"Knowledge assessment among pregnant women and lactating women about MCH entitlements under NRHM"

A dissertation submitted in partial fulfillment of the requirements for the award of

Post Graduate Diploma in Health and Hospital Management

By

Virendra Singh Shekhawat
Roll No. 59

under the guidance of

Ms. Ila Vakharia
Designation: Senior Project Officer
Organization: CHETNA, Ahmedabad

Ms. Anupama Sharma
Designation: Asst. Professor
Organization: IIHMR, New Delhi

International Institute of Health Management Research
New Delhi
Date: 29th April, 2011

Certificate of Approval

The following dissertation titled "**Knowledge assessment among pregnant women and lactating women about MCH entitlements under NRHM"** 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
_____	_____
_____	_____

Certificate from Dissertation Advisory Committee

This is to certify that **Mr. Virendra Singh Shekhawat**, a participant of the **Postgraduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision. He is submitting this dissertation titled "**Knowledge assessment among pregnant women and lactating women about MCH entitlements under NRHM"** in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.

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

Ms. Anupama Sharma
Faculty Advisor
Designation
IIHMR,
New Delhi

Date

Table of contents:

ACKNOWLEDGEMENT

I'am very much indebted to Ms. Indu Capoor, Director CHETNA for giving me the opportunity to work with such a renowned organization.

I acknowledge with thanks the support rendered by Ms. Ila Vakharia. Without her continuous support and reviving ideas I would not have completed this project. Her leadership and zeal of to train me in this field is really commendable. I extend my gratification to her for rendering her valuable time and guidance at every stage of this project. I 'am also obliged to her for providing with the facilities to carry forward the study in the community.

I'am extremely grateful to my mentor Ms. Anupama Sharma and Faculties at IIHMR, New Delhi for taking time to share their vast knowledge with us. It is just because of these great teachers and guides; I 'am able to stand tall and able to complete this project.

I 'am extremely thankful to my colleague Ms. Rajesh Bhalla, without her support, help and cooperation it would have been impossible for me to complete the project.

Last but not the least, I 'am honoured to have the privilege to thank my family for their unparalleled love and for providing me all the opportunities and amenities I ultimately desired for.

To owe the debt individually would be an endless task.

Virendra Singh Shekhawat

PGDHHM (IIHMR, NEW DELHI)

List of Figures:

List of Abbreviations

PHC	Additional Primary Health Centre
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
CBR	Crude birth rate
CDR	Crude death rate
CHC	Community health centres
CHC	Community health centre
CSSM	Child Survival and Safe Motherhood
EMNC	Essential Maternal Newborn Care
EmOC	Emergency Obstetric Care
FDG	Focus Group Discussion
FRU	First referral unit
GOT	Government of India
HSC	Health sub centre
ICPD	International conference on Population and development
IDU	Intra uterine device
IMNCI	Integrated management of neo natal and childhood illness
IMR	Infant Mortality ratio
IPHS	Indian public health standard
LHV	Lady Health visitor
MMR	Maternal mortality ratio

NFHS -2	National family health survey- 2
NGO	Non governmental organization
NRHM	National Rural Health Mission
NSSO	National sample survey organization
NVDBDCP	National vector borne disease control program
OPD	Out patient department
PHC	Primary health centre
RCH	Reproductive and Child Health
RGI	Registrar General of India
SC	Schedule Castes
SPSS	Statistical Package for social sciences
SRS	Sample registration Survey
SRS	Sample registration system
ST	Schedule tribes
TBA	Traditional Birth attendant
TFR	Total fertility rate
TTinj	Titanus Toxoid injection
UNFPA	United Nation Population fund
WHO	World Health Organization

Part-1
Centre for Health Education, Training and Nutrition Awareness (CHETNA)

1.1

CHETNA is a non-government support organisation which raises nutrition and health consciousness among disadvantaged social sections. It does this through capacity enhancement of Government and Civil Society functionaries using participatory training approaches.
CHETNA strives for people-centred, gender-sensitive nutrition and health policies and programmes at State, National, Regional and International levels, forging strategic partnerships and facilitating dialogue among key stakeholders.

Vision:

CHETNA envisages an equitable society where disadvantaged communities are empowered to live healthy lives.

Mission:

To empower children, young people and women, especially from marginalised social groups, so that they become capable of gaining control over their own, their families' and communities' nutrition, health and wellbeing.

Approach:

CHETNA's approach to health embraces the life cycle of gender equity and human rights within the wide cultural, economic and political environment. It recognises the needs of children, youth and women at the critical stages of life viz. Children (0-10 years), Adolescents and Youth (11-24 years) and Women (25+).

CHETNA believes that…..

Information is critical for awareness

For equitable policies and programmes to evolve, people need to be equipped with information on their rights and entitlements. Likewise, policy makers and programme planners need to recognise and address people's realities.

Community empowerment is the key

Empowerment is the process of enabling communities to identify their development needs, know their health and nutrition rights and entitlements and take action to obtain them. We believe that people are agents of their own change. Providing an enabling environment facilitates

identification of locally available human and natural resources and their optimal utilisation, which ensures long-term sustainability of any effort.

Addressing gender-power equity is basic

Gender equity and equality is critical to improve the nutrition and health status of girls and women. This requires working with families and communities, including ensuring involvement and responsibility of boys and men.

Indigenous healing practices can enhance self-reliance

Communities are reservoirs of ancient health knowledge and healing practices. They are based on local resources and intricately woven into people's lives. Promoting sound practices can enhance self-reliance and health.

Issues addressed by CHETNA

- Improving Access to Food and Enhancing Nutrition Every individual has the right to adequate food and nutrition, a foundation for healthy living. The increasing prevalence of under nutrition indicates the need to safeguard this right across the life cycle.

- Ensuring Health and Development in Childhood.

- Every child has the right to survival and dignified life. To safeguard this right, there is need to ensure that children have a healthy and equitable social environment within and outside the family. They should have access to adequate nutrition, health and developmental services. Within the age group of 0-10 years, specific intervention is required at different ages.

- Saving the Girl Child

The skewed sex ratio in the age group of 0-6 years indicates the need for social transformation to stop the heinous practice of sex selection and promote an enabling environment for valuing the girl child.

- Participatory approach

In enabling environments, children can and do become partners in their own nutrition, health and development processes.

- Range of stakeholders

It is essential to work with parents, care-givers, teachers, social leaders and policy makers to ensure the right to survival and dignity of children.

- Learning by exploring

Through an interactive, exploratory approach to health education, children can learn how to actualise their right to healthy growth and dignity.

Issues addressed by CHETNA

1. **Promoting Sexual Health of Adolescents and Youth**

Adolescents and Youth are a heterogeneous group and constitute 22% of India's population. This phase of transition from childhood to adulthood requires significant efforts from all stakeholders. Information regarding their health and development, along with life skills, helps them to adopt healthy and responsible lifestyles.

Partners in development

By analysing their needs and articulating the challenges, Adolescents and Youth can contribute in policy formulation, programme planning, monitoring and evaluation.

Knowing one's body and mind

Learning how one's body and mind works builds confidence and self-esteem. It enables young people to take decisions related to reproductive and sexual health with responsibility and sensitivity.

Acquiring life skills

Enhancing skills for decision making and negotiating gender-power relations ensures that young people can adopt practices that protect their own health and that of others.

2. **Improving Maternal and Newborn Health**

The high rates of maternal and neonatal mortality indicate the need to address the right to life and survival of women and newborns. Poor maternal nutrition has a direct impact on pregnancy outcomes. Empowering women and community stakeholders to access their entitlements from the public health system is critical.

Outreach

Activities are primarily focused in the states of Gujarat and Rajasthan in India. Networking, advocacy and programme planning is done at the Local, State, National, Regional and International levels.

CHETNA is recognised by the Ministry of Health and Family Welfare, Government of India, as a Regional Resource Centre (RRC) for Gujarat State and the Union Territories of Dadra Nagar

Haveli and Diu, to support the implementation of Reproductive and Child Health (RCH) programme. The RRC provides technical support to 20 partner NGOs for enhancing access to health services in areas underserved by the public health system.

Strategic interventions by CHETNA

Policy and Programme level

- Generation of field level evidence on nutrition and health status of marginalised communities.
- Demonstration of innovative strategies to enhance access to nutrition and health services.
- Facilitation of people's participation in policy and programme formulation and monitoring of action plans at state and national levels.
- Media advocacy to generate public opinion on issues affecting nutrition and health status of marginalised communities.
- Networking with stakeholders for consensus building on identified issues.

Community level

- Capacity building of community based organisations on nutrition and health issues. The programmes are based on specific learning needs and realistic action plans are developed to facilitate effective implementation.
- Development and dissemination of a wide range of gender-sensitive nutrition and health communication and training material. The material is innovative, culturally sensitive and undergoes extensive field testing. It is widely disseminated at State, National, Regional and International levels. CHETNA's Information and Documentation Centre has a rich collection of material on diverse issues of women, young people and children.
- Working with stakeholders such as elected representatives of Panchayat, members of Self Help Groups, families and communities, influencing health-seeking behaviour.

CHETNA provides an open and interactive space to facilitate continuous dialogue, sharing and learning. The space enables participation of community, partners, programme and policy level stakeholders and CHETNA team. The vision serves as a reference point to brainstorm on ideas for developing strategies, which facilitate processes to achieve the vision.

1.2. Programme/Project

During my dissertation period I was appointed as Training coordinator particularly for CHANGE project. This project is implemented in 5 blocks of Rajasthan (Gogunda, Anandpuri, Tijara,

Karauli, Churu). During my internship period I had a lot of experience of working in the community.

1.3. **Managerial Tasks Performed**

- Facilitated Community awareness meetings on the issues of Maternal and Child health.
- Facilitated forum meetings with Village Health and Sanitation Committee members, Panchayati raj institutions members, Self help group members, Sarpanchs and others.
- Conducted round table meetings with service providers, Religious leaders, block health functionaries and community members.
- Conducted service providers training of ASHAs, ANMs, LHVs and others about the participatory communication and NRHM.
- I did monitoring visits with regional partner in Rajasthan provide technical support to partners for data analysis.
- Documentation of all the tasks and field visits.

1.4. **Reflective Learning**

This internship period was definitely a great learning experience for me. On the very next day of joining the organization I got a chance to organize Training on "Participatory communication, National Rural Health Mission, ASHA trainings" for the TBA's, ASHA's, ANMs and Health Workers of. During the training I learnt the technical aspects of Maternal and Child Health like the Complications during Pregnancy, National Rural health Mission, community members perspective of about National Rural Health Mission (NRHM).

Part 2
Chapter 1
Introduction

1.1 BACKGROUND

The challenge that we face making health care affordable and conveniently accessible to most people is not unique to health care. Almost every industry began with services and products that were so complicated and expensive to provide and consume that only people with a lot of skill and a lot of money could participate *(Christensen, Grossman and Hwang, 2009)*.

The Ministry of Health and Family Welfare, in its quest to attain the Millennium Development Goals, introduced the National Rural Health Mission in 2005. Through this initiative, the government hopes to improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.

The key features of NRHM are

- Community participation and Community mobilization.
- Behavior Change Communication aimed at health-seeking behavior with emphasis on promoting home based health care and generating demand for essential primary healthcare services as well as making health providers more responsive and accountable to clients.

Community participation and mobilization as well as communication need to be strengthened to enable the guiding principles and entitlements of the NRHM to reach the community in rural areas. While the NRHM acknowledges this, there is no focused strategy communication strategy.

The main objective of the National Rural Health Mission launched by the Government of India in the year 2005 is to improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.

The design of RCH II /NRHM has fostered innovations across the country, resulting in an impressive range of innovative approaches being implemented to address identified needs /specific gaps in health services. Equity is a central consideration in all innovations with the majority being targeted BPL. With a view to improving the use of health care services by the poorest and the underserved populations, a number of innovations have been adopted by the States/Union Territories across various thematic areas.

RCH II and NRHM have offered the flexibility to states to design and implement local and context specific innovations, across a spectrum of health services, spanning a range of service delivery projects and programmes. The term ―innovation has been used very flexibly and covers new approaches as well as testing out known approaches in different contexts.

Some innovations spanned several states, while many were state specific. The innovations are all being piloted in the context of substantial investments from national and state levels on improving the health infrastructure, strengthening health systems, promoting social mobilization and community participation, enabling decentralized health planning and implementation, incentivizing performance and quality to retain and attract human resources, and strengthening programme management and monitoring.

The innovations are categorized into themes that roughly follow those laid out in the National Programme Implementation Plan of RCH II and also in the Implementation Framework of the National Rural Health Mission. Nine major themes were identified that span major thematic areas of RCH II/NRHM.

Healthy Motherhood not only benefits the newborn but influences the global and national development (Fraser A. et al 2004). The international conference on population and development (ICPD), 1994 has stressed on the importance of women's health and especially reproductive health for overall development.

For long the international health community and national health planners, have directed their efforts towards increasing the coverage of maternal care (antenatal, delivery and postnatal) but less attention has been directed to the content of the program. As a result, data indicative of high coverage of care were commonly coexisting with high levels of maternal and neonatal morbidity and mortality (WHO, 1994).

The magnitude of maternal and newborn care problems in Rajasthan, India is immense as indicated by various available indicators. This high level of mortality and morbidity, 'cost containment', increased demand for services, focus on effectiveness and efficacy, changes in demography and epidemiological factor' has increased the concerned for good quality, client satisfaction care in the primary health care services (Sundari TK, 1992).

The 42nd round (1986-87) and 52nd round (1995-1996) of national sample survey organization (NSSO) mapped a decline trend in both rural and urban utilization of public sector health services in India, for hospitalization and non-hospitalization treatment. Though, use of public health facilities has declined but it continues to be the major health service provider, particularly for reproductive and child health in most part of India. Therefore, it is necessary to create an appropriate and quality mother and child health care and family planning services network, especially in rural areas (Nicholas D, et al 1991).

The concept of special care services during high risk child bearing period had started in India since the first and second five year plan (1951-56 and 1956-61). Promotion of maternal and child health has been the main aim of Family welfare programme (1969-74) in India. This was followed by interventions like child survival and safe motherhood (CSSM) in 1992-93 which merged with Reproductive and Child health (RCH) programme in 1996.

Although Maternal and child health care services have been working since decades, mostly through Government health facilities, still the magnitude of maternal and newborn care problems

in Rajasthan is immense as indicated by the available indicators compared to global and national figures. It has also been seen that government health facilities in spite of being the main source of health care services for majority of people living in rural and urban area, especially for those having low income; has very poor condition. But the core lies in the fact that maternal mortality cannot be reduced unless Obstetric Complications are treated effectively, which requires an integrated health system, continuous from the community to the health facility.
This has increased the concerns for quality of care at govt. health facilities. Therefore, it's more important to know what will reduce Maternal Mortality in the population rather than knowing how to prevent mortality.

This feeds into the wider question of equality and access to innovative healthcare. The gap between those who struggle to have their basic health needs met and the developed world, where some patients have ready access to life-saving medication and state-of-the-art preventative technologies, is growing. Innovation is not just about technology—we especially need innovations in breaking through process and challenges that inhibit the adoption of new ideas.

Patients, doctors, nurses, governments, communities, insurance companies, pharmaceutical companies all have vested interests (or incentives) that can actively prevent good ideas from being adopted. For example, patients want effective, inexpensive, and convenient care. Doctors want to help people but also earn a good living. Insurance companies want to limit the costs they are liable for. Governments want to make sure that healthcare is widely available. The categories above are great places to look for innovation, but you should feel free to ―think outside the box and propose solutions in other areas. *(Hill, Obando and Jensen, 2010)*

1.2 Literature review

The growing concern over the high mortality of mothers and newborns, costs and organisation of the health services have focused the attention of Legislative, professional and public towards Quality of health care. Globally each year more than 585,000 million women die due to pregnancy and child birth related preventable causes (UNFPA 2004); of these deaths 99% occurs in developing countries and about 1% occurs in developed countries (WHO 2001). In India Maternal mortality ratio is 476/100,000 live births (WHO 2006) and that of Rajasthan state is approximately 451/100,000 (same as in Bihar in 1997); (RGI, SRS, 1997-98).

This is very high compared to the international scenario like Sweden (8) , UK(11) , Greece(10),and even in neighbouring countries like Sri lanka (92), china(56) and Thailand (44)/100,000 , (WHO 2006). Similarly, global figure for Infant mortality is about 7.1 million deaths each year; of these deaths half die in the first 28 days after birth (neonatal period). Of the infants dying in the neonatal period about 75% die in the first week after birth (Lawn J.E, et al, 2005). In India, about 2.1 million child death occurs every year, which is the highest number in a single country. (UNICEF 2004). The national under five mortality rate of India is around 85/1000 live births (UNICEF 2006) although there is wide variation between states.

Fourth and fifth millennium development Goals (signed by 189 countries); demands reduction in infant and Maternal Mortality ratio respectively by 2015 ,which has not been possible even after so many years of safe motherhood interventions (initiated in 1987) in developing countries (WHO 1994). Similarly, the condition of Rajasthan too has not improved, even after interventions like child survival safe motherhood programme (CSSM) started in 1992 and Reproductive & Child health programme (RCH) started in 1996-97; still the infant mortality ratio and fertility rate shows a rising trend in comparison to India; where also the situation is not very comfortable.

The fertility rate of Rajasthan has increased from 2.8 in 1998-99 to 3.3 in 2005-06. This means increase in life time risk in women and only 5% facilities give EmOC facility round the clock, so more risk of maternal death. Therefore, it’s important to find what will reduce maternal and infant mortality in the population of Rajasthan. This study focuses on assessment of knowledge

among pregnant women and lactating women about NRHM (maternal and newborn care services).

A literature search was done in pub-med, using MeSH terms, also manually in search engines like Google and visiting different 'international development' websites. Fifty one articles were found studying various aspects of maternal and newborn care in many developing countries, only few studies focused on the functioning of primary health care and almost negligible studies on this issue is done in Rajasthan, India. The key terms used were: Maternal child health centres, Maternal health services, Maternal Mortality, Obstetric care, Health Facility, Health facility planning, Health services, Quality assurances, outcome assessment, facility audit, Quality care , newborn care, developing countries and Indigenous maternal health.

After reviewing the related literature the following conclusions could be drawn:

1. Most studies have focused only on finding the utilization of Maternal and Child Health services and not on health seeking behaviour and knowledge about the services.

2. Not much effort had been made to understand the perception of health among women, their pattern of health seeking behaviour and its various determinants.

3. Although study at macro level is available but in the micro level not many study on assessing the health seeking behaviour of the pregnant women is available which can be used as a ready reference.

5. Poor literacy and lack of awareness about services, schemes and entitlements; low status of women and lack of family support for women reinforcing low self worth; abject poverty that pushes health to a low priority; and prevalence of culturally influenced practices that may in certain situations be detrimental to health are among the crucial factors that determine the health-seeking behavior in the state. (Prasad. G, 2009)

6. Analysis of literature pertaining to uptake of reproductive and child health (RCH) services suggests that use of services is affected by the broader contextual factors in which women live, such as poverty and limited educational opportunities, as well as individual attitudes which, in

turn, are shaped by past experience, community perceptions, and practical aspects. Delays in seeking appropriate care, difficulties in physically accessing services, and facing serious breakdowns in services at the facility level have been noted as the three crucial barriers that inhibit access to healthcare.

Several other deterrents, such as bad roads, the unreliability of finding the health provider, costs for transport, and wages foregone, make it cheaper for a villager to get some treatment from the local practitioner or ―quack, who may have limited knowledge and skills in either modern or traditional medicine.

Therefore in order to fill these lacunae and bridge the existing gap a strong information base needs to be developed. Hence the present study was undertaken to understand the health seeking behaviour of the community and give strategic inputs for implementation of the health services under NRHM / RCH II in better way.

1.3 Need for the study:

- There are very few or negligible studies have been conducted on the knowledge assessment of pregnant women and lactating women about NRHM and its entitlement.
- To collect in-depth information through FGDs and IDIs with various Health Workers like ASHA, ANM, Medical officers and Community Members about the Maternal and Child Health entitlements and other health related issues for fill the gaps.

1.4 Objectives of the study

Research Question:

What is the understanding among women regarding maternal and Child health entitlements under NRHM?

Objectives:

- To understand the knowledge of the community members regarding Maternal and Child Health entitlements under National Rural health Mission.

- To understand the perception of the community on the functioning of the Sub-centres and Primary Health Centres and Community Health Centres.

- Development of a participatory communication strategy (including communication packages) to advocate for health entitlements of rural communities**.**

Chapter 2
Methodology

2.1 Research Design:

2.1.1 Descriptive and Diagnostic Research Design:-

For this study I have adopted Descriptive research. The descriptive research studies are concerned with describing the characteristics of a particular individual, or of a group whereas diagnostic research studies deal with the determination of frequency with which something occurs or its associates with something else. Descriptive and Diagnostic studies are basically interested in detailed description of the phenomenon, group or community. A diagnostic study is concerned with an existing social problem and its basic nature and cause. The main objective of these studies is to diagnose the problem to accurately specify by characteristics.

2.1.2 Sample Size

The study was conducted taking convenient sample (according to the availability) from five different villages of pregnant women and lactating women.

2.1.3 Collection of data

The task of collection of data begins after a research problem has been defined. There are several ways of collecting the data, which differ considerably in context of money, cost, time and other resources at the disposal of researcher.

2.1.4 Primary Data

The primary data are those which are collected fresh and for the first time and thus happen to be original in character. Thus, primary data is the data collected directly from the target group. The various methods involved for collecting primary data are: Observation method, Questionnaire method, Scheduling method, Interview method etc.

I have collected the primary data through five villages and adopted three methods for data collection:

- **Questionnaire (Quantitative tool):**

- **In-depth Interview (Qualitative tool): -** To obtain views of individuals, personal interview starting with informal talk was conducted. First, people were told about the rationale of the study and introduction of the researcher. It helped in collecting personal information about the target group and about NRHM program. It also helped in understanding the perception of the Medical officers, CM&HO, BCM&H and ASHA Worker on the functioning of the Sub-centre and PHC under NRHM program.

- **Focus Group Discussion (Qualitative tool):-**All data could not be gathered through interviews because of social barrier and less free line that is why FGD method was used. FGD which will help to understand their perceptions of the quality of care at the different providers and understand the reasons why they go to some providers over others. Issues coming up in case studies could also be discussed.

What to assess?

(a) Community's perception of the quality of care at the facility and their needs;
(b) Reasons for their preference for particular providers;
(c) Burden on their pocket for accessing care at the nearest facility;

Process for conducting assessment:

The groups would be made of participants (8-10) preferably from all the ethnic groups residing in the catchments area (after obtaining their consent) to discuss on issues concerning maternal and child entitlements and services under NRHM.

I have facilitated 8 FGDs and during each FGD 10 participants including community Members, lactating women, pregnant women, ASHA workers, PRI/VHSC and Health service providers were present. FGD were facilitated according guideline. This was very helpful as detailed analysis to find out the knowledge of the community on NRHM and its entitlements and existing knowledge of the community, service providers and PRI on communicating and advocating for NRHM commitments.

Chapter 3
Results and findings

3.1 Findings:

3.1.1Qualitative study:

Qualitative method i.e. focus group discussion (FGDs) and in-depth interviews (IDIs) technique were adopted for gathering information pertaining to varied aspects of Maternal and Child Health. All FGDs and IDIs were conducted as per detailed given below:

FGDs

Pregnant women and lactating women	(a total 6 FGDs in all villages)
VHSC members and PRI members	(a total 2 FGDs in two villages)
ASHA/ANM	(a total 1 FGD of 8 participants)

IDIs

Block Programme manager	(one IDI)
ASHA/ANM	(five IDI)
Lactating women	(five IDIs in all five villages)
Pregnant women	(five IDIs in all five villages)

3.1.1.1

Community women

During this study, 6 FGDs with pregnant women and lactating women have been facilitated in the selected villages namely **Jasasar, Hirasar, Badhaki, Gariya and bhojaser in Churu and Anandpuri Banswara.** A total of 60 pregnant and lactating women participated in FGD and 18 members of VHSC and PRI participated in focus group discussions. These are some major findings of FGDs

1. Health Status:

- **Common Health Concerns**

The health problems commonly reported by the community members were cough, cold and fever, followed by malaria, diarrhoea and vomiting. Severe health problems in some villages were reported for example, in Jasasar and Hirasar the problem of Pneumonia among infant and neonatal is a prime concern. Some major health concern like under nutrition, anaemia, reproductive health problems, including miscarriage and post-natal haemorrhage, prolapsed uterus also emerge but community women did not report accordingly.

Apart from these, stomach pain due to infection or worms in the stomach, jaundice, typhoid, joint pain and body pain, which may be due to lack of proper nutritional intake have been reported. The health concerns that emerged from the community were only common illnesses. Key health concerns like reproductive and child health issues did not emerge strongly.

2. Reasons for illness

Unclean and unhygienic surroundings have been reported as a major cause of illness almost in every village. Alcoholism has been identified as another reason for illness by respondents from tribal belt Banswara. Unsafe drinking water, with the mixture of chemical and fluoride identified as a major reason of illness in villages of Churu and Banswara. Apart from this, lack of awareness, traditional beliefs and customs also emerged as the key cause of all kind of illnesses. This generates an emergent need for "public awareness" among the community and at the same time monitoring existing programmes to ensure effectiveness.

3. Preferred place for treatment

The community people including pregnant women and lactating mother reported that they availed the services of PHC and private health services for treatment.

Due to long distance people only access CHC in case of referral. Mostly delivery and Ante Natal and Pre Natal Check-ups were done in PHC. Majority of the people go to the traditional healers or *Bhopa's* for general treatment.

In all the five villages, the community members reported that despite existence of sub centre; its functioning was not regular.

Only the services of MCHN day e.g. immunization, ante natal and post natal check up was provided by village ANM. Some of r***espondent shared that ANM visits once in two – three days. She reaches the village at 12 noon and goes away by 2 – 2:30. She gives medicines only***

for headache and pain in limbs. She has never administered an injection to anyone in the village.

As per the community people, in terms of services, availability of medicine, cleanliness, infrastructure, private hospitals score high compared to Government hospitals but all community members cannot afford the private health facility due to high charges.

4. Community's perception regarding the functioning of Government Health Care services

a) Sub-centre

The perception of community regarding the services of sub centre is almost similar in every village. In all the identified areas, the functions of sub centre are very irregular. Only the services like ANC, PNC and immunization of children was provided in sub centres.

In some community people did not access sub centres, due to long distance between villages, scattered area and lack of transportation facility. It was difficult both for service providers and women and beneficiaries to visit villages and sub centre respectively. The respondents from the identified five villages reported that apart from the services of MCHN day the other services like IFA distribution, delivery facility, general treatment, and health education were not available adequately.

b) Primary Health Centre (PHC)

Majority respondents reported that in every district the PHC was mostly utilized for ante-natal check-up, vaccination and distribution of IFA tablets. There are 4-5 sub enters under each PHC. Despite the distance, community people including pregnant and lactating mother go to PHC for treatment, immunization, routine health check up etc. Along with this the community people reported that the condition of the PHC is severely poor in the both districts Churu and Banswara.

The Operation Theater, adequate medicinal stocks and 24hrs services are far reaching goals but the basic facilities like safe drinking water, clean hygienic toilets are also lacking in these PHCs.

In Banswara block some of villages are located approximately 40-45 kms away from PHC and the 108 facility was also not available there and if there then people were not aware about that. Due to hilly area, lack of transportation and lack of financial resources, women mainly prefer local practitioner for any medical aid. Very few women took services of PHC.

With reference of the communities opinion it can be said that even though the community women access the services, but the services of PHCs in terms of infrastructure and quality of care need to be strengthened.

After the extensive discussion it has been identified that after five years of MCH programme, health services are still unreachable to the marginalized especially to the mother and children. The study did underline the following consolidated suggestions provided by the community members for strengthening government health care services;

- Increase number of sub center, one sub center at every revenue villages.
- Night stay of ANM and GNM at sub center.
- Services of sub centre should be regularized in all the villages.
- Increase number of PHC.
- Availability of Ambulance/ vehicle at PHC.
- Availability of doctor and services for all 24*7 days at PHC.
- Availability of adequate stock of medicine, drips, injections, etc at the PHC level.

5. Status of MCH entitlements

- **Knowledge about MCH entitlements**

The knowledge of MCH entitlements among communities especially among women is very low. Compared to other entitlements, people are aware about 108 services, Janani Suraksha Yojna (JSY) and MCHN day.

Apart from the entitlements some members also talked about pulse polio, family planning, ANC-PNC as entitlements. Some of community members have availed the services just for the sake of money they were not aware about the main motto behind the incentive and benefits of institutional delivery.

During FGDs it emerged that the community people did not recognise the entitlements by name, for example they only know that the pregnant BPL women receives i.e Rs.1400 and 5 kg ghee would receive for institutional delivery, not Janani Suraksha Yojna as an entitlement. The responses regarding the name of the scheme, the procedures and criteria for availing the schemes were not enumerated as such by the respondent.

MCH was launched in 2005 to provide effective healthcare to the rural population, especially the disadvantaged groups including women and children, by improving access, enabling community ownership and demand for services, strengthening public health systems for efficient service delivery, enhancing equity and accountability and promoting decentralization.

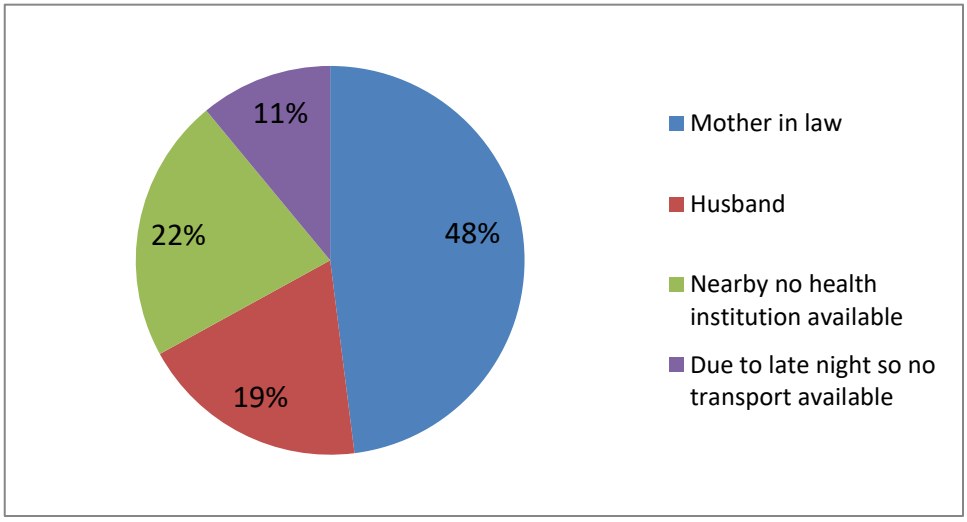

Figure 2: Reason for Home delivery

According this graph major reason for home delivery is the decision of Mother in law and Husband's decision. Only 22% home delivery due to not availability of health institution nearby (up to 5-10 kilometre). In Banswara district some villages are on hilly area so to manage transport facility is also a big problem during late night.

Irrespective of the extensive efforts by the government to promote availability and access, it is surprising that in almost every district community members are not aware of the schemes. Gender differences are also seen as community men are comparatively aware about the entitlements than women. Even ASHAs were not aware about that to decrease the MMR and IMR are the main motto to provide MCH entitlements under NRHM.

- **Perception of women about the functions of ASHA, ANM and ICDS workers**

In 3 out of 5 villages the ASHAs are newly appointed, so very few community members are aware about the functions of ASHA. More than 50% of the community people were aware of ASHA.

During the FGDs few of the community women replied that ASHA accompanied the pregnant women for accessing PHC services, called 108 ambulances, and provides necessary counselling for family planning along with these also facilitated MCHN days with ANM.

Most of the community women specially the pregnant women and lactating mothers are cited that during MCHN day, they received the services like vaccination for mother and children, (TT, BCG, DPT, pulse polio etc) ante natal-post natal check up, IFA through ANM.

Along with these ANM also provided health care services in PHC and sub centre level. But the respondents from villages of Banswara reported that due to scattered and hilly area it is difficult both for the service providers to provide services and for the community people to access services.

As regards to the functioning of Anganwadi workers most of the respondent reported that the Anganwadi centres were not open regularly in their area. And other than providing the meal for pregnant women and children the other functions of Anwganwadi workers were not carried as such.

6. Communication:

- **Sources and types of health information**

The community women reported that they received different kind of health information from varied sources. For example from ANM, ASHA and MCHN day, they received information like personal care, breast feeding, newborn and child care, family planning, immunization etc. The sources for these information particularly on schemes were through posters and wall paintings.

Other than these they also enumerated about Swasthya Chetna Yatra (Health Awareness Journey/Campaign) by which they obtained general information about health, sanitation and hygiene etc.

In almost every villages the respondent reported that the source like street theatre, exhibition, folk songs were preferable and easy medium for them. Due to low rate of literacy most of the time the messages through posters and pamphlet were incomprehensible for them.

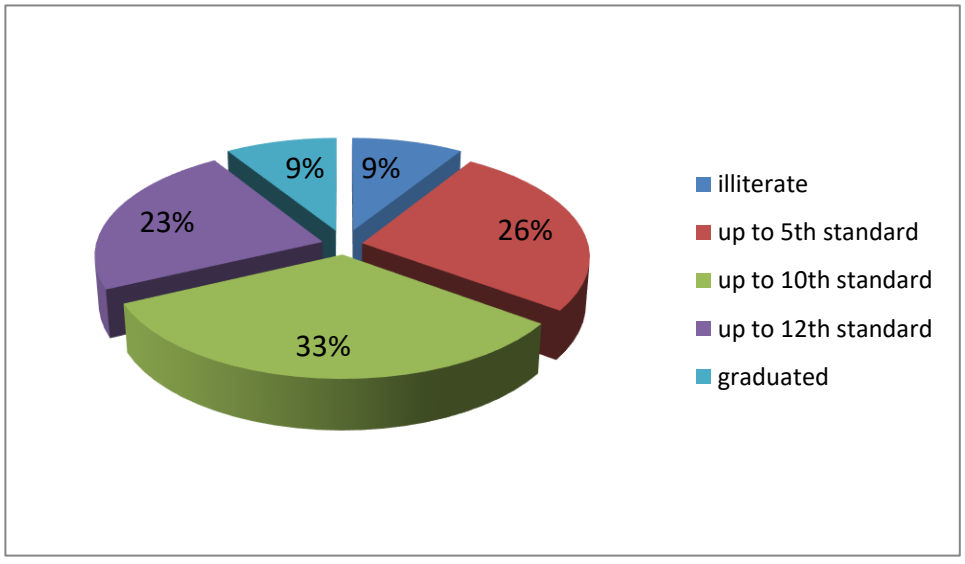

Figure 1: Educational level of Respondents

This graph is depicting that 70 % respondents have education level up to below 10th level so it is showing that poor literacy and lack of awareness about services, schemes and entitlements; low status of women and lack of family support for women reinforcing low self worth; abject poverty that pushes health to a low priority; and prevalence of culturally influenced practices that may in certain situations be detrimental to health are among the crucial factors that determine the health-seeking behavior in the state.

- **Barriers in accessing health information**

Respondents reported illiteracy and lack of substantial and relevant information as the main barriers for accessing health information. Respondents from all the villages stated that they were not getting adequate information about the procedures involved in availing health benefits, including what documents were required and they did not understand both the content and language. According to them, both needed to be specific and localised.

- **Perception communication materials**

The community members reported that they have seen posters only in Anganwadi centre, sub centres, *pani ki tanki, chaupati* etc.

Along with this they also reported that most of the posters are available on various diseases; symptoms and precautions for example Leprosy, Tuberculosis, Malaria, Chickengunia, swine flu etc. During the study I also observed that most of the communication materials are available on various diseases, but very few materials are available on JSY, MCHN day, 108 etc.

In almost all FGDs, it was reported that illiteracy is one of the major problems of the selected area. They suggested that instead of using posters, audio-visual communication media like street plays, folk art, role play, and exhibitions should be used widely.

7. Health Service Providers

During this study FGDs were facilitated with service providers of PHC in all the five implementing districts. A total of 79 respondents including Medical Officer, (only from Udaipur) ANM, FHW, MPW, Malaria workers were part of these FGDs.

a) Health Status

- **Common Health Concerns**

During the FGD the service providers reported that mostly children were vulnerable and susceptible to illness. Apart from the common health problems like fever, diarrhoea, cough-cold; health concerns e.g. Tuberculosis, Pneumonia, eye as well as skin infection have been identified as major illness. Problems like heavy menstrual bleeding, miscarriage, prolapsed uterus is very common in Anandpuri (Banswara) and Churu blocks.

Vulnerability of neonates and children is a major issue leading to high IMR. Women suffer mainly from anemia, malnutrition, Reproductive Tract Infections (RTI) and reproductive morbidities. TB was identified as a major problem among men. During the time of monsoon upper and lower respiratory tract infection, **pneumonia, malaria among children were prevalent.** During seasonal changes, old age person and children were infected by cold and fever.

The underlying causes of general weakness among women like- worm infestation, malaria, excessive loss of blood due to multiple pregnancies were also seen but not adequately emphasized by them.

Unsafe drinking and polluted water (chemical and fluoride mixed water) leads to all major diseases like diarrhoea, eye, and skin infection diseases related to respiratory tract in addition to waterborne diseases.

- **Places for treatments**

The service providers reported that most of the community people primarily go to the traditional healers or 'Bhopa' especially in remote region superstitions among community is very high; as a result it creates further problem. Apart from the traditional healers, community people also go to the PHC for health care services. The pregnant and lactating mothers, children have access to services like immunization, ante natal, post natal check up etc from PHC. The services like medicines for minor treatments, IFA, stitches etc were provided from sub centres. In times of emergency and referral, people also access CHC.

With the significance of the field data a gap between the responses of community and service providers have been noticed regarding the accessibility of Government health care service. Quite a few number of the community women mentioned about the private health care services whereas none of the service providers mentioned about private health services.

b) Status of MCH entitlements

- **Knowledge about MCH entitlements**

The knowledge of MCH entitlement among the PHC service providers were varied in both blocks. The common entitlements mentioned by the respondents were Janani Suraksha Yojna, MCHN day, 108 referral transport services etc. Some respondents from Churu and Banswara district reported about ANC, PNC, IFA, complete immunization and institutional delivery

The other entitlements such as supplementary nutritious food for pregnant and lactating mothers and children, growth monitoring, exclusive breast feeding counseling etc were not sufficiently reported by them. Even none of them had reported about KALEVA and YASHODA schemes which are exclusively available in the State of Rajasthan. Also during this study I came to know that none of the service providers other than the Medical officers recognized Charter of Citizen Health Rights, but as per MCH norms it should be displayed in every PHC.

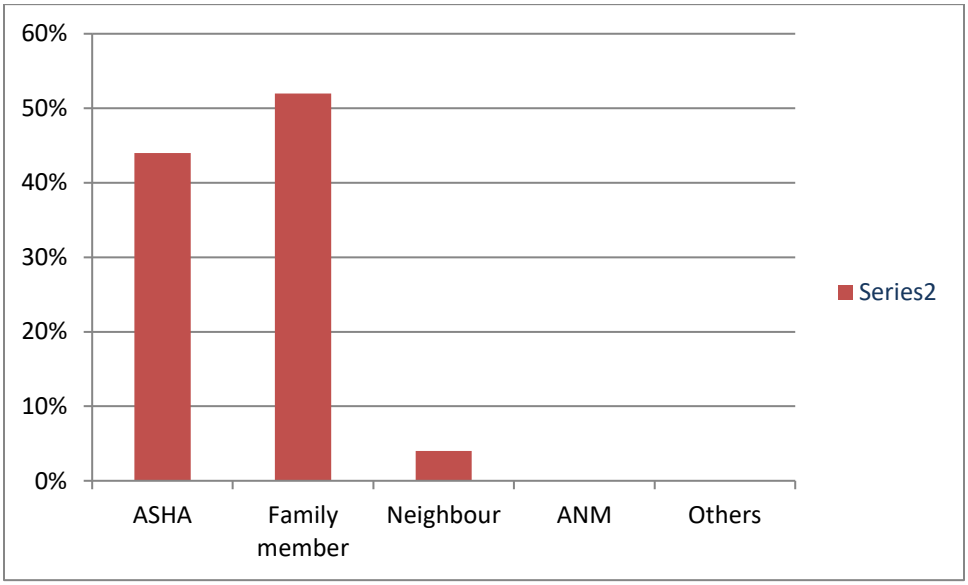

Figure 4: Person you accompanied at the time of delivery

This graph is depicting that mainly ASHA and family members accompanied the pregnant women at the time of delivery. Sometime ASHA assist the pregnant women up to 48 hrs in health institution and sometime she went after delivery.

3.1.1.2 Role of service providers and activities done by PHC

Regular activities done by PHC service providers included providing medical aid, counseling, organizing awareness meeting with community, facilitating MCHN day, organizing health camp etc. Apart from these they also enumerated various processes of availing of the entitlements by the community such as collecting relevant documents from beneficiaries, filling forms, providing JSY money, meeting with beneficiaries etc. At the same time the findings also reveal that the number of the community members facilitated by the service providers availing the services is relatively low.

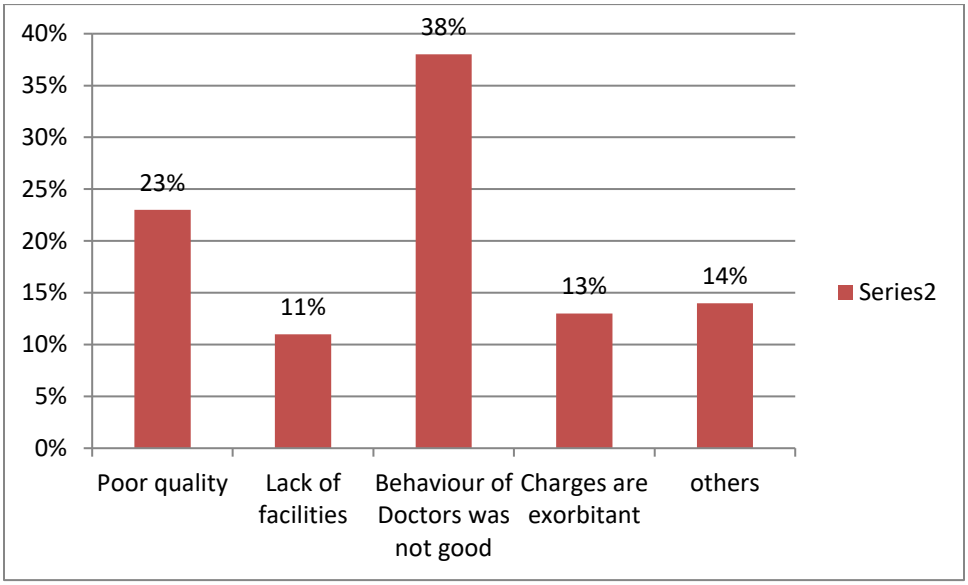

Figure 5: Have you satisfied with overall government health services?

The awareness activity done by PHC, commonly mentioned by the service providers were personal counseling, community sensitization meetings, celebration of MCHN day etc. MCHN day was reported as one of the regular activity done almost in every district. The participation of the community women, adolescent girls and children in MCHN day was comparatively high than other sensitization activities. The awareness activities varied in different district. For example awareness through Nukkad Natak (Street Play), regional songs were very popular in Banswara district.

Apart from this Swasthya Chetna Yatra (Health awareness journey) is a large forum for creating health awareness among the community. This Yatra is being organized all over Rajasthan every year by the Government of Rajasthan.

8. Communication

- **Sources and types of health information in the community**

This study underlines varied sources of health information in different districts. During this study the respondents from Churu mentioned that wall painting, posters, meetings and camps were the key sources of health information. In Banswara community meetings, Nukkad Natak, Kala Jatha and regional songs were reported as effective sources of information. Apart from these, the key sources commonly reported by the respondents were ANM, ASHA and MCHN day.

- **Difficulties faced by service providers in conducting health awareness programme**

The field data also indicates a major gap between the responses of community and service providers regarding accessing and disseminating communication messages.

Majority of the health **Service providers** reported that less participation of the community in the awareness meeting, (due to silent culture of the society) high rate of illiteracy, social stigma and lack of interest are the key barriers to disseminate the health information in the community. Very few of them from Banswara reported that lack of pictorial materials was the main barrier for reaching to the community.

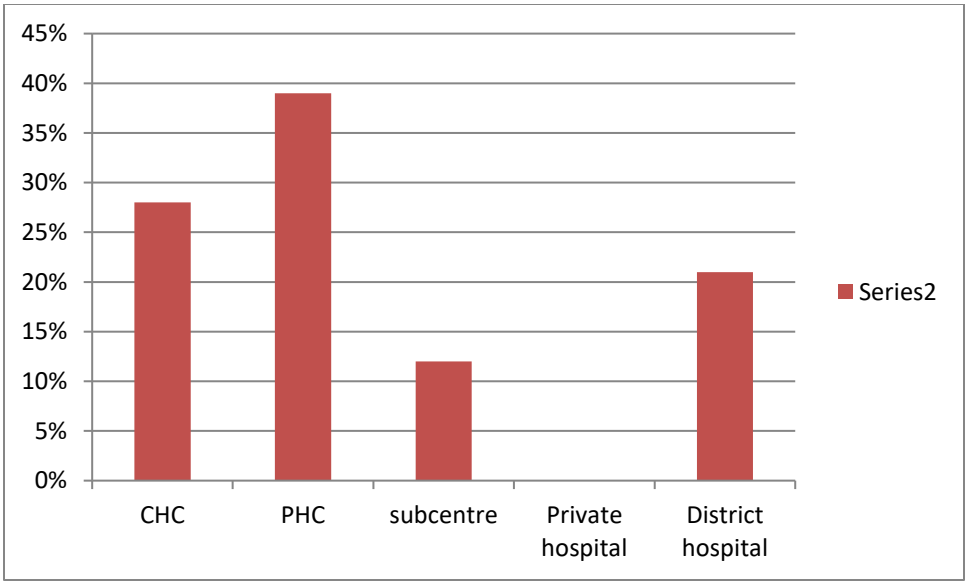

Figure 3: Place where you received the money under JSY scheme

Whereas the **Community** people informed that most of the time both the content and language of the communication messages were incomprehensible to them. Along with this they also reported that irregular visit of ASHA and AWW and lack of pictorial messages were main barrier for accessing the information.

Majority of the service providers also mentioned that, the posters are available in Anganwadi centre, Panchayat Office, PHC, Polio booth, CHC and village haat (local market) but community people reported that posters were only seen in Anganwadi centre.

- **Perception on available communication materials**

The perception of the service providers about posters and other communication materials are quite similar with the community members. The service provider mentioned that despite availability of the IEC materials they did not reach to the community because of socio-cultural difference. They also mentioned that to reach out to majority of the community members, the methodology of the awareness activity should be changed. According to them, maximum use of local resources like folk songs, street theatre, and puppet show in the IEC activity reach out to huge number of community people.

- **Training Status and Training Need**

The respondents reported that they have not yet received any training on MCH and communication. They have taken part in some awareness and sectoral meetings of PHC but have not received any kind of formal training. The training needs that emerged were communication, enhancing knowledge on MCH entitlements.

Some of MO (AYUSH) have been newly recruited throughout the state, they mentioned that they wanted to receive training on diseases, schemes like JSY and RCH programme, Record Keeping, up- gradation of PHC, communication etc. This generates an emergent need for "Training on MCH and communication" among the service providers and at the same time monitoring the existing programme is necessary for further development.

Table 1 findings

Questions	Coding	Frequency
1. What is your Age?	a) Under 20 b) 20-25 c) 25-30 d) 30-35 e) 35-40 f) 40+	4% 24% 31% 22% 13% 6%
2. What is your marital status?	a) Married b) Unmarried c) Divorced	a) Married 7%
3. What is your caste?	a) General b) OBC c) SC d) ST	28% 42% 21% 9%
4. What is your educational status?	a) Illiterate b) Up to 5th standard c) Up to 10th standard d) Up to 12th standard e) Graduated	9% 26% 33% 23% 9%
5. What is your relegion?	a) Hindu b) Muslim c) Others	59% 41% 0%
6. BPL status	a) Yes b) No	24% 76%

7. No of children/parity?	a) 0	11%
	b) 1	30%
	c) 2	34%
	d) 3	9%
	e) 4	11%
	f) 4+	5%
8. Place of last delivery?	a) Home delivery	44%
	b) Institutional	56%
9. Reason for opting home delivery?	a) Mother in law decision	48%
	b) Husband's decision	19%
	c) Nearby no health institution available	22%
	d) Due to late night so no transport available	11%
10. Reasons for institutional delivery?	a) ASHA guided	43%
	b) ANM guided	11%
	c) Husband suggested	15%
	d) Own decision	21%
	e) Mother in law suggested	10%
11. Mode of transport	a) 108	34%
	b) Private vehicle	42%
	c) Government vehicle (hospital)	0%
	d) Personal vehicle	24%
12. Persons facilitated in the arranging the transport?	a) ASHA	8%
	b) ANM	2%
	c) Family members	59%
	d) others	31%

13. Person accompanied you at the time of delivery?	a) ASHA	44%
	b) Family member	52%
	c) Neighbour	4%
	d) ANM	0%
	e) Others	0%
14. Have you heard about NRHM?	a) Yes	60%
	b) No	40%
15. Source of information about NRHM?	a) ASHA	64%
	b) ANM	18%
	c) Some NGOs	12%
	d) Government health workers	6%
	e) News papers	0%
	f) others	0%
16. What are the MCH entitlements under NRHM?		
17. Have you heard about ANM?	a) Yes	82%
	b) No	18%
18. What are the roles and responsibilities of ANM?		
19. Have you heard about ASHA?	a) Yes	91%
	b) No	9%
20. What are the roles and responsibilities of ASHA?		
21. Have you heard about VHSC?	a) Yes	51%
	b) No	49%
22. What are roles and responsibilities of VHSC?		
23. Have you heard about untied fund?	a) Yes	41%
	b) No	59%
24. What is Janani Suraksha Yojana?		

25. How much amount you get under the JSY scheme?	a) 1700/-	16%
	b) 1400/-	71%
	c) 1000/-	8%
	d) 700/-	5%
26. Place where you received the money under JSY scheme?	a) CHC	28%
	b) PHC	39%
	c) Sub centre	12%
	d) Private hospital	0%
	e) District hospital	21%
27. Have you faced any difficulties to get money?	a) Yes	27%
	b) No	73%
28. Where should go at time of delivery?	a) Skilled dai	3%
	b) PHC	39%
	c) Sub-centre	12%
	d) CHC	24%
	e) District hospital	22%
29. Where you will go for your delivery in future?	a) Skilled dai	3%
	b) nearest PHC	39%
	c) Sub-centre	12%
	d) nearest CHC	24%
	e) District hospital	22%
30. What are the benefits of institutional delivery?		
	a) Money available under JSY scheme	
	b) Better access of institutional delivery	44%
	c) Support provided by ASHA	18%
	d) Some NGO advised and aware them about the institutional delivery	23%
	e) Previous child was born in the institution	15%
		0%
31. What is MCHN day?		

32. Frequency of MCHN day?	a) 1st month	77%
	b) 2nd month	22%
	c) 3rd month	8%
	d) 4th month	3%
33. Stage of pregnancy when beneficiary got registered for JSY scheme?	a) 1st month	a) 1st month
	b) 2nd month	b) 2nd month
	c) 3rd month	c) 3rd month
	d) 4th month	d) 4th month
34. Person who registered the pregnant women?	a) ASHA	69%
	b) ANM	26%
	c) Doctor	4%
	d) Social workers	1%
35. Place where beneficiaries got registered for JSY scheme?	a) Sub-centre	17%
	b) PHC	29%
	c) CHC	26%
	d) District hospital	12%
	e) Private hospital	5%
36. JSY received by beneficiaries?		
37. What is complete immunisation?		
38. Have you completely immunised you and your children?	a) Yes	35%
	b) No	65%
39. ASHA worker helped the beneficiaries to get JSY card?	a) Yes	72%
	b) No	28%
40. Beneficiaries received advise from ASHA	a) For institutional delivery	13%
	b) For ANC	8%
	c) For PNC	4%
	d) IFA	11%
	e) For any two	9%
	f) For all	55%

41. Have you satisfied with overall government health services?	a) Poor quality	23%
	b) Lack of facilities	11%
	c) Behaviour of doctors was not good	38%
	d) Charges are exorbitant	13%
	e) others	14%
42. Reasons for dissatisfaction?	a) Poor quality	18%
	b) Lack of facilities	30%
	c) Behaviour of doctors was not good	40%
	d) Charges are exorbitant	2%
	e) others	10%
43. Behaviours of government health workers is	a) Good	28%
	b) Bad	42%
	c) Moderate	30%
44. Have you received at least 3 ANC?	a) Yes	80%
	b) No	20%
45. Have you received at least 3 PNC?	a) Yes	35%
	b) No	65%
46. Stayed for 48 hours in hospital or health institution after the delivery?	a) Yes	30%
	b) No	70%

Chapter 4
Conclusion:

Maternal and newborn care is an important factor in the primary health care system, which needs to be given the first priority for reducing mortality. Much attention has been given with the introduction of safe motherhood in 1987. No significant fall in maternal and infant mortality rate had been observed although data indicates high coverage of care. There is a wide disparity in the Mortality rate between developed and developing countries. This difference can be attributed to the 'quality of care' and 'continuum of care'. Much stress has been given on the coverage of primary health care for improving the quality of care. But, quality improvement also requires keeping into account the needs of the users, skilled attendance, availability and accessibility to functioning health facilities. The decision on managing resources should be based on systematic 'assessment of needs' of the local population and the Gaps in the health care system. This means to take into account local demography, the epidemiology of health problems, evidence on the effectiveness of health care system and preference of the local population to know the gap areas. Achieving quality in health facilities requires the proper performance of the interventions according to prescribed standards (Gilson et al 1995). Therefore, program planners and policy makers should focus more on issues related to structure, process and outcome with emphasis on health providers training, appropriate use of standard case management guidelines, and development and implement of protocols for systemic supervision.

Limitations of study:

Generalization of the study result is limited firstly due to prevailing geographical, socioeconomically and cultural variations and sample consistency. Secondly, there can be selection bias for group discussion, as tribal people are very introvert and shy, they do not

like to open up quickly. Thirdly, Language problem may act as a barrier to understanding the actual essence of what the members want to say even though interpreter may try to translate very accurately. Fourthly, complete records may not be available at certain facilities therefore to trace the sequence of events in case studies may be difficult.

Chapter 5
Recommendations:

- Increase awareness among pregnant women, lactating women, community member is most important step to generate demand from community side for government health services.In almost every villages the respondent reported that the source like street theatre, exhibition, folk songs were preferable and easy medium for them. Due to low rate of literacy most of the time the messages through posters and pamphlet were incomprehensible for them.

- Participatory communication methods should be use to improve the awareness among community members and pregnant women and lactating women.

- Absenteeism of NRHM worker should be properly monitored.

- ASHA should be recruited from same village, so she can assist the pregnant lady at the time of delivery in mid night also.

- Regular refresher trainings should be provided to ASHA/ANM for improvement of maternal health services.

- Regular community awareness meeting should be facilitated from health workers with help of some regional NGO/CBO and other agencies.

- Pictorial messages should be used to improve awareness among community members.

- Round table meetings with service providers, religious leaders, VHSC members, PRI members, social workers, NGO workers and other active member should be conducted.

- Communitization of health services need to be ensured for which multipronged approach for addressing the communication gaps to be adopted and community empowerment is to be ensured by giving the responsibility in planning execution and monitoring of health services at villages' level. Transferring the untied fund is not the solution of the problem.

- In Rajasthan, discontinuity and dropping out from the services at various stages from registration of pregnancy, ANC visits, PNC and Neonatal care is visible. Therefore strategies for ensuring the continuity in services need to be framed.

- BCC strategy should be evolved based on the observation of this study and the experiences of field level services providers and program managers.

- As decision related to pregnancy, delivery and child care, rests with mothers-in-law so need is to enhance the knowledge of MIL, wherein specific strategies in relation to communication and counseling need to be forged.

- Introduction of JSY has changed the scenario of institutional deliveries but some of the regions still lag behind in this regard. Region specific BCC strategies are needed to be developed for these areas to promote JSY.

- ASHA should also focus on PNC, because there are some cases where after getting incentive they have not done the minimum 3 PNC checkups.

- VHSC members should discuss the maternal and child health issues in their monthly meetings.

Chapter 6
References

ADDM: (2002): Working Group on Indicators, Program Note: Using UN Process Indicators to assess needs in Emergency Obstetric Services : Bhutan, Camroon and Rajasthan, India. International J. Of Gynaecology and Obstetric: 77: 277-284.

Basu S.K: (1994): The state of the Art-Tribal health in India (in) Tribal Health in India: edited by Salil Basu, Manak publications, Delhi: Pages-12-14.

Basu S.K, Jindal A, Kshatriya G.K, et al :(1993): Study for socio-cultural, demographic features, Maternal and Child health Care practices and sexually transmitted diseases in Santhals of Mayurbhanj district, Orissa (Mimeo. NIHFW): New Delhi: 1-6.

Bhatia B.D, Chandra R: (1993): Adolescent Mothers an unprepared Child: India J. Maternal Child Health: 4 :(3):67-70.

Department of Reproductive Health and Research (DRHR) : (2000):Managing Complications in Pregnancy and Childbirth : a guide for Midwives and Doctors, WHO/RHR/00.7. Integrated management of Pregnancy and childbirth. Geneva: World Health Organisation.

Department of Reproductive Health and Research (DRHR): (2002): The WHO reproductive health library, WHO/RHR/01.1 Vol-5, Geneva: World Health Organisation.

DFID: (2004): Reducing Maternal Deaths: Evidence and Action: page – 1-35.
Director of Census Operation, Jharkhand (DCOJ): (2001b): Census of India 2001, series 21, Rajasthan provincial population totals: paper-2 of 2001: Rural–urban distribution of Population, Patna.

Foundation for Research in Health System (FRHS): (2003): Study on availability and accessibility of abortion care: Client perception of quality and access to abortion care in Ranchi, Jharkhand: A report: http://www.frhsindia.org/ActivityReport.htm (accessed on January 14th 2007).

Ghosalkar A.B: (2006-07): Tribes of India: Ahmadabad, Gujarat, and Anthropological Survey Ministry of Tribal Affairs: by book wise (India) Pvt. Ltd. New Delhi. India. Annual Report (2006-07) www.Tribal.nic.in/finalcontent.pdf

Gupta P.K: (2004): The status of maternal health and child care in newly formed States: Jharkhand, Chhattisgarh, Rajasthan and Uttaranchal of India: District level analysis: Indian Journal of preventive and social medicine: vol. 35:1&2: pages- 46-57.

Gwatkin D.R: (2000): Health inequalities and the health of the poor. What do we know? What

can we do? : Bull World Health Organisation: 78: 3-18.

Khan K.S, Wojdyla D, Say L, Gulmezoglu A.M, Van Look P, :(2006): WHO systematic review of causes of maternal deaths: Lancet: 367:1066-74.

Kim Y.M, Rimon J, Winnard K, Corso C, Mako I.V, Lawal S, Banaloa S, and Huntingdon D: (1992): Improving the quality of service delivery in Nigeria: Studies in family planning: 23: 118-127.

Kumar S, Jain A.K., and Bruce J: (1989): Assessing the quality of family planning services in developing countries: Programs division working paper no-2: Population Council, New York.
Kunst A.E, Houweling T: (2001): A Global picture of poor – rich differences in the utilization of delivery care: Studies Health Serv Organ Policy: 17: 297-316.

Maiti S, Unisa S,Agarwal A.k: (2005) : Health care and Health among Tribal women in Rajasthan: A situational Analysis: Stud. Tribals: 3(1):37-46.