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INDIA HEALTH ACTION TRUST, LUCKNOW



A report submitted on

GAP ANALYSIS OF LABOUR ROOM OF PRIMARY HEALTH CENTRE(PHCs) IN DISTRICT RAMPUR,UP BASED ON INDIAN PUBLIC HEALTH STANDARDS (IPHS)

Submitted by – Dr Kalpana Pawalia (PG/13/031)

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Post-Graduate Diploma in Hospital and Health Management, New Delhi 2013-2015



International Institute of Health Management Research New Delhi

This certificate is awarded to

Dr Kalpana Pawalia

In recognition of having successfully completed her

Internship in the project

RMNCH+A, UP-TSU, Lucknow

And successfully completing her dissertation project on

GAP ANALYSIS OF LABOUR ROOMS OF PRIMARY HEALTH CENTRES (PHCs)

IN DISTRICT RAMPUR, UTTAR PRADESH BASED ON IPHS

At

INDIA HEALTH ACTION TRUST (IHAT), UP

She comes across as a committed sincere & diligent person who has a

strong drive and zeal for learning

We wish her all the best for future endeavors.

Dr Amerital

Dr Amritesh Mullick Zonal Technical Specialist, Bareilly zone IHAT , Lucknow

CERTIFICATE FROM DISSERTATION ADVISORY COMMITTEE

This is to certify that **Dr Kalpana Pawalia**, a student of The **Post Graduate Diploma In Health And Hospital Management (IIHMR, New Delhi)** has worked under our guidance and supervision. She is submitting this dissertation titled "GAP ANALYSIS OF LABOR ROOMS OF PRIMARY HEALTH CENTRES (PHCs) IN DISTRICT RAMPUR, UTTAR PRADESH BASED ON INDIAN PUBLIC HEALTH STANDARDS(IPHS) at IHAT (India Health Action Trust), Lucknow in partial fulfillment of the requirement for the award of the Post Graduate Diploma in Health and Hospital Management.

This dissertation has the requisite and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

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TO WHOM SO EVER IT MAY CONCERN

This is to certify that Dr Kalpana Pawalia , a student of Post Graduate Diploma in Hospital And Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at India Health Action Trust (IHAT) , ,Lucknow from 2^{nd} march 2015 to 10^{th} may 2015.

The candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The internship is in fulfillment of the course requirements. I wish her all the success in all her endeavors.

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CERTIFICATE OF APPROVAL

The following dissertation titled GAP ANALYSIS OF LABOUR ROOMS OF PRIMARY HEALTH CENTRES (PHCs) IN DISTRICT RAMPUR, UP BASED ON INDIAN PUBLIC HEALTH STANDARDS(IPHS) at IHAT, Lucknow is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of post graduate diploma in health and hospital management for which it has been submitted.it is understood that by this approval the undersigned do not necessarily endorse or approve any statement made ,opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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This is to certify that the dissertation titled GAP ANALYSIS OF LABOUR ROOMS OF PRIMARY HEALTH CENTRES (PHCs) in DISTRICT RAMPUR,UP BASED ON INDIAN PUBLIC HEALTH STANDARDS(IPHS) and submitted by Dr Kalpana Pawalia, enrollment no. PG/13/031 under the supervision of Dr Amritesh Mullick, Zonal Technical Specialist (RMNCH+A programme) IHAT,UP-TSU and Dr B S Singh, IIHMR New Delhi for award of post graduate diploma in hospital and health management of the institute carried out during the period from 2nd march 2015 to 10th may 2015 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institute of higher learning.

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"Any accomplishment requires the grace of god as well as help and good wishes of many people and this work is not different"

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Dr Kalpana Pawalia

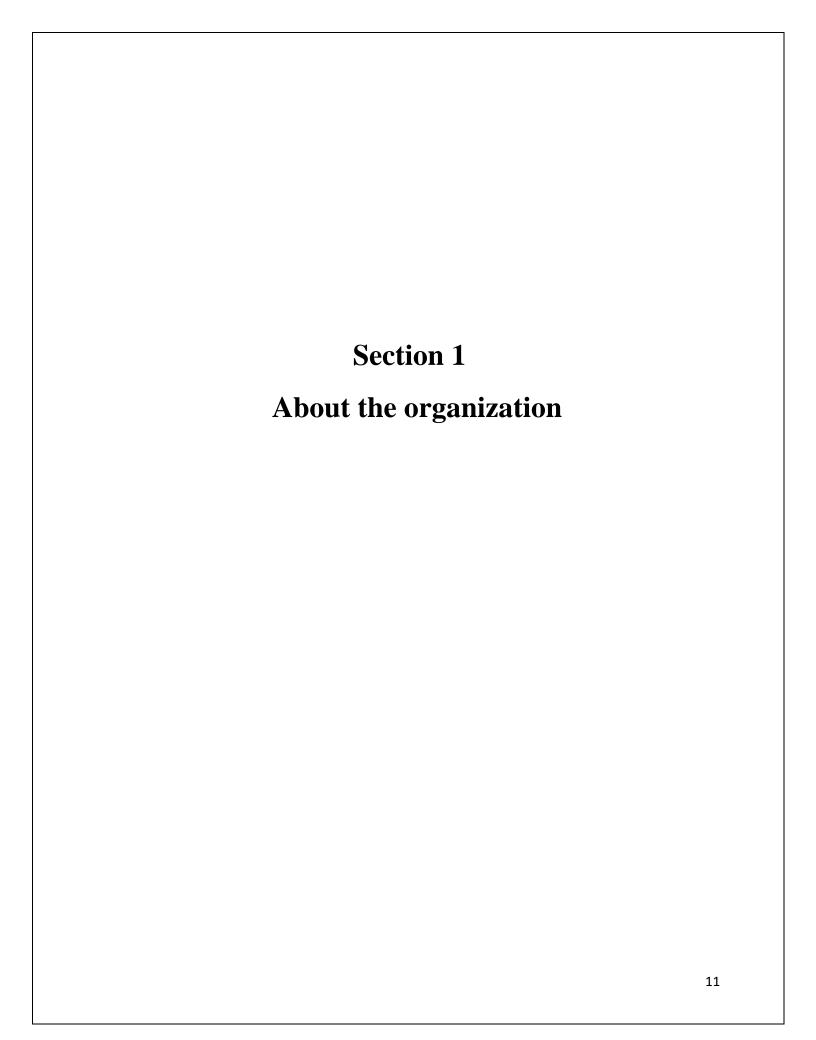
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ACRONYMS/ABBREVIATIONS

- 1. ANC -Ante Natal Care
- 2. ANM- Auxillary Nurse Midwif
- 3. BCC- Behavior Change Communication
- 4. IPHS- Indian Public Health Standards
- 5. IEC- Information, Education, Communication
- 6. JSY- Jananisuraksha Yojana
- 7. LBW- Low Birth Weigth
- 8. MMR- Maternal Mortality Ratio
- 9. NHM-National Health Mission
- 10. NUHM-National Urban Health Mission
- 11. NFHS-National Family Health Survey
- 12. PHC-primary health centre
- 13. SRS-Sample Registration System
- 14. TSU-Technical support unit



About the Organization and Program Profile

The India Health Action Trust (IHAT) was established in 2003 to improve public health in India and abroad by extending proven techniques, insights and principles pivotal to the success of the University of Manitoba's and Karnataka Health Promotion Trust's projects. IHAT specializes in providing comprehensive technical assistance and training in programme planning and management. With emphasis on incorporating science in programme design and monitoring, it aims to maximize both efficacy and efficiency of interventions.

With the University of Manitoba's (UoM) Centre for Global Public Health, IHAT has assisted the national governments of Bhutan and Sri Lanka to initiate and scale up HIV prevention. IHAT manages the designated Technical Support Unit (TSU) for the Karnataka State AIDS Prevention Society. It has provided technical assistance to government agencies in Maharashtra, Bihar, Rajasthan, Andhra Pradesh, Tamil Nadu, Uttar Pradesh and Goa. IHAT has also received support from UNICEF and Save the Children India, for projects in Rajasthan to protect infants from HIV, to provide life skill education for adolescents, and to provide community outreach services to rural children.

The Government of Uttar Pradesh (GoUP) and Bill & Melinda Gates Foundation (BMGF) have signed a Memorandum of Cooperation on December 13th 2012, the objectives of which are:

• To reduce maternal, neonatal and child morbidity and mortality, total fertility and improve key nutrition and health outcomes by scaling up existing and new innovative solutions through public and private sectors through techno-managerial support to the public health system to improve the reach, coverage and quality of essential primary health, immunization

and nutrition services for children under five years and women of reproductive age especially pregnant women, newborns and children under five years – as per targets in the State Program Implementation Plan in the areas mentioned above;

- To improve agricultural productivity by improving indigenous state capacity to conduct research into critical areas and supportive innovations in extension;
- To enhance financial inclusion (e.g., by improving government to person payments through digitization); and
- To document and disseminate results and lessons to influence related health and nutrition programs within India and other developing countries.

Services provided by the Organization:

IHAT provides technical support through various mechanisms:-

- At the National level, IHAT has been involved in Data Triangulation Project under the leadership of NACO. In this project, IHAT was primarily responsible for HIV data triangulation in the states of Karnataka and Maharashtra and provided technical support to Indian Institute of Public Health (IIPH), Hyderabad, and Andhra Pradesh. The project was undertaken to enhance evidence-based programming and policy in dealing with the HIV epidemic. The project was initially implemented in selected states as a pilot.

 Learning's from these pilots have guided NACO to scale up the process in other states and encouraged an environment of evidence based planning.
- In pursuance of the MOC, BMGF has contracted the University of Manitoba
 (UoM)/India Health Action Trust (IHAT) to set up a Technical Support Unit (TSU) that

will report to the Principal Secretary Health, Government of Uttar Pradesh in Lucknow. The TSU will have the support structures in select divisions, districts, and blocks to advice and support government structures (state/district/divisional level machinery, PHCs, sub-centers, and ICDS centers, etc.), frontline workers (FLW) and other service delivery points. The TSU's goal is to support the government to increase the efficiency, effectiveness and equity of the delivery of key RMNCH+A services to improve RMNCH+A outcomes in UP.

Additionally in Karnataka, IHAT has continued to extend technical assistance to
 Karnataka State AIDS Prevention Society through the Technical Support Unit (TSU) to
 support the scale up of quality Targeted Interventions(TIs) in the State and help it achieve
 the goals and objectives of NACP III.

IHAT in collaboration with UoM and SIHFW initiated the State Training Resource Centre which was successful in ensuring standardized and high quality training of TIs as per NACP III operational guidelines. Besides this, IHAT, along with Centre for Global Health, University of Manitoba provided technical support to South Asian Association for Regional Cooperation (SAARC) countries like Bhutan and Sri Lanka to help them initiate and scale up the HIV prevention programmes

INDIAN PUBLIC HEALTH STANDARDS (IPHS

Objectives of Indian Public HealthStandards (IPHS) for PrimaryHealth Centres (PHC)

The overall objective of IPHS is to provide health carethat is quality oriented and sensitive to the needs of the community.

The objectives of IPHS for PHCs are:

- i. To provide comprehensive primary health careto the community through the Primary Health Centres.
- ii. To achieve and maintain an acceptable standardof quality of care.
- iii. To make the services more responsive andsensitive to the needs of the community.

LABOUR ROOM(3.8 m x 4.2 m)

Essential

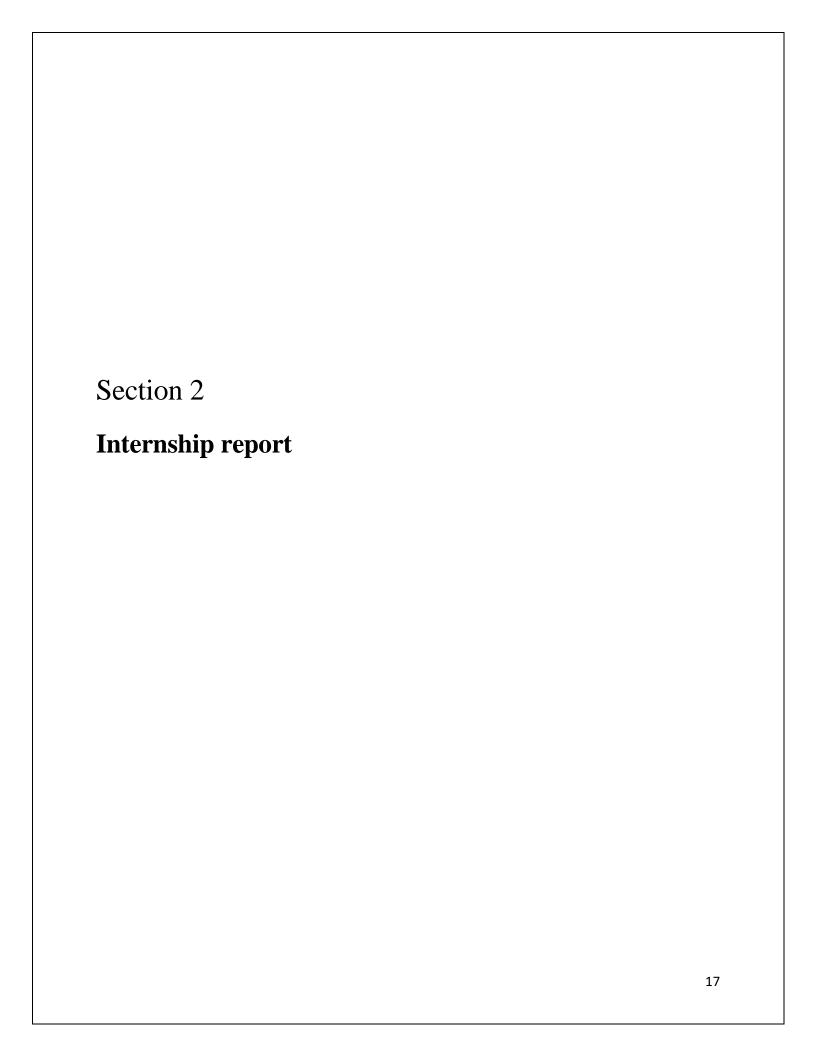
- a. Configuration of New Born care corner
 - Clear floor area shall be provided in the room for newborn corner. It is a space within the labour room, 20-30 sq ft in size, where a radiant warmer (Functional) will be kept.
 - Oxygen, suction machine and simultaneously accessible electrical outlets shall be
 provided for the newborn infant in addition to the facilities required for the mother. Both
 Oxygen Cylinder and Suction Machine should be functional with their tips cleaned and
 covered with sterile gauze etc for ready to use condition. They must be cleaned after use
 and kept in the same way for next use.
 - The Labour room shall be provided with a good source of light, preferably shadow-less.
 - Resuscitation kit including Ambu Bag (Paediatric size) should be placed in the radiant warmer.
 - Provision of hand washing and containment of infection control if it is not a part of the delivery room.
 - The area should be away from draught of air, and should have power connection for plugging in the radiant warmer

b. There should be separate areas for septic and aseptic deliveries.

- c. The Labour room should be well-lit and ventilated with an attached toilet and drinking water facilities. Facilities for hot water shall be available.
- d. Separate areas for Dirty linen, baby wash, toilet, Sterilization.
- e. Standard Treatment Protocols for common problems during labour and for newborns to be provided in the labour room.
- f. Labour room should have restricted entry. Separate foot wear should be used.
- g. All the essential drugs and equipment (functional) should be available.
- h. Cleanliness shall always be maintained in Labour room by regular washing and mopping with disinfectants. Labour Room shall be fumigated i. at regular interval

(Desirable).

- j. Delivery kits and other instruments shall be autoclaved where facility is available.
- k. If Labour Room has more than one labour table then the privacy of the women must be ensured by having screens between 2 labour tables.



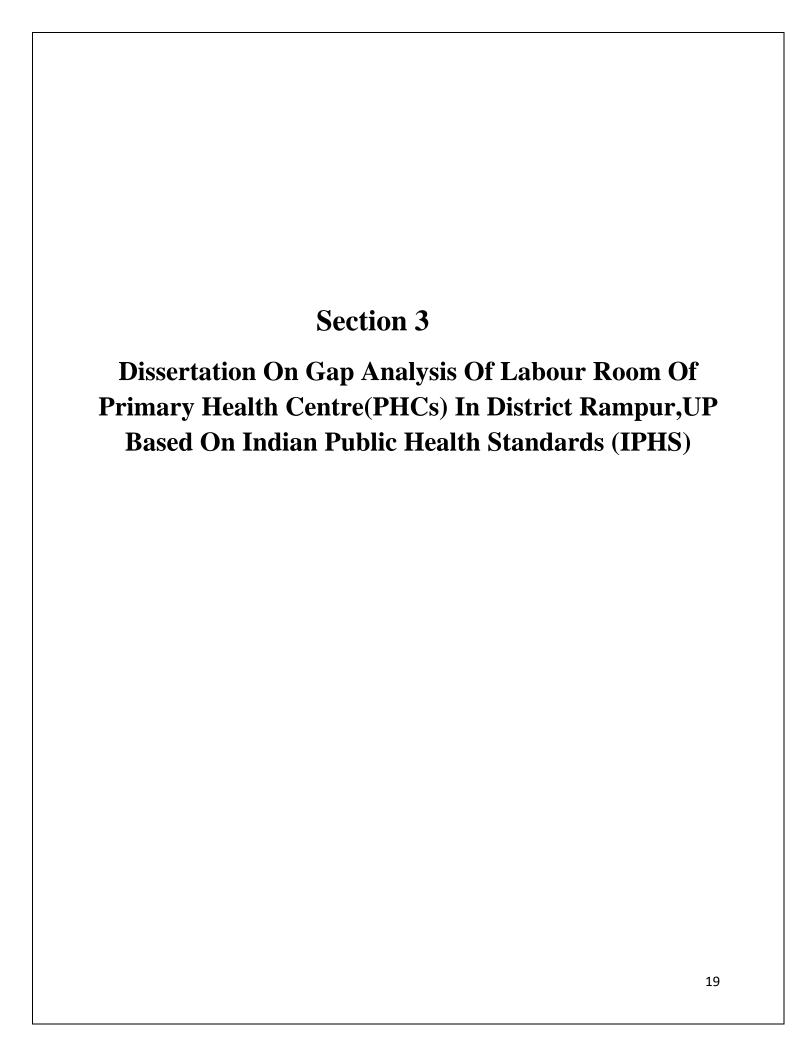
Introduction-

Internship training is an integral part of the second year program, where we have to observe and learn the work culture of organization. Also it will be necessary to participate in various department/activities so that we get first hand exposure of the different departments and work done in the organisation and through which one can understand process of work and thereafter be able to involve in decision making.

I have beem appointed as District Technical Specialist(RMNCH+A), by India Health Action Trust at Rampur District, Uttar Pradesh. The focus of the project is on to reduce maternal, neonatal and child morbidity and mortality, total fertility and improve key nutrition and health outcomes by scaling up existing and new innovative solutions through public and private sectors through techno-managerial support to the public health system to improve the reach, coverage and quality of essential primary health, immunization and nutrition services for children under five years and women of reproductive age especially pregnant women, newborns and children under five years

Objective of Internship

- (a) Understand the work pattern of India Health Action Trust, and its organizational structure
- (b) Learn various managerial and administrative skills needed to work with a government system and to help in effectively implementation of the assigned program (RMNCH+A Project) in the government setup to ensure the overall benefit of the community.
- (c) Identifyexisting gaps in human resource, service deliveryquality, logistics availability, data collection, analysis and implementation of assigned project (RMNCH+A Project) in the district and to propose probable solutions to them.
- (d) Coordinate proper functioning of the assigned program (RMNCH+A)



INTRODUCTION

Primary Health Centre is the cornerstone of rural health services- a first port of call to a qualified doctor of the public sector in rural areas for the sick and those who directly report or referred from Sub-Centres for curative, preventive and promotive health care. India is signatory to the Alma Ata declaration of 1978 and had committed to attaining "health for all" by 2000 AD through the primary health care approach. Further, the Bhore Committee (1946) strongly proposed the primary health care approach for effective and equitable health care services in India. primary health care seek to extend the first level of the health system from sick care to the development of health .The national rural health mission (NRHM) was launched by the Hon'ble prime minister of India in 2005 with a goal to improve the availability and accessibility of quality health care to the people, especially for those residing in rural areas , the poor and women.

A typical PHCs covers a population of 20,000 in hilly, tribal, or difficult areas and 30,000 populations in plain areas with six indoor/observation beds. It acts as a referral unit for six subcenters and refer out cases to community health centers (CHC) (30 bedded hospital) and higher order public hospitals located at sub-district and district level. However, as the population density in the country is not uniform, the number of PHCs would depend upon the case load. PHCs should become a 24 h facility with nursing facilities. Select PHCs, especially in large blocks where the CHC/first referral unit is over 1 h of journey time away, may be upgraded to provide 24 h emergency hospital care for a number of conditions by increasing number of Medical Officers, preferably such PHCs should have the same IPHS norms as for a CHC.

The IPHS gives a framework and structure to find out the gaps existing in the healthcare delivery in the rural communities as it aids in the measurement of indicators which in turn helps to measure the performance with the resources available. The availability of trained manpower, essential drug and services are the main imperative which cannot be compromised and which is well captured in the IPHS survey format developed by NRHM.

REVIEW OF LITERATURE

A study was conducted by V Srinath et al (2012) to assess the compliance of PHCS to IPH standards. The study revealed that there were great variations between the PHCs in terms of manpower, and less in terms of drugs and supplies.

In another study by Arun Kumar et al(2010) conducted a study to identify the gaps in facilities existing at the subcentres in comparison to IPHS norms. The study revealed that significant gaps existed in the available infrastructure and availability of manpower (especially male workers) in the selected sub centers. Gaps were also there in the parameters designed for quality control of the sub centers eg citizen's charter, external monitoring etc. availability of services and service delivery at the sub centers was satisfactory.

A study was carried out to find out and compare to what extent the IPHS were followed by the PHCs in the selected districts of both the Empowered Action Group (EAG) state of Assam and non EAG state of Karnataka by Zaman FA and Lashkar NB in 2010. It was a Cross sectional observational study conducted during September-October 2008 where the quality of care and services provided in the selected PHCs as per the IPHS norms was assessed. All the PHCs in both the studied districts were rendering the assured services of OPD, 24hrs general emergency service and referral services while 24 hour delivery services were being provided by 80% of the PHCs of the selected districts of both the states. Functional labor rooms were available only in 80% and 90% of the studied PHCs in Assam and Karnataka respectively. Basic laboratory facilities, for routine blood, urine and stool examination were available in 80% of the studied PHCs in the non-EAG state of Karnataka while it was only in 20% of the studied PHCs of the EAG state of Assam. The findings of the present study revealed important deficiencies as per IPHS norms in the studied PHCs of both Assam and Karnataka.

RATIONALE

Despite recent gains and commitments from the government of Uttar Pradesh (GOU) and active leadership of key stakeholders to improve health infrastructure and outcomes, deep-rooted problems limit the government's ability to affect lasting change. Persistent barriers include poor quality and non availability of frontline and primary health center level services and staff, limited access to services by neglected and marginalized populations, lack of accurate data, lack of effective program management, weak training systems, absence of supervision in health facilities, poor functional integration of interventions and inadequate public health infrastructure. One of the major factors affecting the situation of maternal health is the availability and functionality of labor rooms present in the primary health centers, which is one of the most important points of contact of the government healthcare delivery system with the rural population. The IPHS gives a framework and structure to find out the gaps existing in the healthcare delivery in the rural communities as it aids in the measurement of indicators which in turn helps to measure the performance with the resources available.

The current study has aimed to analyze the gaps in the labor rooms of PHCs as per the Indian Public Health Standards developed under NRHM for PHCs.

RESEARCH QUESTION

Do labor rooms in PHCs of District Rampur, Uttar Pradesh meet the IPHS Standards?

OBJECTIVES

General Objectives

The objective of the study is-

To assess the existing status of the status of the labor rooms available in the PHC establishments in Uttar Pradesh as per the IPHS norms developed under the NRHM.

Specific Objectives

• To assess the existing status of the labor rooms available in the PHC with respect to dimensions and cleanliness and maintenance activities.

- To assess the existing status of the labour rooms available in the PHC with respect to practices to prevent cross infection.
- To assess the existing ststus of the labour rooms available in the PHC with respect to preparedness of labour rooms to handle septic and infected deliveries.
- To assess the existing status of the newborn care corners in labour rooms available in the PHC.

METHODOLOGY

- Study area- the study was conducted in District Rampur of Uttar Pradesh having a population of 23,35, 398.
- Study design The present study was a cross sectional descriptive study.
- Sample size- A sample of 7 PHCs was taken (from 4 focus block of UP TSU and 2 non focus block) was purposively achieved.
- Sampling technique- purposive sample of 7 PHC was taken as there were no other facilities which matched the PHC criteria.
- Survey instrument- An observation checklist was prepared based on the Indian Public Health Standards (IPHS) guidelines for primary health centres (PHCs) revised 2012.
- Data Type- primary data –facility survey with the help of an observation checklist based on guidelines provided in IPH standards(revised) for primary health centers 2012.

ANALYSIS

Univariate analysis was performed using MS Excel. The data gathered in this regard was analyzed under the heads, dimension of labour rooms, reasons for deliveries not being conducted in the labour room, ventilation of labour rooms, availability and functionality of equipments and configuration of new born care corner.

Findings

All the 7 PHCs visited had a functional labour room where deliveries were being conducted.

Table 1 labour room available

	frequency	%	valid %
valid	7	100	100

Table 2 deliveries carried out

	frequency	%	valid %
valid	7	100	100

Out of total 7 PHCs included in the study, labour rooms of 4 (57.12%) had the prescribed dimensions of 3.8m*4.2m as per IPHS standards.

Table 3 dimensions 3.8*4.2 m

	frequency	%	valid %
valid			
yes	4	57.12	57.12
no	3	42.84	42.84
total	7	100	100

Labour rooms of 5 out of total 7 PHCs had a separate area for septic and aseptic deliveries, while 2 of the PHCs did not have separate area for septic and aseptic deliveries.

Table 4 separate septic and aseptic deliveries

	frequency	%	valid %
valid yes	5	71.4	71.4
no	2	28.57	28.57
total	7	100	100

All the PHCs visite were well lit and ventilated

Table 5 labour room well lit ventilated

	frequency	%	valid %
valid	7	100	100

Out of 7 PHCs included in the study, labour rooms of 3 had toilet and drinking water facilities attached to the labour room in labour room. In labour rooms of 2 PHCs drinking water and toilet facilities were not availabl solely for the use of the labour room. In labour room of two of the PHC separate toilet and drinking water facilities were available solely for the labour room but it was not attached to it.

Table 6 attached toilet & water

	Frequency	%	valid %
valid			
yes	3	42.84	42.84
no	2	28.57	28.57
yes not attached	2	28.57	28.57
total	7		

Separate area for dirty linen was available in 3 labour rooms of the 7 PHCs, while in labour rooms of 4 PHCs dirty linen was being washed with the general linen and laundry of the PHC. The IPHS require a separate area to be present for dirty linen from the labour room.

Table 7 separate dirty linen

	frequency	%	valid %
valid			
yes	3	42.84	42.84
no	4	57.12	57.12
total	7	100	100

In labour rooms of 3 of the PHCs, separate area for baby wash was available while in 4 PHCs baby wash being done in the infected conditions. The IPHS standards require a separate area to be present for cleaning of the baby post delivery.

Table 8 separate baby wash

	frequency	%	valid %
valid yes	3	42.84	42.84
no	4	57.12	57.12
total	7	100	100

Labour rooms of 5 out of 7 PHCs had separate area for toilet, while 2 did not have a separate area for toilet.

Table 9 separate toilet

	frequency	%	valid %
valid yes	5	71.4	71.4
no	2	28.57	28.57
total	7	100	

separate sterilization area was found in labour rooms of 4 out of 7 PHCs.

Table 10 separate sterilization

	frequency		%		valid %
valid yes		4		57.12	57.12
no		3		42.84	42.84
total		7		100	

Standard treatment protocols for common problems during labour and for newborns was provided in labour rooms of 5 out of 7 PHCs visited, while in labour rooms of 2 PHCs, Standard Treatment Protocol were missing.

Table 11 STP for problems in labour

	frequency	%	valid %
valid yes	5	71.4	71.4
no	2	28.57	28.57
total	7		

Labour room of 3 out of 7 PHCs included in the study had restricted entry, while in 4 entry was not restricted.

Table 12 restricted entry

	frequency	%	valid %
valid yes	2	28.54	28.54
no	5	71.4	71.4
total	7		

Separate footwear was being used in labour rooms of 2 out of 7 PHCs while in 5 separate footwear was not being used.

Table 13 separate footwear

	frequency	%		valid %
valid yes	3		42.84	42.84
no	4		57.12	57.12
total	7			

In labour room of 5 PHCs, all the essential drugs and equipment were present, while in labour rooms of 2 PHCs, the complete list of essential drugs and equipments was found to be missing.

Table 14 essential drugs and equipments

	frequency	%	valid %
valid yes	5	71.4	71.4
no	2	28.57	28.57
total	7		

Regular mopping and washing with disinfectants was being done in labour rooms of 6 out of 7 PHCs, while in 1 this practice was not being followed.

Table 15 mopping and washing

	frequency		%		valid %
valid yes		6		85.68	85.68
no		1		14.28	14.28
total		7			

Fumigation at regular intervals was being done in labour rooms of 4 out of 7 PHCs, while in this practice was not being followed.

Table 16 fumigation

	frequency		%	valid %
valid yes		4	57.12	57.12
no		3	42.84	42.84
total		7		

Configuration of new born care corner (NBCC)

In the newborn care corner (NBCC) in labour rooms of all the 7 PHCs, a clear floor area with a functional radiant warmer was present.

Table 17 NBCC clear floor functional radiant warmer.

	frequency	%	valid %
valid yes	7	100	100

Oxygen, suction machine and electrical sockets were provided in the Newborn Care Corner(NBCC) in labour rooms of all the 7 PHC

Table 18 Oxygen, suction machine and electrical sockets.

	frequency		%	valid %
valid yes		7	10	0 100

In the Newborn Care Corner (NBCC) in labour rooms of 4 of the 7 PHCs, good sources of shadow-less light was provided while in Newborn Care Corner (NBCC) in labour rooms of 3 PHCs there was no provision of a good source of shadow-less light.

Table 19 Shadow less light

	frequency	%	valid %
valid yes	4	57.12	57.12
no	3	42.84	42.84
total	7		

In the new born care corner (NBCC) in labour rooms of all of the 7 PHCs, resuscitation kit including Ambu bag (paediatric size) was placed in the radiant warmer. Power connection for radiant warmer was also available in Newborn Care Corner (NBCC) in labour rooms of all of the 7 PHCs.

Table 20 Resuscitation kit with Ambu bag

	frequency	%	valid %
valid yes	7	100	100

Table 21 Power Connection for radiant warmer.

	frequency	%	valid %
valid yes	7	100	100

Status of IPHS criteria of labour rooms according to percentage compliance in PHCs

Based on compliance by labour rooms in PHCs, the criteria have been divided into 4 categories low, medium, satisfactory and outstanding. Acute category criteria are those which are being compiled by labour rooms of 0-40% of the PHCs, medium category criteria are those which are being compiled by labour rooms of 41-74% of the PHCs, satisfactory category of criteria are those which are being compiled by labour rooms of 75-99% of the PHCs, and outstanding category of criteria are those which are being compiled by the labour rooms of all 100% of the PHCs.

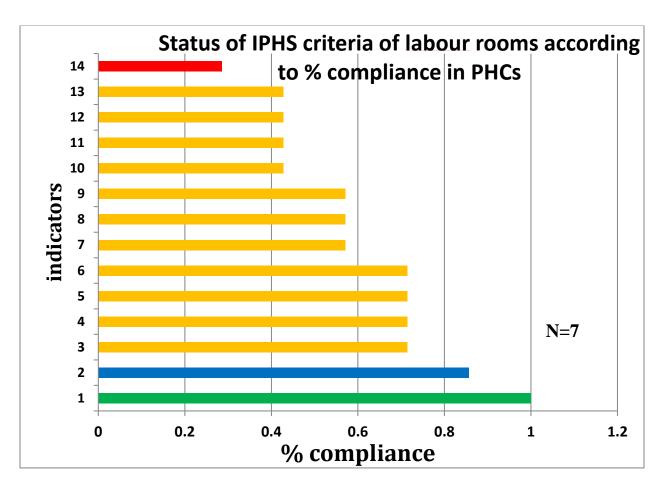


Figure 1 . status of IPHS criteria of labour rooms according to percentage compliance in PHCs

	Legends for Figure 1
1	labour room well-lit and ventilated.
2	regular mopping and wahing of labour room
3	separate areas for septic and aseptic deliveries.
4	separate area for toilet
5	availability of essential drugs and equipments
6	provision of STP for common problems during labour and for newborn
7	separate area for sterlization
8	fumigation at regular interval
9	Prescribed dimensions of 3.8*4.2 m
10	attached toilet and water facilities
11	usage of separate footwear for labour rrom
12	separate area for baby wash
13	separate area for dirty linen
14	restricted entry in labour room

Similar categories based on % compliance in PHCs have also been made for criteria of Newborn Care Corner (NBCC) in labour rooms of PHCs.

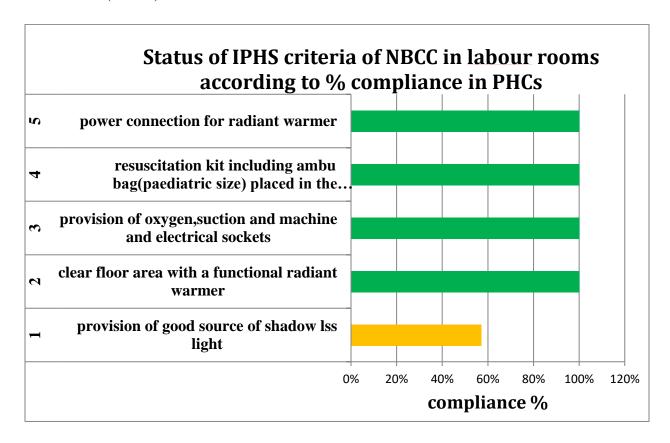


Figure 2. Status of IPHS criteria of NBCC in labour rooms according to paercentage compliance in PHCs

CONCLUSION

- The study was aimed to find out the gaps and assess the labour rooms in the PHCs of 7 blocks of district Rampur (4 focus blocks and 3 non focus blocks). The gaps in the labour rooms with the NBCC were assessed according to a prescribed IPHS criteria. As evident from the findings of the study, not all of the labour rooms of PHCs meet the IPHS norms fully. There are variations in PHCs across the district of Rampur. While deliveries are being reported to be carried out in the labour rooms of all the 7 PHCs included in the study, all the criteria as prescribed in the IPHS guidelines for PHCs (revised) 2012 are not being met in some of the PHCs (mostly non focus blocks).
- The condition of NBCC were slightly better than that of the rest of the labour rooms as 4 out of 5 required criteria for NBCC are being fully compiled within all PHCs.
- Hence, there is a need to enhance the knowledge of SN and ANM, as well as need to
 equip the labour room especially with better facilities, which will ultimately improve the
 quality of care & the outcomes.

RECOMMENDATIONS

- Ensure availability of privacy and restricted entry into labour rooms.
- Ensure separate area for dirty linen and for baby wash area.
- Separate footwear for labour room should be ensured and updating knowledge of the labour room staff.
- Skill building sessions for implementing practices to prevent cross infection.
- Ensuring availability and functionality of shadow-less light source in NBCC.
- Updating knowledge of labour room staff regarding usage of separate footwear for labour room.
- More focus to be put on the non focus block(shahbad and sehzadnagar) through nurse mentoring.

LIMITATIONS

- Time constraint
- Limited sample size
- Political and religious challenges.

ETHICAL CONSIDERATION

The consent of the Medical Officer in charge at PHC was taken before interview and assessment . The nature and purpose of the study was well explained and communicated to them. The respondents had the right to deny at any point of time during interview. The confidentiality and privacy of the information was maintained and this data was solely used for the study and research purpose.

REFERENCES

- [1] Assessment of essential newborn care services for low birth weight babies in rural Lucknow, India by *Krishna Kumar Sahu*, M. Z. Idris, Monika Agarwal, S. K Singh, Pratap Shankar, R. K. Dixit.
- [2] Assessment of Essential Newborn Care services in Secondary Level Facilities from two districts of India by <u>Sumit Malhotra</u>, <u>Sanjay P. Zodpey</u>, <u>Aishwarya L. Vidyasagaran</u>, <u>Kavya Sharma</u>, <u>Sunil S. Raj</u>, <u>Sutapa B. Neogi</u>, <u>Garima Pathak</u>, and <u>AbhaySaraf</u>.
- [3] SNCU Toolkit
- [4] FBNC operational guidelines by Ministry of Health & Family welfare
- [5] Facility based newborn care: what works, what does not? (Dr.Pavitra Mohan, MD, MPH, Health Specialist, UNICEF India)