DISSERTATION
IN
SUB DIVISIONAL HOSPITAL, RAJGIR (BIHAR)
UNDER
STATE HEALTH SOCIETY BIHAR
(MARCH 18 - APRIL 30, 2013)

-

"GAP ANALYSIS OF SUB DIVISIONAL HOSPITALAS PER IPHS STANDARDS"

PRANOTI JOSHI

POST-GRADUATE PROGRAMME IN HOSPITAL & HEALTH MANAGEMENT,
NEW DELHI
2011-13

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH
NEW DELHI
2011- 2013

Certificate from Dissertation Advisory Committee

This is to certify that **Ms. Pranoti Joshi** a graduate student of the **Post-Graduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision. He is submitting this dissertation titled "**Gap Analysis of Sub Divisional Hospital, Rajgir As Per IPHS Standards**" in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.
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Faculty Mentor

Designation

IIHMR New-Delhi

Date

Dr. Umesh Chandra

Deupty Superitendent

Rajgir (Nalanda)

Date

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The following dissertation titled "**Gap analysis of sub divisional hospital Rajgir, (Bihar) as per IPHS standards**" 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.

Dissertation Examination Committee for evaluation of dissertation

Name	Signature
Dr. SHER SINGH	
Dr VINAY TRIPATHI	
Dr Preetha GS	

Student Name
Pranoti Joshi

निबंधन संख्या 1697 वर्ष 2011-12

Rogi Kalyan Samiti, Rajgir

रोगी कल्याण समिति, राजगीर

Sub.-Divisional Hospital, Rajgir (Nalanda)
अनुमण्डलीय अस्पताल, राजगीर (नालन्दा)
Ph.: 06112-255418

Ref. No.: 282 /RKS Rajgir

Date: 30/04/2013

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. PRANOTI JOSHI is a Second year Student of Post Graduate Diploma in Hospital and Health Management (PGDHHM) of International Institute of Health Management Research (IIHMR), New Delhi. She is working with the District Health Society, Nalanda (Bihar) as a **SUB DIVISIONAL HOSPITAL MANAGER in Rajgir**; headquarter at State Health Society Bihar, Patna. She has successfully completed her dissertation from **18th, March** to **30th April 2013** as a part of the course curriculum from District Health Society, Nalanda (Bihar).

She is hard working and sincere towards her work. She has completed all the assignments tasks at the District Health Society, Nalanda (Bihar). I wish her all the very best endeavors.

30/04/2013
उपाधीक्षक
अनु० अस्पताल, राजगीर

(Dr. Umesh Chandra)
Asstt. ~~District~~ Superintendent
Sub-Divisional Hospital, Rajgir, Nalanda

FEEDBACK FORM

NAME OF STUDENT: Pranoti Joshi

ORGANISATION: Sub-divisional Hospital, Rajgir, Under DHS

AREA OF WORKING OF PROJECT: Gap Analysis of Sub Divisional Hospital, Rajgir as per IPHS

ATTENDANCE: 100%

OBJECTIVES ACHIEVED: Objectives were met

DELIVERABLES: Routinely Hospital Management

STRENGTHS: Hand washing

SUGGESTIONS FOR IMPROVEMENT: Every Words whether it it is small or big should be sincerely obeyed.

SIGNATURE OF MEDICAL OFFICER-IN-CHARGE

DATE: 29/7/13

PLACE:

ACKNOWLEDGEMENT

I owe a great many thanks to a great many people who helped and supported me during the making of this report.

The special thank goes to my helpful supervisor and mentor, Mr. Vinay Tripathi. The supervision and support that he gave truly help the progression and smoothness of the dissertation program. The co-operation is much indeed appreciated.

My grateful and deepest thanks also go to Dr.Umesh Chandra Sinha (District Superintendent). A big contribution and hard work from him during the month is very great indeed. My project during the program would be nothing without his effort and guidance. Besides, this dissertation program makes me realize the value of working together as a team and as a new experience in working environment, which challenges us every minute. Not forget, a great appreciation go to the rest of hospital members that help me from time to time during the project. The whole program really brought us together to appreciate the true value of friendship and respect of each other.

I would thank my Institution “International Institute of Health Management Research, New Delhi and the Dean Dr. Bhalla without whom this project would be a distant reality. Last but not least I would like to thank my friends especially those who worked in Bihar at different hospitals for the wise idea throughout the project.

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ABBREVIATIONS

AYUSH- AYURVED, YOGA, UNANI, SIDDHA, HOMOEOPATHY

BCG- BACILLUS CALAMITTE GUREIN

CDMO- CHIEF DISTRICT MEDICAL OFFICER

CEO- CHIEF EXECUTIVE OFFICER

CS- CIVIL SURGEON

DHS- DISTRICT HEALTH SOCIETY

DM- DISTRICT MAGISTRATE

DDC- DISTRICT DATA COORDINATOR

FW- FAMILY WELFARE

MOHFW- MINISTRY OF HEALTH AND FAMILY WELFARE

MTP- MEDICAL TERMINATION OF PREGNANCY

IPD- INPATIENT DEPARTMENT

OPD- OUTPATIENT DEPARTMENT

GoI- GOVERNMENT OF INDIA

ICDS- INTEGRATED

PHED- PUBLIC HEALTH ENGINEERING DEPARTMENT

TSC- TOTAL SANITATION COMMITTE

DRDA- PROJECT OFFICER

ECG- ELECTRO CARDIO GRAM

ICU- INTENSIVE CARE UNIT

STI- SEXUALLY TRANSMITTED INFECTION

ENCS- ESSENTIAL NEW BORN CARE SERVICES

IPHS- INDIAN PUBLIC HEALTH STANDARDS

CHCs- COMMUNITY HEALTH CENTRES

SCs- SUB CENTRES

MPHW- MULTI PURPOSE HEALTH WORKERS

OPV- ORAL POLIO VIRUS

DPT- DIPTHRIA, PERTUISS, TETANUS

ORT- ORAL REHYDRATION THERAPY

SUF- SUB MUCUS FIBROSIS

CONTENTS

CHAPTER 1: INTRODUCTION

1.1 ORGANIZATIONAL PROFILE

FIG1: NATIONALRURALHEATHMISSION

National Rural Health Mission (NRHM) is an Indian health program for improving health care delivery across rural India. The mission, initially mooted for 7 years (2005-2012), is run by the Ministry of Health. The mission proposes a number of new mechanisms for healthcare delivery including training local residents as Accredited Social Health Activists (ASHA), and the Janani Surakshay Yojana (motherhood protection program). It also aims at improving hygiene and sanitation infrastructure.

The mission has a special focus on 18 states Arunachal Pradesh , Assam, Bihar, Chhattisgarh, HimachalPradesh, Jharkhand, Jammu and Kashmir, Manipur, Mizoram, Meghalaya, MadhyaPradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttarkhand and Uttar Pradesh. Under the mission, health funding had increased from ₹27,700 crores in 2004-05 to ₹39,000 crores in 2005-06 (from 0.95% of GDP to 1.05%).This has further increased from ₹14,974 crores in 2007-08 to ₹34,488 crores in 2012-13. As of 2009, economists noted that "the mid-term appraisal of the NRHM has found that there has been a significant improvement in health indicators even in this short period". However, in many situations, the state level apparatus have not been able to deploy the additional funds, often owing to inadequacies in the Panchayati Raj functioning. Fund utilization in many states is around 70%.

FIG: 2 STATE HEALTH SOCIETY BIHAR

National Rural Health Mission: Institutional Setup at State level

STATE HEALTH SOCIETY BIHAR

The State Health Society Bihar is situated at Sheikhpura, Patna. It has been established in order to guide its functionaries towards receiving, managing, and account for the funds received from the ministry of Health & Family Welfare, Government of India.

SHSB manages NGO, PPP (Public Private Partnership), components of the NRHM in the state including execution of contracts, disbursement of funds and monitoring of performance. The Government of Bihar has decided that SHSB will function as a resource centre for the department of Health & Family Welfare in situational and policy development.

Basically SHSB strengthen the technical or management capacity of the Directorate of Medical and Health services Patna as well as districts societies by various means like recruitment of individual from open market & mobilize financial or non-financial resources for supplementing the NRHM activities in the state. It will organize training, meeting, conferences, policy review studies / surveys, workshops and inter-state exchange visits etc. for deriving inputs for improving the implementation of NRHM in the BIHAR.

State Health Mission and State Health Society

At the National level, the NRHM has a Mission Steering Group (MSG) headed by the Union Minister for Health & Family Welfare and an Empowered Programme Committee (EPC) headed by the Union Secretary for Health & FW. The EPC will implement the Mission under the overall guidance of the MSG.

At the State level, the Mission would function under the overall guidance of the State Health Mission headed by the Chief Minister of the State. The functions under the Mission would be carried out through the State Health & Family Welfare Society. The structures of the Mission and Society and their linkages are mentioned in the following paragraphs.

State Health Mission

Composition

- Chairperson : Chief Minister
- Co-Chairperson : Minister of Health and Family Welfare, State Government
- Convener : Principal Secretary/Secretary (Family Welfare)

Members :

State Health Society

A. Governing Body

- Chairperson : Chief Secretary/Development Commissioner
- Co-Chair : Development Commissioner
- Vice-Chair : Principal/Secretary (Health & Family Welfare)
- Convener : Officer designated as Mission Director of State Health Mission

- Members:
  - Secretaries of the NRHM related Departments: Health & FW, Finance, AYUSH, Women and Child Development, Public Health Engineering, Water and Sanitation, Panchayati Raj, Rural Development, Tribal/SC Welfare, Urban Affairs and Planning and Programme Implementation.
  - DHS, Director AYUSH
  - GoI representative(s): MoHFW nominee.
  - Representatives of Development Partners supporting the NRHM in the State

- Nominated non-official members: Four to six members (Public Health Professionals, MNGO representatives/ representatives of Medical Associations)
- Regional Directors

B. Executive Committee

1. Chairperson : Principal Secretary/Secretary, FW
2. Co-Chair (s): Principal Secretary/Secretary, Health/FW (in case of separate secretaries in the State)
3. vice Chair: Director, Health & FW
4. Convener : Executive Director/Mission Director (To be an IAS Officer Of JAG/Selection Grade)
4. Joint Secretaries: State Programme Managers/Project Directors of National Disease Control Programme

Members:

1. Director, AYUSH
2. Secretaries / technical officers from NRHM related sectors
3. Executive Secretary, State AIDS Control Society [for the States which decide not to merge it with State Health & FW Society].
4. MoHFW, GoI representative.
5. Regional Directors

NATIONAL RURAL HEALTH MISSION: INSTITUTIONAL SETUP AT THE DISTRICT LEVEL

Governance structure

B.1 District Health Mission

Chairperson: Chairman, Zilla Parishad

Co-Chair: District Collector/DM

Vice Chair: CEO Zila Parishad

Convener : Chief Medical Officer/CDMO/CMHO/Civil Surgeon

Members : MPs, MLAs, MLCs from the district, Chair-persons of the Standing Committees of the Zilla Parishad, Project Officer (DRDA), Chair-persons of the Panchayat Samitis and Hospital Management Societies, District Programme Managers for health, PHED, ICDS, AYUSH, education, social welfare, Panchayati Raj, State representative, representatives of MNGO/SNGO, etc.

B.2 District Health Society The overall governance structure of the Society may be as depicted in Diagram-1 below.

FIG 3: Governance Structure of the DHS

Governing Body	
Chair:	**District Collector/DM/CEO Zilla Parishad**
Co-Chair:	**DDC (District Data Coordinator)cum CEO, Zilla Parishad**
Chief Executive Officer:	**Chief Medical Officer/CDMO/Civil Surgeon**
Members:	**Project Officer (DRDA), District Programme Managers for Health AYUSH, Water and Sanitation [under Total Sanitation Campaign (TSC)], DPMSU, PHED, ICDS, education, social welfare,Panchayati Raj, a State representative, Sub-Divisional Officer, CHC In-charge; representatives of Medical Association/MNGO/SNGO and Development Partners**

FIG 4: Structure of executive committee

EXECUTIVE COMMITTEE

Chair : **DDC cum CEO Zilla Parishad (CMO in case no Post of DDC/CEO Zilla Parishad is notified in the District**

Co-chair : **CMO/CDMO/CMHO/CS**

Chief Executive Officer and Convener :

District Programme Manager/District RCH Officer

Members: Superintendent-District Hospital, All District Programme Managers for health, ICDS, PHED, Water and Sanitation, Education, Panchayati Raj etc.

1.2 INTRODUCTION OF THE PROJECT

GAP ANALYSIS OF SUB DIVISIONAL HOSPITAL, RAJGIR BIHAR AS PER IPHS STANDARDS

Sub-district (Sub-divisional) hospitals are below the district and above the block level (CHC) hospitals and act as First Referral Units for the Tehsil/Taluk/block population in which they are geographically located. They have an important role to play as First Referral Units in providing emergency obstetrics care and neonatal care and help in bringing down the Maternal Mortality and Infant Mortality. A subdivision hospital caters to about 5-6 lakh people. They form an important link between SC, PHC and CHC on one end and District Hospitals on other end. It also saves the travel time for the cases needing emergency care and reduces the workload of the district hospital. In some of the states, each district is subdivided in to two or three sub divisions. In bigger districts the Sub-district hospitals fills the gap between the block level hospitals and the district . The Government of India is strongly committed to strengthen the health sector for improving the availability, accessibility of affordable quality health services to the people.

Definition of Sub-district Hospital

The term Sub-district/Sub-divisional Hospital is used here to mean a hospital at the secondary referral level responsible for the Sub-district/Sub-division of a defined geographical area containing a defined population.

Categorization of Sub-district Hospitals

The size of a Sub-district hospital is a function of the hospital bed requirement, which in turn is a function of the size of the population it serves. In India the population size of a Sub-district varies from 1, 00,000 to 5, 00,000. Based on the assumptions of the annual rate of admission as 1 per 50 populations and average length of stay in a hospital as 5 days, the number of beds required for a Sub-district having a population of 5 lakhs will be around 100-150 beds. However, as the population of the Sub-district varies a lot, it would be prudent to prescribe norms by categorizing the size of the hospitals as per the number of beds.

For the purpose of classification IPHS have have arbitrarily labeled Sub-district Hospitals as

Category I: Sub-district hospitals norms for 31-50 beds.

Category II: Sub-district hospitals norms for 51-100 beds.

In order to improve the quality and accountability of health services a set of standards need to be there for all health service institutions including Sub-district hospitals. Standards are a means of describing the level of quality the health care organizations are expected to meet or aspire to. The key aim of standard is to underpin the delivery of quality services which are fair and responsive to client's needs, provided equitably and deliver improvements in health and well being of the population. Standards are the main driver for continuous improvements in quality. The performance of Sub-district hospitals can be assessed against a set of Standards. The Bureau of Indian standards (BIS) has developed standards for hospitals services for 30 bedded and 100 bedded hospitals. However, these standards are considered very resource intensive and lack the processes to ensure community involvement, accountability, the hospital management, and citizens' charter etc. peculiar to the public hospitals. Setting standards is a dynamic process. contains the standards to bring the Sub-district/ Sub-divisional hospitals to a minimum acceptable functional grade (indicated as **Essential**) with scope for further improvement (indicated as **Desirable**) in it.

Functions

A Sub-district hospital has the following functions:

1) It provides effective, affordable health care services (curative including specialist services, preventive and promotive) for a defined population, with their full participation and in co-operation with agencies in the district that have similar concern.
2) It covers both urban population (Sub-divisional head quarter town) and the rural population of the sub division.
3) Function as a referral centre for the public health institutions below the tehseel/taluka level such as Community Health Centres, Primary Health Centres and Sub-centres.
4) Provide education and training for primary health care staff.

ESSENTIAL SERVICES (MINIMUM ASSURED SERVICES)

Services include OPD, indoor, emergency services. Secondary level health care services regarding following specialties will be assured at hospital:

Consultation services with following specialists:

- General Medicine
- General Surgery
- O&G
- Paediatrics
- Emergency/A&E
- Critical care
- Anaesthesia
- Ophthalmology
- ENT
- Dermatology and Venerology (Skin & VD) RTI/STI
- Orthopaedics
- Dental care
- AYUSH

Diagnostic and other Para clinical services regarding:

Lab, X-ray, Ultrasound, ECG, Blood transfusion and storage, and physiotherapy

Support services: Following ancillary services shall be ensured:

- Medico legal/post-mortem
- Ambulance services
- Dietary services
- Laundry services
- Security services
- Housekeeping and sanitation
- Waste management
- Office Management (Provision should be made for computerized medical records with anti-virus facilities whereas alternate records should also be maintained)
- Counselling services for domestic violence, gender violence, adolescents, etc.
- Gender and socially sensitive service delivery be assured.

- Finance
- Inventory Management

DESIRABLE SERVICES:

- Psychiatry
- Geriatric Services
- Tobacco Cessation Services
- Physical Medicine and Rehabilitation services
- Critical care/Intensive Care (ICU) [if bed strength is more than 50 beds]
- Dermatology & Venerology including RTI/STI

FINANCIAL POWERS OF HEAD OF THE INSTITUTION

Medical Superintendent to be authorized to incure and expenditure up to Rs.15.00 lakhs for repair/upgrading of impaired equipments/instruments with the approval of executive Committee of RKS.

GAP ANALYSIS

Definition

A technique that businesses use to determine what steps need to be taken in order to move from its current state to its desired, future state. Also called need-gap analysis, needs analysis, and needs assessment.

Gap analysis consists of

(1) Listing of characteristic factors (such as attributes, competencies, performance levels) of the present situation ("what is"),

(2) Listing factors needed to achieve future objectives ("what should be"), and then

(3) Highlighting the gaps that exist and need to be filled. Gap analysis forces accompany to reflect on who it is and ask who they want to be in the future.

In the management literature, **gap analysis** is the comparison of actual performance with potential performance. Gap analysis identifies gaps between the optimized allocation and integration of the inputs (resources), and the current allocation level. This reveals areas that

can be improved. Gap analysis involves determining, documenting, and approving the variance between business requirements and current capabilities. Gap analysis naturally flows from benchmarking and other assessments. Once the general expectation of performance in the industry is understood, it is possible to compare that expectation with the company's current level of performance. This comparison becomes the gap analysis. Such analysis can be performed at the strategic or operational level of an organization.

In health sector a gap analysis include identification of health problems, risks and gaps in services and prioritization of them on the basis of the health risks posed – the number of people at risk of death, serious illness or disability due to each problem. In hospital a gap analysis constitutes the identification of gaps in provision of services which includes gaps in infrastructure, human resources and delivery of services such as availability of caesarean set in hospital and whether C- section is performed or not.

1) A BRIEF DESCRIPTION OF BIHAR STATE

Bihar is situated in north eastern part of the India. It is a land locked state and lies in the midway between the West Bengal and the Uttar Pradesh. It is bounded by Nepal in the north and Jharkhand in the south. It has thirty eight (38) districts and the total area comprises of 94,163.00 sq. Kms. It is divided into rural and urban area which constitutes to 92,257.51 sq. Kms and 1,095.49 sq. Kms respectively. Bihar covers 2.86% of land area of India. It consists of majorly rural area 89.05% and urban constitutes 10.05%. It constitutes of 45908 villages and 130 towns. Bihar has a diverse climate. Its temperature is extreme {too hot during summers and too cool during winters} Bihar is a vast stretch of fertile plain. The economy of Bihar is largely service oriented, but it has a significant agricultural base. The state also has a small industrial sector. Hindi and Urdu are the official languages of the state (recently Maithili is also included as one of the official languages of the state, although the usage of the language for official purposes is negligible), while the majority of the people speak one of the Bihari languages – Maithili, Angika, Magadhi or Bhojpuri The census statistics is further given in the table below.[4]

http://gov.bih.nic.in/Profile/default.

Figure: 5 State of Bihar with districts

TABLE: 1.1 KEY STATISTICS – AS PER 2011 CENSUS (PROVISIONAL)

Key Statistics - as per 2011 Census (Provisional)	
Population	10,38,04,637
- Male	5,41,85,347
- Female	4,96,19,290
Population (0~6 Years Group)	
- In Absolute Numbers	1,85,82,229
	male 96,15,280
	female 89,66,949
- Percentage of Total Population	17.90%
	male 17.75%
	female 18.07%
Literacy	
- In Absolute Numbers	5,43,90,254
	male 3,27,11,975
	female 2,16,78,279
- Percentage of Total Population	63.82%
	male 73.39%
	female 53.33%
Sex Ratio (Females/Thousand Males)	916
Total Fertility Rate	3.9 (NFHS 3)
Decadal Growth Rate[4]	Absolute:20925841 Percentage: 25.07%)

The key statistics are given above that gives an overview of the current situation of Bihar.

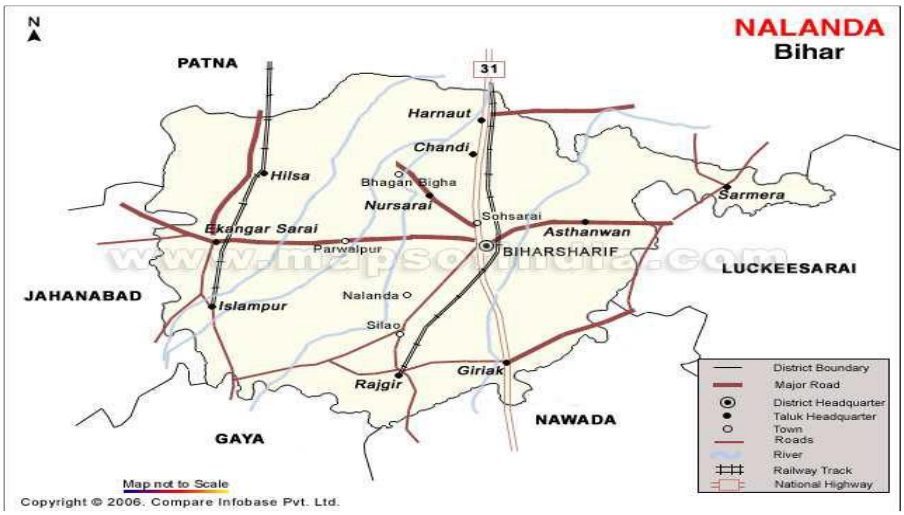

FIGURE: 6 DISTRICT NALANDA MAP

Rajgir is a city and a notified area in Nalanda district in the Indian state of Bihar. The city of Rajgir was the first capital of the kingdom of Magadha, a state that would eventually evolve into the Mauryan Empire. Its date of origin is unknown, although ceramics dating to about 1000 BC have been found in the city. This area also notable in Buddhism, as one of the favourite places for Gautama Buddha and the well known "Atanatiya" conference was held at Vulture's Peak mountain.

TABLE 1.2 DEMOGRAPHIC PROFILE OF NALANDA

Population **(2011)**	
• Total	41,619
Languages	
• Official	Magadha, bhojpuri,Hindi
Sex ratio	1000/889 ♂/♀
Literacy	51.88%
Lok Sabhaconstituency	Nalanda
Vidhan Sabhaconstituency	Rajgir(SC)(173)

FIG 7 : SUB DIVISIONAL HOSPITAL,RAJGIR

Rajgir Sub Divisional Hospital is located in resident area and is 100 bedded but 62 beds are functional. This hospital was upgraded from referral to sub divisional two years back.

RATIONALE OF THE STUDY:

A number of hospitals are been set up for providing services to the population. The sub divisional hospital, Rajgir was upgraded from referral hospital post to sub divisional last year. To check whether this hospital is providing full fledged services and is set up as per IPHS norms the gap analysis is taken up. This will prove fruitful to the hospital in raising standard and setting benchmark if improvements are done and would increase the knowledge.

CHAPTER-2

IPHS STANDARDS

2.1 INTRODUCTION

Upgrading public health infrastructure in rural areas to measureable standards of quality is a key strategic intervention under the National Rural Health Mission. Health care delivery in India has been envisaged at three levels namely primary, secondary and tertiary. The secondary level of health care essentially includes community health centres (CHCs), constituting the First Referral Units (FRUs), Sub divisional and the District Hospitals. CHCs are public health facility, designed to provide referral health care for cases from the primary level and for cases in need of specialist care approaching the CHC directly. A CHC is established for every 1, 00,000 population and is expected to provide curative and preventive health services to the people and to control and eradicate communicable diseases. Hence, standards are being introduced in order to improve the quality of services in these health care centers. Although there are standards as prescribed by the Bureau of Indian Standards (BIS) for 30 bedded hospitals, these are at present not achievable as they are very resource intensive. Hence a less resource intensive standard suited to the requirement of the system has been developed. Ministry of Health and Family Welfare, Government of India constituted a Task Group under the Chairmanship of Director General of Health Services, Government of India to recommend the Indian Public Health Standards (IPHS) for Community Health Centers. To prepare IPHS for Community Health Centers, inputs were taken from major stakeholders including programme officers of National Health Programmes, consultants from accreditation agencies and apex institutions like All India Institute of Medical Sciences. The Task Group submitted the draft guidelines for "Indian Public Health Standards for Community Health Centers0" in 2006 which was then revised in 2007 as "Indian Public Health Standards (Revised) for Community Health Centers". These standards were further modified by the Task Group in 2010 as "Indian Public Health Standards (Revised Draft) for Community Health Centers0". During revision, major changes in the IPHS were done in the number of human resources and newborn care facilities in the CHCs. IPHS are the set of standards formed to provide optimal level of quality health care, with the aim to deliver high quality services which are fair and responsive to client's needs, which should provide equitably and deliver improvements in the health and wellbeing of the population. IPHS for CHCs are designed to provide optimal expert care to the community; to achieve and maintain an acceptable standard of quality of

care; and to ensure that service at CHC are commensurate with universal best practices and are responsive and sensitive to the client needs/expectations. 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, through the concept of citizen's charter enforced through the hospital management society at the facility level and quality assurance committee at State and District level.

OBJECTIVES OF INDIAN PUBLIC HEALTH STANDARDS (IPHS) FOR SUB-DISTRICT HOSPITALS

The overall objective of IPHS is to provide health care that is quality oriented and sensitive to the needs of the people of the district. The **specific objectives** of IPHS for Sub-district Hospitals are:

- To provide comprehensive secondary health care (specialist and referral services) to the community through the Sub-district Hospital.
- To achieve and maintain an acceptable standard of quality of care.
- To make the services more responsive and sensitive to the needs of the people of the

Sub-district/Sub-division and act as the First Referral Unit (FRU) for the hospitals/centres from which the cases are referred to the Sub-district hospitals.

2.3 REVIEW OF LITERATURE

The health care system in India has expanded considerably over the last few decades; however, the quality of services is not uniform. Therefore, Standards were introduced through the NRHM mechanism in order to improve the quality of public health care. Bihar is one of the NRHM high focus states where all health Indicators are poor and need improvement to achieve the Millennium Development Goals. There is also a huge shortage of health infrastructure in the state, with only 60% of the sub Centres (SCs), 72 % primary health centres (PHCs) and 20% Community health centres (CHCs) to provide the services,

As against the total required health facilities according to the Rural Health Statistics, compiled by the Ministry of health And Family Welfare, Government of India in 2008 a study of the Health Facilities in Sheikhpura District of Bihar in PHCS and CHCs regarding adherence to guidelines of IPHS shows that the level of awareness regarding IPHS was very low. Most of the staff is unaware about the standard recommendations of IPHS, basics of NRHM, their duties and responsibilities, assured Services and goal and targets of the national

health policy. It was evident from the study, all the types of health centres in the district are not adhering to the IPHS norms, and be it Human resource, infrastructure or services. A comprehensive study conducted at CHCs in the Bharatpur District of State of Rajasthan with the main objective of this paper is to study the availability of infrastructure facility, human resources, investigative services and facilities based newborn care services at CHCs and compare these with the IPHS for CHCs.

To assess the CHCs in terms of availability of infrastructure facilities, human resources, investigative facilities, essential newborn care services (ENCS) with respect to IPHS, a facility assessment tool was developed referring the " Revised Draft of Indian Public Health Standards (IPHS) for Community Health Centers" (2010) developed by the Ministry of Health and Family Welfare, Government of India. Data were collected from all the 13 CHCs of the study district during the months of September and October 2010. The assessment of CHCs depicted that there is a need to strengthen the CHCs under NRHM to provide quality health care services to the community, especially on providing adequate number of competent human resources, improving communication facilities, strengthening newborn care facilities, and promoting partnership with the private sector in providing human resources.

More and concentrated efforts are required to provide human resources support at all CHCs to effectively provide services especially newborn care services in rural areas. A cross-sectional study carried out in fifteen sub-centers located in three purposively selected community development blocks namely Dighal, Jhajjar (rural) and Dubaldhan-Majra, of district Jhajjar in Haryana. Five sub-centers were selected from each block randomly. The data were collected by interviewing the female multipurpose health workers [MPHW (F)] working in the selected sub-centers, on a pre-designed, structured and pre-tested schedule designed as per IPHS norms. Significant gaps existed in the available infrastructure and availability of man power (especially male worker) in the selected sub-centers. Gaps were also there in the parameters designed for quality control of the sub-centers e.g. citizen’s charter, external monitoring etc. Availability of services and service delivery at the sub-centers was satisfactory. Adequate infrastructure and logistics at the sub-centre level could enhance the active community participation in health activities in rural areas and will go a long way in providing quality health services at the sub-centre level.

2.2 OBJECTIVE:

GENERAL OBJECTIVE:

1) To perform gaps analysis of sub divisional hospital as per IPHS standards.

SPECIFIC OBJECTIVES:

1) To find out the gaps in services of sub divisional hospital, Rajgir as per IPHS standards.
2) To find the gaps in physical infrastructure of sub divisional hospital as per IPHS standards.
3) To find the gaps in human resources part of sub divisional hospital as per IPHS.
4) To recommend the solutions for fulfilling the gaps to make a standard sub divisional hospital.

2.4 METHODOLOGY

The study Gaps analysis of sub divisional hospital is a cross sectional study. For this purpose the IPHS standards for sub divisional hospital is taken as guidelines .The Questionnaire is in form of checklist as per IPHS Performa and the availability of services and existing standards were checked out. The analysis is done in percentage form in part of services provided by hospital and rest analysis which include location, public health engineering, manpower, intermediate care area and paramedical is done in the form of availability of service in yes/no form.

In this report gap analysis is done to know the present situation of hospital so that remedial measures can be taken to make hospital of existing IPHS standards.

CHAPTER -3 FINDINGS AND OBSERVATION

TABLE 3.1 AVAILABILITY OF SPECIALIST SERVICES AS PER IPHS

IPHS STANDARDS (SPECIALIST SERVICES)	YES	NO
General Medicine		
General Surgery	yes	
Obstetric & Gynaecology	yes	
Paediatrics		no
Emergency / A&E	yes	
Critical Care		no
Anaesthesia	yes	
Orthopedics		no
ENT		no
Radiologist and Ultrasonologist	yes	
Ophthalmology	yes	
Community Health	yes	
Dermatology and Venerology (Skin & VD) RTI / STI		no
Dental Care	yes	
AYUSH	yes	

The table shows that out of fifteen specialist services ten services are available. The paediatrics, critical care, orthopaedics, ENT and dermatology services show their unavailability.

TABLE: 3.2 AVAILABILITY OF DIAGNOSTIC AND CLINICAL SERVICES AS PER IPHS

IPHS STANDARDS IN DIAGNOSTIC AND OTHER PARA CLINICAL SERVICES	YES	NO
Laboratory	yes	
X-Ray	yes	
Ultrasound		no
ECG		no
Blood Transfusion and Storage		no
Physiotherapy		no

The table shows that out of six only two services are been catered by hospital which are laboratory and x-ray.

TABLE: 3.3 SUPPORT SERVICES AS PER IPHS STANDARDS

IPHS STANDARDS in SUPPORT SERVICES	YES	NO
Finance (Financial accounting and auditing; timely submission of SOEs / UCs)	yes	
Medico legal / postmortem		no
Ambulance Services	yes	
Dietary Services	yes	
Laundry Services	yes	
Security Services	yes	
Housekeeping and Sanitation	yes	
Inventory Management	yes	
Waste Management	yes	
Office Management (provision for computerized medical records)		no
Counseling Services for Domestic Violence, Gender Violence, Adolescents, etc.		no

The table above shows the availability of support services. Out of eleven, eight services are available. Post-mortem service and counselling services and office management were not present.

TABLE: 3.4 IPHS STANDARDS IN OPD (INCLUDING IPD)

In hospital the Outpatient department (OPD) starts from 8 am till 12 pm and in evening from 4 pm till 6 pm. During that period doctors prescribe some patients to get admit and this contribute to inpatient department (IPD).

IPHS STANDARDS IN OPD (INCLUDING IPD)	YES	NO
Dressing (Small, Medium and Large)	yes	
Injection (I/M & I/V)	yes	
Catheterisation	yes	
Steam Inhalation		no
Cut down (Adult)		no
Enema	yes	
Stomach Wash	yes	
Douche		no
Sitz bath		no
Blood Transfusion		no
Hydrotherapy	yes	
Bowel Wash		no

In OPD and including IPD the services that are available are dressing, injection, catherisation, enema, stomach wash and hydrotherapy. Out of 12 services only6 services are available which 50 % percent of total services.

TABLE 3.5 PAEDIATRIC PROCEDURES AS PER IPHS

PAEDIATRIC PROCEDURES AS PER IPHS	YES	NO
Immunization (BCG, OPV, DPT, Measles, DT) / CH/ORT corner	yes	
Services related to new borne care	yes	
Only cradle		no
Incubator Nebulization equipment		no
Radiant Heat Warmer	yes	
Phototherapy	yes	
Gases (oxygen)	yes	
Cut down		no
Ventilator		no

The graph above depicts the availability of paediatric procedures in which immunization, NBCC, radiant warmer, phototherapy and oxygen are present where as cradle, nebulisation, and ventilator and cut down are absent. Out of nine, five services are available.

TABLE 3.6 EYE SPECILIST SERVICES (OPTHALMOLOGY) OPD PROCEDURES AS PER IPHS

EYE SPECILIST SERVICES (OPTHALMOLOGY) OPD PROCEDURES AS PER IPHS	YES	NO
Refraction (by using snellen's chart)	yes	
Prescription for glasses using Trial frame.	yes	
Syringing and Probing	yes	
Foreign Body Removal (conjunctival)	yes	
Foreign Body Removal (Corneal)		no
Epilation	yes	
Suture Removal		no
Subconj Injection		no
Retrobular Injection (Alcohol etc.)		no
Tonometry		no
Pterygium Excision		no
Syringing & Probing	yes	
I & C of chalazion	yes	

Stye	yes	
Cauterization (Thermal)		no
Conjuctival Resuturing		no
Corneal Scraping		no
I & D Lid Abscess		no
Uncomplicated Lid Tear		no
Indirect Opthalmoscopy		no
Retinoscopy		no

Under eye specialist services only 38% services are available. Out of twenty one, nine service are available.

TABLE 3.7 OBSTETRIC & GYNAECOLOGY SPECIALIST SERVICES AS PER IPHS

OBSTETRIC & GYNAECOLOGY SPECIALIST SERVICES AS PER IPHS	YES	NO
Episiotomy	yes	
Forceps delivery		no
Craniotomy-Dead Fetus/Hydrocephalus		no
Caesarean section	yes	
Female Sterilization (Mini Laparotomy & Laparoscopic)	yes	
D&C	yes	
MTP	yes	
Bartholin Cyst Excision	yes	
Suturing Perineal Tears	yes	
Assisted Breech Delivery	yes	
Cervical Cautery		no
Normal Delivery	yes	
Cesserian	yes	
E U A		no
Midtrimestor Abortion		no
Ectopic Pregnancy Rapture		no
Retained Placenta	yes	
Suturing Cervical Tear	yes	
Assisted Twin Delivery	yes	

In obstetrics and gynaecology 68% of services are available in which episotomy,c-section,female sterilisation,D&C ,MTP, bartholin cyst excision, suturing perineal tears,

assisted breech delivery ,Normal delivery, Retained placenta, suturing cervical tear, and assisted delivery is present. Out of nineteen, thirteen services are available.

TABLE 3.8 DENTAL SERVICES AS PER IPHS

DENTAL SERVICES AS PER IPHS	YES	NO
Dental Caries/Dental Abcess/Gingivitis	yes	
Periodontitis (Cleaning & Surgery)		no
Minor Surgeries, Impaction, Flap		no
Trauma including Vehicular Accidents		no
Sub Mucus Fibrosis (SMF)		no
Scaling and Polishing		no
Root Canal Treatment		no
Extractions		no
Light cure		no
Amalgum Filling (Silver)		no
Sub Luxation and Arthritis of Temporomandibular Joints		no
Pre Cancerous Lesions and Leukoplakias		no
Intra oral X-ray		no
Complicated Extractions (including suturing of gums)		no

The condition of dental services is in bad condition in which out of 14 services only one service is being provided at the hospital.

TABLE 3.9 SURGICAL SERVICES AS PER IPHS

SURGICAL SERVICES AS PER IPHS	YES	NO
Abcess drainage including breast & perianal	yes	
Wound Debridement	yes	
Appendicectomy	yes	
Fissurotomy or fistulectomy	yes	
Hemorrohoidectomy		no
Circumcision		no
Hydrocele surgery	yes	

Herniorraphy		no
Suprapubic Cystostomy		no
Diagnostic Laparoscopy		no
Cysts and Benign Tumour of the Palate		no
Excision Submucous Cysts		no

The above table depicts that 41.6% services are available. Out of twelve 5 services are available.

TABLE 3.10 LOCATION AS PER IPHS

LOCATION	AVAILABILITY
Is the hospital located near residential area? (Yes / No)	Yes
Is the hospital building free from danger of flooding? (Yes / No)	Yes
Is the hospital located in an area free from pollution of any kind including air, noise, and water and land pollution? (Yes /No)	Yes
Is necessary environmental clearance obtained? (Yes / No)	Yes
Whether hospital building is disabled friendly as per provisions of Disability Act? (Yes / No)	Yes

TABLE 3.11 PHYSICAL INFRASTRUCTURE

S.NO	PHYSICAL INFRASTRUCTURE	ANSWER
1.	Size (Area) of the Hospital (In Sq. Meters)	
2.	Number of indoor beds available	62
BUILDING STATUS		
3.	What is the present stage of construction of the building **(Complete: 1; Incomplete: 0)**	1
4.	Compound Wall / Fencing **(1-All around; 2-Partial; 3-None)**	2
5	Condition of plaster on walls **1) Well plastered with plaster**	2

	intact everywhere; **2) Plaster coming off in some places;** 3) **Plaster coming off in many places or no plaster)**	
6.	Condition of floor (**1- Floor in good condition; 2- Floor coming off in some places; 3- Floor coming off in many places or no proper flooring)**	2
BUILDING REQUIREMENTS (AVAILABILITY TO BE RECORDED IN YES / NO)		
1.	Administrative Block	No
2.	Circulation Area	
3.	Entrance Area	Yes
4.	Ambulatory Care Area (OPD)	Yes
5.	Waiting Spaces adjacent to each consultation and treatment room	No
6.	Registration Counter	Yes
7.	Assistance and Enquiry Counter	No

TABLE 3.12 INTERMEDIATE CARE AREA (INPATIENT NURSING UNITS) EXISTING CONDITION

SNO		IPHS	PRESENT
	Intermediate Care Area (Inpatient Nursing Units)		
a.	General Wards	40-45 beds	40
i.	Male	--	1
ii.	Female	--	2

iii.	Total	--	3
b.	Private Wards	--	5
c.	Wards for Specialities	--	1
d.	Nursing Stations	--	1
e.	Doctors' Duty Room	--	1
f.	Pantry		1
g.	Isolation Room		0
h.	Treatment Room		0
i	Nursing Store		0
j.	Toilets		35 at 12 places in hospital building
2.25.	**Pharmacy (Dispensary)**		
a.	Medical Store facility for indoor patients		1
b.	Separate pharmacy with accessibility for OPD patients		1
2.26.	**Intensive Care Unit (ICU) & High Dependency Wards**		
a.	Number of beds available in ICU		0
b.	Number of beds available in High Dependency Wards	4 beds not more than 12 beds	10
c.	Changing Room		0
d.	Is the unit located close to OT, X-Ray and Pathology department? (Yes / No)		No
e.	Essential Specialised Services		
i.	Piped Suction		No
ii.	Medical Gases		Yes
iii.	Uninterrupted Electric Supply		Yes
iv.	Heating		No
v.	Ventilation		Yes
vi.	Central Air Conditioning		No

f.	Nurses' Station		Yes
g.	Clean Utility Area		
h.	Equipment Room		No
2.27.	**Critical Care Area (Emergency Services)**		
a.	Critical Care Area with independent entry		No
b.	Adequate space for free passage of vehicles		Yes
c.	Covered area for alighting patients		No
2.28.	**Operation Theatre**		
a.	Fully equipped Operation Theatre		No
b.	Location of OT in close relation to ICU, Radiology, Pathology, Blood Bank		No
c.	Specialized Services in OT		No
i.	Piped suction and medical gases		No
ii.	Uninterrupted Electric Supply		Yes
iii.	Heating		No
iv.	Air Conditioning		No
v.	Ventilation		Yes
vi.	Efficient Life Service		No
d.	Other Rooms adjoining OT		
i.	Preparation Room		Yes
ii.	Pre-operative Room		No
iii.	Post-operative Room		No
iv.	Scrub-up Room for washing and scrubbing		Yes
v.	Sub-sterilizing Unit		No
2.29.	**Delivery Suit Unit**		
a.	Fully equipped Delivery Suit Unit located near OT		No
b.	Facilities in Delivery Suit Unit		
i.	Reception and admission		No
ii.	Examination and Preparation Room		Yes
iii.	Labour Room (clean and a septic room)		Yes
iv.	Delivery Room		Yes
v.	Neo-natal Room		Yes

vi.	Sterilizing Rooms		No
vii.	Sterile Store Room		No
viii.	Scrubbing Room		No
ix.	Dirty Utility		No

TABLE 3.13 AVAILABILITY OF PUBLIC HEALTH ENGINEERING

PUBLIC HEALTH ENGINEERING	AVAILABILITY (YES / NO)
Public Health Engineering	
Water Supply	
Round the clock piped water supply	Yes
Overhead water storage tank with	Yes
pumping and boosting arrangements	
Separate provision for fire fighting and	No
water softening plants	
Drainage and Sanitation	
Proper drainage and sanitation system for waste water, surface water, sub soil water and sewerage	Yes
Waste Disposal System	
Proper waste disposal system as per National Guidelines	yes
Trauma Centre	
Fire Protection	No
Telephone and Intercom	Yes
Medical Gas	Yes
Cooking Gas	No
Laboratory Gas	No
Office-cum-store for maintenance work	No
Parking place	Yes
Administrative Services	
General Section	Yes
Medical Records Section	No

Committee Room	Yes
Residential Quarters for all medical and para medical staff	No

TABLE: 3.14 MANPOWER

A.	**Doctors**		
S.No.	**Personnel**	**IPHS Norm**	**Current Availability at Hospital (Indicate Numbers)**
1	Hospital Superintendent	1	1
2	Medical Specialist	2	1
3	Surgery Specialists	2	0
4	O&G specialist	2	0
5	Dermatologist / Venereologist	1	0
6	Paediatrician	2	0
7	Anesthetist	2	1
8	Opthalmologist	1	1
9	Orthopedician	1	0
10	Radiologist	2	0
11	Casualty Doctors / General Duty Doctors	9 (At least 4 female allopathy doctos)	5
12	Dental Surgeon	1	0
13	Public Health Manager	1	0
14	Forensic Specialist	1	0
15	ENT Surgeon	1	0
16	AYUSH Physician	2	0
17	Pathologist with DCP/MD(Micro) / MD (Patho) / MD(Biochemistry)	1	0
	Total	**32**	**7**

TABLE 3.15 PARA- MEDICALS

S.no	PARA -MEDICALS		
	Personnel	**IPHS Norm**	**Current Availability at Hospital (Indicate Numbers)**
1	Staff Nurse	50 (including 5 ward incharge)	2
2	Attendant	1	3
3	Ophthalmic Assistant / Refractionist	1	1
4	ECG Technician	1	0
5	Audiometric Technician	1	0
6	Laboratory Technician (Lab + Blood storage)	5	1
7	Laboratory Attendant (Hospital Worker)	3	0
8	Radiographer	3	0
9	Pharmacist	5	1
10	Matron (including assistant matron)	2	0
11	Physiotherapist	1	0
12	Statistical Assistant	1	0
13	Medical Records Officer / Technician	1	0
14	Electrician	1	0
15	Plumber	1	1
	Total	**77**	6

OBSERVATION:

It was observed that in outpatient and inpatient department, staff was performing number of duties related to hospital .For instance; ward attendant was performing duty of dresser, distribution of medicines' etc. This performance of more than one duty applied on all staff which includes Agrade nurses, 4th grade employee etc. This was creating pressure on same and hence they were merely contributing to the duty for which they were appointed. Also it was observed that the cleanliness during the OPD has no existence because of the patient and relatives bad habits and also negligence of Staff for same .Here outsourcing department which includes cleaning staff don't pay attention and thus it was observed that this was contributing to nosocomial infecti~~on.~~

CHAPTER – 4

SUMMARY & CONCLUSION

The report has described about the governance structure of NRHM and it includes about state health society ad district health society. Further the report has given brief description about Bihar state and Rajgir where the study is been carried out in hospital. The sub divisional hospital is 62 bedded and the report has analysed the gaps in the existing hospital as per IPHS standards.

Summarizing about services it can be said that in Specialist services out of fifteen specialist services ten services are available. In Diagnostic and Clinical Services out of six only two has their existence. In support services Out of eleven, eight services are available. In Outpatient department (also include inpatient Department) the services that are available are dressing, injection, catherisation, enema, stomach wash and hydrotherapy. Out of 12 services only6 services are available. In paediatric procedures Out of nine, five services are available. In eye specialist services out of twenty one nine services are available. In obstetrics and gynaecology out of nineteen, thirteen services are available. The condition of dental services is in bad condition in which out of 14 services only one service is given by hospital. In surgical services, out of twelve, five services are available.

The location of hospital is in residential area free from pollution and danger. This hospital is disabled friendly .Apart from this, the hospital has proper water supply, drainage and sanitation and waste disposal system. Regarding manpower in hospital findings have confirmed that there is shortage of personnel whether it may be doctors or paramedical staff. The finding section has given a brief idea about the services which the hospital is providing and also the services which are not delivered. The same is applied to departments and also the manpower is been analysed as per IPHS norms. The result of the analysis shows that the hospital is not functioning as per IPHS standards and it needs to be improved and should be well equipped so that the hospital should cater to the population with all its arms and contribute to healthcare deliver

CHAPTER- 5

RECOMMENDATIONS

Bihar is today in a complex situation as there lies a variety of problems and the degree of problems is not proportional to the solution. However, if stern actions and initiatives are taken then the state can solve its own problems and can achieve a healthy position in all aspects related to the issues prevailing in the same.

The findings of the study suggest a number of priority areas for action. :

- **Manpower should be increased to decrease the burden on the staff.**

Findings have confirmed that lack of manpower increases burden on the staff .To make work easier manpower should get into hospital so that division of work should be done properly and task should be achieved.

- **Proper infrastructure and facility should be made available**

To make hospital proper as per IPHS standards collaboration with developing partners could help in resolving issues.

- **Maintenance of services delivered should be done.**

In order to maintain the hospital status and its image it needs to be maintained properly by the staff and the patient coming into the hospital.

- **The staff should get aware of their duty properly and should exhibit the same functions properly.**

It is observed that due to lack of manpower and burden on staff the personnel are not contributing to their duty properly so if there is overburden then by adopting appropriate strategies staff should get aware of it. For this purpose NRHM guidelines booklets should be available in hindi language.

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