2). Since then ten years had been passed with the launch of NRHM, many changes has been seen regarding infrastructure, equipment, supplies etc. This study is done to assess the facilities available at health sub – centre as per IPHS after launch of NRHM and to compare the same between two blocks of different districts.

Material and methods: Main objectives of this study were to assess the availability of manpower, physical infrastructure and services availability at sub-centers as per Indian Public Health Standard (IPHS).

To compare between two blocks of different districts one rural district (Leh) and one urban district (Srinagar).

Study Area.

Srinagar district being the summer capital of J&K is predominantly urban, but rural, slum and tribal areas also exist. The population of District Srinagar for the year 2011 is 12 lakhs approximately. There are 52 Sub-centers in the district. We choose medical block Hazratbal as it comes under the Community Medicine, medical college Srinagar.

Leh district is rural area and remotest district of Kashmir Division with a population of 1.2 lakhs. Leh district with an area of 45,000 km ^{2} is the second largest district in the country in terms of area. Leh is at an altitude of 3542 metres. Leh has a cold desert climate with long, harsh winters from October to early March, with minimum temperatures fall below freezing point for most of the winter.

Study design: A Health facility based cross-sectional study

Sampling Method: Two stage sampling technique was used to draw the sample.

1) **First stage**: Out of the total 10 districts in Kashmir valley, 2 districts were sampled constituting 20% of total districts (using convenient Sampling method).
2) **Second stage**: From each districts one block in selected, 10 Subcentre's were sampled by using simple random sampling technique (lottery method).

A total of 10 sub-centres were selected from each block i.e Leh and Hazratbal for the study.

At District and Block level, permission was sought from concerned officials. A standard IPHS pre designed format was used to collect all information regarding Sub-centre's. At sub-centre's ANMs/ FMPHWs were interviewed on spot and secondary data were obtained from records.

Observations: Average population of Srinagar district was 2946 with range of 815 to7723. Average population of Leh district is 849 with range of 265 to 2142. As per availability of services at sub-centers in both blocks it has been seen that all sub- centers provide services like ANC registration, Immunization, family planning and contraception, Tetanus Toxoid and first Aid. But majority of SCs in both districts are lacking behind in services like Intra Natal care, Post Natal care and new born care. Details are given in table 1.

Table 1: Distribution of subcentres as per availability of services.

Particulars	Hazratbal Block (n= 10)		Leh Block (n= 10)	
Services available*	n	%	n	%
Ante- natal care	10	100	10	100
Intra- natal care	3	30	2	20
Post-natal care	3	30	8	80
New born care	1	10	2	20
Child care with Immunization	10	100	10	100
Family Planning and contraception	10	100	10	100
Adolescent health care	5	50	5	50
Assistance to school health services	6	60	5	50
Janani Suraksha Yojna services	9	90	7	70
Minor ailments like injuries Anti-septic dressing, injection Tetanus Toxoid.	10	100	10	100

First Aid	10	100	10	100

As per specific services avaliable at sub-centres, it was found that non of sub- centers are conducting delivery in both blocks. IUCD insertion was also 0% in both , but on other hand services like ANC like T.T, IFA, Wt and BP measurement was 100%. Other services like monthly visit of doctors was seen in 80% of sub-centers in Hazratbal and 30% in leh district. But fixed timing/day of doctors visits was found in 70% in Hazratbal compared to 10% in sub-centers of Leh block. Referral of complicated pregnancy/ delivery at SCs for 24 hours was seen in 40% of SCs in Hazartbal and 0% in Leh.

Table 2: Distribution of sub-centres as per other functions and services.

Other function& services	Hazartbal (n – 10)	Leh (n -10)
Disease surveillance	10%	20%
Control of locally endemic diseases	10%	30%
Promotion of sanitation	90%	90%
Field visit and home care	70%	50%
National AIDS control prog.	0%	0%

Above table shows that out of surveyed health facilities field visits and home care services were found in 70% and 50% while as promotion of sanitation was present in 90% and 80% of Subcentres in Hazratbal and Leh block respectively.

The services like disease surveillance activities, control of locally endemic diseases, National AIDS Control Programme activities are totally lacking behind.

As per monitoring and supervision is concern, monitoring training of ASHA is seen in 70% and 100% of SCs in Hazratbal and Leh block respectively. Water quality monitoring is lacking in Hazratbal while it is seen in 60% of SCs of Leh block. Coordinated services of subcentres with Anganwari worker and supervision of activities of ASHA was 100% in both the block. Sub-centre plan yearly was available in 60% and 40% in Hazartbal and Leh blocks. Maintenance of records and registers were also good in both blocks.

Table 3: Physical infrastructure of sub- centers (n=10 for each district)

		Hazratbal n =10		Leh n =10	
Sub-center	Within village	10	100(%)	8	80(%)
	Far from village	0	0(%)	2	20(%)
Designated govt. building		3	30(%)	9	90(%)
Display board in local language		6	60(%)	8	80(%)
Labour room		0	0(%)	8	80(%)
Clinic room		7	70(%)	9	90(%)
Regular electricity		5	50(%)	1	10(%)
Examination room		10	100(%)	10	100 %
Source of water supply	Piped	9	90(%)	0	0(%)
	Bore well/pump	0	0(%)	10	100%
	others	1	10(%)	0	0(%)

Table no. 3 depicts that all SCs of Hazratbal block were located within the villages and 30% were designated governments building. On the other hand 80% of SCs of Leh block were designated government building. Labour room was totally absent in SCs of hazaratbal block and was present in 80% of SCs in Leh block. Regular electricity and continuous water supply was lacking in both blocks. As for waste disposal is concern disposal of Bio-Medical waste in surveyed Subcentres of Hazratbal block was done by dumping in 50%, burning 20% and 20%
were throwing it in municipality dump and 10% dispose indiscriminate, while as in Leh disposal was done by dumping in 50% Subcentres , and 50% of Subcentres were disposing of their Bio-Medical waste by burning.

Table 4 shows the availability of manpower in the selected sub- centers of both blocks, it has been seen that at least one FMPHW female was available in the entire sub –centers.

Parameter	IPHS norm	Hazartbal Block n =10	Deficiency/surplus	Leh Block n=10	Deficiency/surplus
Health worker female(FMPHW)	1+1	15	5(def.)	23	3(extra)
Health worker male	1	4	6(def.)	3	7(def.)
Voluntary worker (Sweeper)	1	8	2(def.)	3	7(def.)

Where quality control of sub- centers is concern it has been seen that citizen's charter was available in one SC in Hazratbal and none in Leh block. In Hazratbal block only two SCs was supervised by supervisor/CHO and none in Leh. 60% and 5% of SCs were supervised by MO/BMO in Hazratbal and Leh block respectively. External monitoring was being carried out in six and seven sub- centers of Hazratbal and Leh blocks respectively.

Discussion:

In this study, at the outmost there were large differences in the average population between the two blocks i.e. Hazratbal and Leh block. Leh is a dry desert area with scare population with village's located far flung area. Regarding service availability in both blocks it has been seen that services like ANC registration, immunization, family planning and treatment of minor ailments were satisfactory but in majority of sub centre's there were lacking in intra natal care, new born care and post natal care services, except for post natal care services were given by 80% of sub centre's in Leh block. In a study done by Roy et al (3) almost similar findings were seen. Reason may be that after launch of NRHM emphasis were given to mother and child health. Also after introduction of ASHA, the health seeking behavior of rural beneficiaries has changed. On the other hand success in intra natal care and post natal care is not yet achieved, reason behind this is that no delivery is conducted in the SCs of both districts due to many reasons like non availability of doctors, staff nurse, continuous electricity and 24x7 emergency services at SC level. During my survey I also noticed that institutional delivery has improved and people are quite aware of importance of institutional delivery so they also prefer to go to higher centre for delivery where gynecologist is present and stay there for months or more. That's why intra natal and post natal care services at SC level were poor.

Other specific services like monthly visit of doctors were seen in 80% in Hazratbal compared to 10% in Leh, it has been seen that Hazartbal is a study field area of community medicine of Govt.Medical College Srinagar and post graduates are deputed on weekly/ monthly basis to visit the SCs on fixed day. In a study done in District Andra Pradesh they found that 8.8% of SCs were visited by Medical Officer (4) but a study done in Kerala it was found that 58.9% of SCs were visited by medical officer every months(5).

Disease surveillance and control of locally endemic disease were seen only in 10 to 30% in both blocks, may be FMPHW and other staff were not given proper training and also due to lack of monitoring on such activities. On the other hand coverage by SCs on promotion of sanitation was satisfactory. National Health Programmers' were lacking in all the sub-centres of both blocks.

Water quality monitoring is lacking in Hazratbal while it has seen in 60% of SCs of Leh block. More emphasis should be given on water quality monitoring as there is increase emerging of water born diseases due to environmental changes.

As per availability of physical infrastructure is concern, majority of SCs were located within the village. Finding was consistent with a study done by Kumar et al (6).

90% of SCs were designated Government building in Leh compared to 30% in hazaratbal. Labour room was not available in any of SCs in Hazartbal, but in 80% of SCs in Leh were having labour room but no delivery has been conducted, reason already mentioned earlier, other than that there is lack of continuous water supply and electricity in most of SCs in Leh. Continuous water supply is a big problem in Leh as winter temperature go down below freezing point. Special heating system is also required to keep labour room warm.
50% and 1% of SCs in Hazratbal and Leh blocks had regular electricity. Inadequate water supply and lack of electricity facility at SCs level is also documented in other studies (7, 8, 9) There is no communication facility from government; most of them has their personal mobile phone except ASHA. Same is with transport facilities in both blocks, they use public transport to carry out immunization services and fare is not provided to them.
All the sub-centres had at least one FMPHW; Leh block has FMPHW as per IPHS norms i.e. two in each sub-centre. Even in a study conducted in Kerala they found 56.4% of SCs has two FMPHW (4). But there is a significant gap in male health workers in both blocks and same gaps is also seen in other states found in many studies (6). Deficiency of manpower will definitely affect the health care delivery.
Importance of citizen charter was not understood by health officials, as it was lacking in both the blocks. Citizen charter helps in improving community awareness and utilization of the service at sub- centre level. And involvement of Panchayati Raj Instiurion (PRI) is also important as they are one of the key links.

Limitation of the study:
The study was conducted in one block from respective district on convenient sampling, so it might not represent the whole district of Srinagar and Leh. Due to shortage of time and resource all parameter of sub centre could not be included.

Conclusion: Almost all parameters were comparable between both blocks except few parameters like designated govt. buildings, labour room, adequate FMPHW were better in Leh as compared to hazratbal block. Other parameters like regular water supply, continuous electricity, supervision by MO/ ZMO and timely visit of doctor at sub-centres were better in Hazratbal compared to Leh block. Identified gaps need to be addressed on priority basis. Supervision of sub-centres by medical officer as well as community participation is important.

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Nomenclature:
IPHS Indian Public Health Standard
NRHM National Rural Health Mission
DAC District ASHA Coordinator
FMPHW Female multipurpose health worker
MHW Male health worker
SCs Sub –centre's
IUCD Intra uterine contraceptive device.
ASHA Accredited Social Health Activist.
PRI Panchayati raj institution.
ANC Ante natal care
IFA Iron folic acid
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