Summer Training

In

Jaipur, Rajasthan

(1st April to 15th June, 2015)

A Report on

"Data Quality of Social Audit of Maternal Deaths and Analysis of the cause of Delays in Obstetric care by applying the Theory of Three Delays Model"

By

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(WHO Collaborating Centre for District Health System Based on Primary Health Care)

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CERTIFICATE

This is to certify that the project work titled "**Data Quality of Social Audit of Maternal Deaths and Analysis of the cause of Delays in Obstetric care by applying the Theory of Three Dlays Model"** has been done entirely and submitted by **Dr. Shruti Kohli**, student of MBA 1st year in Hospital and Health Management, from IIHMR University, Jaipur.

The study project is her original work and was prepared during the internship period from April 1 to June 15, 2015 at UNICEF, Jaipur.

I wish her all success for future endeavors.

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Shruti Kohli** student of Institute of Health Management Research University, Jaipur has successfully completed her internship with UNICEF Office for Rajasthan, Jaipur from 1st April to 15thJune 2015. During her internship she has managed the data available through Pregnancy & Child Tracking System and prepared reports on the following subjects:

Study on "Data Quality of Social Audit of Maternal Deaths and Analysis of the Cause of Delays in Obstetric Care by Applying the Theory of Three Delay Model"

She has successfully completed the study assigned to her during the training and her contribution to the study has been sincere, scientific and analytical.

I wish her success in all her future endeavours.

30/6/15

Dr Apurva Chaturvedi
Health Officer
UNICEF, Rajasthan

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Acknowledgement

I would like to express my heartfelt gratitude to UNICEF for providing me the opportunity to work in such an esteemed organization and for making all the facilities available and giving support in every way for completion of internship.

I would like to express great indebtedness to Dr. Apurva Chaturvedi and Dr. Anil Aggarwal without whom this training could not have been accomplished. I would like to extend my sincere regards for Dr. Sanjeev Gupta, Mr. Vinod and Mrs.Poonam, who despite other preoccupation and busy schedule, were there to help me on the project.

I attribute this success and thanks to Dr. Ashok Kaushik (Dean), Dr. P.R. Sodani (Professor and Mentor IIHMR) for their constant motivation and valuable guidance.

Thanking you

Dr. Shruti Kohli

19th Batch MBA-HM

Table of content

S. No. **Page No.**

1. List of acronyms

2. Purpose of Internship

3. Executive Summary

4. Section I

A). About the organization

B). NRHM, Rajasthan

5. Review of Literature

6. Section II

A) Rationale of study

B) Objective

C) Methodology

D) Findings

E) Conclusion

7. Recommendations

8. Learnings from summer training

9. Reference study

List of Acronyms:-

ANC = Ante Natal Care

ANM = Auxiliary Nurse Midwife

AHSA = Accredited Social Health Activist

AWW = Anganwadi Worker

APH = Ante partum Haemorrhage

BMO = Block Medical Officer

CHC = Community Health Center

CBMDR = Community Based Maternal Death Review

FBMDR = Facility Based Maternal Death Review

HIV= Human Immunodeficiency Virus

IFA = Iron and Folic Acid

MMR = Maternal Mortality Rate

NRHM = National Rural Health Mission

PCTS = Pregnancy Child Tracking System

PPH = Post-Partum Haemorrhage

SRS = Sample Registration System

TB = Tuberculosis

UNICEF = United Nation Children's Fund

UNFPA = United Nations Population Fund

WHO = World Health Organization

Purpose of summer training

Practical exposure is an integral part of post graduate diploma in health and hospital management. As a part of curriculum, I had a privilege to get hands on experience in UNICEF Jaipur where I learnt the functioning of healthcare organization. During my internship I visited UNICEF Jaipur and SHIFW where I observed the functioning of health system and worked in a project under their guidance.

1. To understand functioning of CHC, PHC SC, Aganwadi, DH and Tertiary care Centre and learn various managerial inputs required in an organization.

2. To understand the ongoing activities and my responsibility so as to contribute in the best possible manner to the organization and project given to me.

3. Develop skills in scrutiny of secondary data, operations and its management to analyze different aspects.

4. The above objective required extensive reading and interaction with persons to get knowledge about State health system and its functioning style.

5. Literature review by reading journals, reports and presentations about a given subject and relate them to project for reference purpose.

Executive Summary

Millennium Development Goal- 5 talks about maternal health. Estimate of WHOM, UNICEF and UNFPA for the years 1990, 1995 and 2000 states that more than half a million women die every year from complications related to pregnancy and delivery, of which more than 50% take place in Africa and 40% in Asia. [4] Millennium Development Goal- 5 aims to reduce the worldwide maternal mortality ratio by 75% between 1990 and 2015 which has been attained by Kerala, Tamil Nadu and Maharashtra, but Rajasthan is still fighting the battle with MMR of 244 [6].

Maternal mortality is the death of a woman who dies from pregnancy related causes while pregnant or within 42 days of termination of pregnancy. There are direct and indirect causes of maternal mortality. Direct causes include Ectopic Pregnancy, Eclampsia, Sepsis, Obstructed Labour, Ante partum Hemorrhage, Postpartum Hemorrhage, Abortion complications, Anaesthetic Complications and Embolism. Some

indirect causes are Anaemia, Malaria, HIV/AIDS, Heart diseases, Substance abuse, Diabetes etc.

Maternal mortality ratio is the number of women who die from pregnancy related causes while pregnant or within 42 days of termination of pregnancy, per 100,000 live births. India has a MMR of 167 whereas Rajasthan has a MMR of 244 [SRS, 2011-2013] which shows a fall in pattern from previous counts. But this information is not to be cheered as this number still outreaches that of many states in India. [1]Maternal Death Review (MDR) as a strategy has been stated in the RCH – II National Programme Implementation Plan document. It aims to improve the quality of obstetric care and reduce maternal mortality and morbidity.

Government of Rajasthan has introduced social audit of maternal deaths for deaths happening at community level since 2014 September. It is one step ahead of the traditional method of social audit as in other states. A team of health professionals (that includes medical officer, a nurse, ASHA/ANM/AHW) visit the community and take history of the maternal death case to deduce the cause of maternal death. Apart from this they also conduct group discussions where all pregnant women, their husbands, mother –in laws and panchayat head are involved. They are counselled for safe motherhood and also a discussion is carried out where the reasons of maternal deaths are put forward.

Section-1

ABOUT THE ORGANIZATION

1. UNICEF, Jaipur

   The **United Nations Children's Fund** (**UNICEF**) is a United Nations Program headquartered in New York City that provides long-term humanitarian and developmental assistance to children and mothers in developing countries.

UNICEF is working with a range of government departments in Rajasthan to provide technical support for programmes aimed at improving child survival, growth and development. It is focusing on improving the health and nutrition status of newborns, children, adolescents and women and adequately addressing water, sanitation and hygiene (WASH) issues, particularly by working to eliminate open defecation.

The state office has been fostering collaboration between UNICEF's Education, Child Protection and Policy Planning and Evaluation sections to create a protective and learning environment for boys and girls so that they are able to have equitable access

to, and utilize, quality education and protection services.

Adolescent participation is another area where a range of UNICEF sections have come together to bring about change. In this case, the Education, Child Protection, Communication for Development, and Advocacy and Communication sections have jointly come up with initiatives to empower adolescents. Both boys and girls are being supported to make informed decisions that affect their lives, create opportunities to come together in forums and for peer learning, exercise rights and access services, take informed decisions to complete their education, better plan their own futures and take steps to realize their dreams.

In the advocacy sphere, UNICEF has developed advocacy briefs for use by relevant stakeholders and will be implementing programmes for the political leadership in the Rajasthan State Legislative Assembly. It has also conducted public advocacy on critical areas of programming such as sanitation and open defecation-free communities, Routine Immunization and elimination of child labour and child marriage. UNICEF is planning sustained media advocacy on several issues, particularly on Routine Immunization and Child Protection.

UNICEF initiatives include:

As a partner of choice for the Government of Rajasthan, UNICEF is working on a set of models and pilot interventions, particularly in tribal areas in the districts of Udaipur, Dungarpur, Barmer and Baran. The intent is to ensure the survival, growth and development particularly of children belonging to marginalized communities .

Child Survival

- Setting up and scaling up Special Newborn Care Units, with a focus on real time monitoring and quality of services.
- Supporting improvements in the care of women and their babies during childbirth through increasing the quality of services.
- Health system strengthening through supportive supervision and capacity-building.
- Demonstrating a mechanism to improve the quality of services in the most deprived blocks to address the issue of inequity.
- Innovations for real-time monitoring of survival and development outcomes.

Nutrition

- Offering a facility and community-based support and tracking mechanism to improve breastfeeding and complementary feeding. The special Haju Suru (healthy well-nourished child) strategy in the tribal districts of Banswara and

Dungarpur promotes family empowerment in feeding through community monitoring and tracking.

- Supporting a high rate of dose for vitamin A supplementation, with two doses every six months.
- Working with the government towards universal salt idolization and tracking access and use of iodized salt at the family level.
- Improving care and treatment for children with severe acute malnutrition (SAM) and providing facility and community-based strategies to help support children with SAM.

Education

- Enhancing learning outcomes of children through transforming the teaching learning process, making it more student-centric, activity-based, learning-focused and equity-oriented.
- Introducing a continuous comprehensive assessment as part of the pedagogy in all schools by 2018. In 2014, 22,000 schools will implement Continuous and Comprehensive Evaluation (CCE) as their assessment system.
- Providing technical support to monitor learning outcomes in real time.
- Offering a school leadership programme to complement the quality improvement initiative in schools.
- Lending technical support to create an enabling environment for early childhood education (ECE); putting in place a curriculum, syllabus and a state policy for ECE and facilitating coordination with the state Education Department for capacity development of Anganwadi workers and their continuous support on ECE.
- Supporting capacity enhancement of School Management Committees.
- Supporting capacity-enhancement of academic institutes, the State Institute for Education, Research and Training (SIERT) and District Institute for Education Training (DIET), to ensure all interventions to improve education standards can be realized.

Child protection

- UNICEF in Rajasthan is working to strengthen systems for Child Protection by ensuring quality education to all children with a special focus on out-of-school, never-enrolled and drop-out children.
- It is building the capacities of and mobilizing families and the community to take collective action to protect their children and help them develop.
- To increase families' adult incomes and prevent child labour, UNICEF is enhancing access to service providers and social protection schemes for vulnerable families and children such as the widow pension, old age pension, Aap ki Beti Yojana, Palanhar and Mukhya Mantri Hunar Vikash Yojana.

- UNICEF is also helping to improve the state policy framework and delivery systems related to Child Protection; improve access to and the quality of social protection schemes and the Integrated Child Protection Scheme (ICPS); and assessing various Acts, policies and programmes related to Child Protection.
- It is strengthening and supporting the capacity of the ICPS to promote and deliver the best services to the most vulnerable children in the state.
- Designing interventions to reduce child marriage, child labour, out-of-school children and corporal punishment in schools.

Water, Sanitation and Hygiene

- UNICEF is building the capacity for the government and communities to eliminate open defecation by supporting the development and implementation of effective behaviour change strategies at the state level.
- Supporting the state to improve the quality of health care in health institutions by improving Water, Sanitation and Hygiene (WASH) facilities and practices through capacity-building of National Rural Health Mission (NRHM) stakeholders.
- Developing monitoring systems and providing access to evidence-based tools and guidelines and promoting key hygiene practices in schools through sustainable, simple and scalable models of WASH.
- Sharing scalable WASH approaches that address priority gaps and bottlenecks in delivering and promoting sanitation facilities and hygiene promotion.
- Supporting rural WASH sector development through improved management information systems (MIS) for WASH access and use, including identification and corrective action for the state's most marginalized areas.
- Creating an enabling environment for improved WASH facilities and practices in health centres through a convergence of Health and WASH programmes in 100 centres in four priority districts.
- Creating an enabling environment to adopt key WASH practices in schools, through innovative technologies and child-centred approaches in the tribal districts of Udaipur and Durgapur.
- Supporting the state's institutionalization of the WASH validation system to monitor WASH outcomes on a regular basis.

Disaster Risk Reduction

- Working with the State Disaster Management Authority to pilot risk-informed planning systems to improve disaster preparedness and response.

Communication for Development

- Developing strategic approaches to communication through the development of evidence–based and theory-driven communication strategies in the areas of the WASH (SHACS strategy), Health (RMNCH+A and RI), Child Protection (addressing social norms on the Prevention of Child Marriage and Child Labour), Education (community mobilization for the promotion of girls' education). These have been developed with the state government and UNICEF frameworks adopted by national flagships and have been customized for rollout across state.
- Building the capacities of frontline service-providers from government flagship programmes so they can effectively engage with families and communities to promote social and behaviour change in relation to key child survival and development issues.
- Using new technologies for Communication for Development (C4D): The potential of technologies such as the internet, digital tools, mobile phones and the like will be harnessed to communicate with families and frontline functionaries in a changing social and cultural context.

Review of Literature:-

It is a matter of pride that Rajasthan has been in the news for its high decline in Maternal Mortality Ratio from previous years. This shows that the efforts made by the health system are fruitful. Although, the health system is working hard to improve the health status of women but maternal mortality is still a concern.

Millennium Development Goal- 5 concerns about maternal health. Estimate of WHO, UNICEF and UNFPA for the years 1990, 1995 and 2000 figures that more than half a million women die every year from complications related to pregnancy and delivery, of which more than 50% take place in Africa and 40% in Asia. [4] Millennium Development Goal- 5 aims to reduce the worldwide maternal mortality ratio by 75% between 1990 and 2015. [7]. According to the last international estimates published in 2012 (1), 287,000 maternal deaths occur annually worldwide, which represents a 47% decline from levels in 1990. However, 99% of these still occur in developing countries. The international health community has repeatedly called for action to reduce the large number of preventable deaths and complications from childbearing and governments have formally committed themselves to act in order to achieve this. Knowing the level of maternal mortality is not enough; we need to understand the underlying factors that led to the deaths. [2] About two-thirds of maternal deaths occur in a handful of states – Bihar and Jharkhand, Orissa, Madhya Pradesh and Chhattisgarh, Rajasthan, Uttar Pradesh and Uttarakhand and in Assam, all these states being among the 18 high focus states under NRHM. [3]. In spite of the progresses made, achievement of the Fifth Millennium Development Goal target seems difficult to procure by 2015.[5] The

utilization of maternal and child health care services among adolescent women is at suboptimal level in India. Around 10% of adolescent women underwent antenatal care, around 50% avail safe delivery services and around 41% of the children of adolescent mothers had full immunization. [6]

Maternal mortality is the death of a woman who dies from pregnancy related causes while pregnant or within 42 days of termination of pregnancy. There are direct and indirect causes of maternal mortality. Direct causes include Ectopic Pregnancy, Eclampsia, Sepsis, Obstructed Labor, Ante partum Hemorrhage, Postpartum Hemorrhage, Abortion complications, Anesthetic Complications and Embolism. Some indirect causes are Anaemia, Malaria, HIV/AIDS, Heart diseases, Substance abuse, Diabetes etc. Maternal mortality ratio is the number of women who die from pregnancy related causes while pregnant or within 42 days of termination of pregnancy, per 100,000 live births. India has a MMR of 190 whereas Rajasthan has a MMR of 244 [SRS, 2011-2013] which shows a fall in pattern from previous counts. But we have a long way to go before we outreach the other states who have achieved the MDG of reducing maternal mortality as desired. [1].

Apart from the direct and indirect causes of maternal mortality, there can be a delay in seeking the obstetric care that accounts for these deaths. A ‘three delays’ model identifies the cause at which delays can occur in obstetric care. A detailed analysis of these delays can help health personals design a Programme to reduce maternal mortality. The first delay occurs when a woman, or her family avoid seeking care which may be because of social obstacles, low perceived susceptibility, low perceived benefit, low perceived severity or affordability of care. The second delay occurs when she cannot reach appropriate care in time because of inadequate transportation mode or elusive routes to health facility. The third delay is delay in receiving care at health facilities. This involves factors within the health facility, including organization, quality of care, and availability of staff and equipment. Unless all three delays are addressed, no safe motherhood Programme can turn out as planned.

Maternal Death Review (MDR) as a strategy has been stated in the RCH – II National Programme Implementation Plan document. It aims to improve the quality of obstetric care and reduce maternal mortality and morbidity. MDR yields information on various facets at community and facility level that are needed to be emphasized on to reduce maternal deaths. Detailed study on these facets can figure out the delays that lead to maternal deaths at various levels. Government of India has decided to take up Community based maternal death review (CBMDR) and the Facility based maternal death review (FBMDR) which would help in identifying the shortfalls in the present health care delivery systems and plan the interventions to be done accordingly. The ASHA/AWW/ANM notify all women deaths in the age group of 15 to 49 years from her

area telephonically to the BMO within 24 hour. The Block Medical Nodal Officer (BMNO) is the in charge of the Block PHC. The BMNO is responsible for the MD review process at the block level. [2]

Audit is defined as “the process by which people, the final beneficiaries of any scheme, progress, policies and laws are empowered to review any scheme, policy, program or law”. Government of Rajasthan has introduced social audit of maternal deaths for deaths happening at community level since 2014 September. It is one step ahead of the traditional method of social audit as in other states. A team of health professionals (that includes medical officer, a nurse, ASHA/ANM/AHW) visit the community and take history of the maternal death case to deduce the cause of maternal death. Apart from this they also conduct group discussions where all pregnant women, their husbands, mother –in laws and panchayat head are involved. They are counselled for safe motherhood and also a discussion is carried out where the reasons of maternal deaths are put forward. The possible ways to prevent these deaths are discussed e.g. if a woman died because of non – availability of transport , then the group discussion carried by social audit team helps the community to figure out that if in future such an event occurs then who shall be the one to carry the patient to health facility by his conveyance . This method of involving community in social audit is unique to Rajasthan.

This paper describes the learnings and challenges from 90 maternal deaths over the period of 4 in 33 districts of Rajasthan.

Rationale of the Study:-

1. To study & understand the social audit of maternal deaths in Rajasthan.
2. To analyse the database and find out the possible delays in obstetric care using three delays model.
3. To determine the quality of data provided.

METHODOLOGY:

1. STUDY SETTING:

Located in northwest, Rajasthan is the largest state of India. Rajasthan has an area of about 342,239 sq. km and a population of about 6.86 million. It borders Punjab in the north, Haryana and Uttar Pradesh in the northeast, Madhya Pradesh in the east and Gujarat in the south. Rajasthan is hilly in south eastern region and has a huge Thar

Desert across the borders to Pakistan. This state is a storehouse of traditions and topographical diversity. There are 33 districts, 237 blocks and 41353 villages.

Every year Rajasthan has 19.58 Lakhs ANC and we encounter 3800 maternal deaths per year.

Review of 90 maternal deaths over the period of 4 months (September 2014 to December 2014) in 33 districts of Rajasthan is done.

2. REVIEW TOOL & DATA COLLECTION:

Secondary data from social audit of maternal deaths as given by Department of National Health Mission was taken.

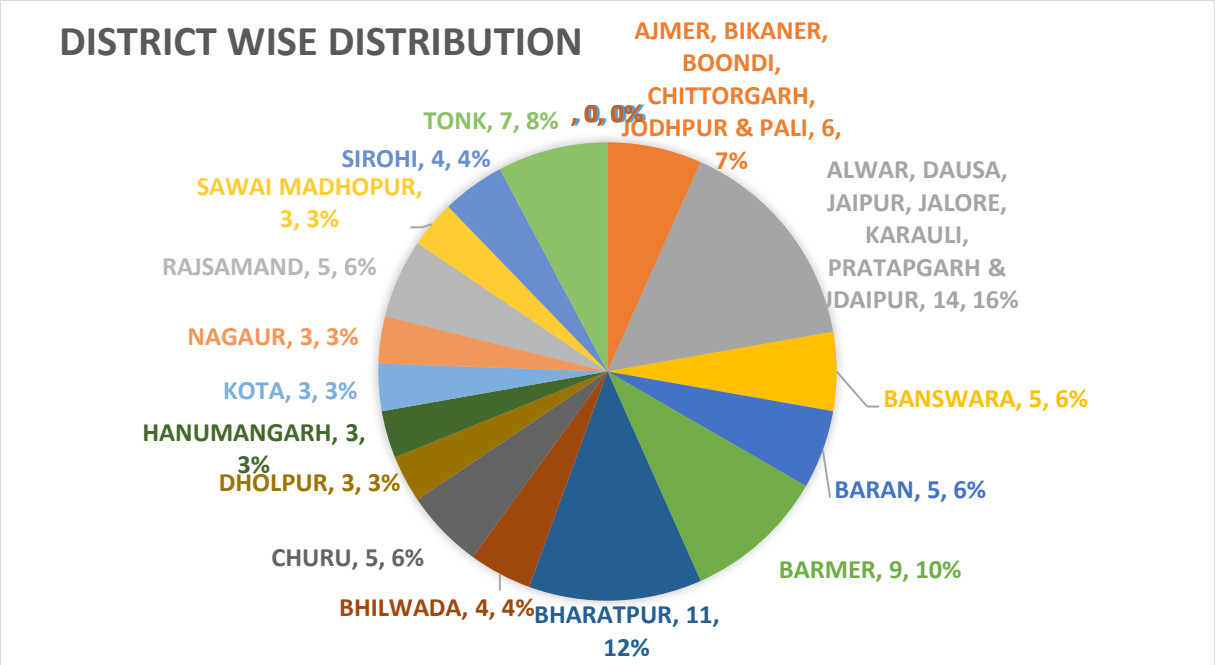
3. DATA ANALYSIS:

First the data was checked for completeness and consistency, then after cleaning the data coding was done. It was categorized into major causes of delay after which it was analyzed using appropriate statistical methods in Microsoft excel.

RESULTS:

Total maternal deaths recorded during 4 months (September 2014 to December 2014) are 90. The data describes the summary of deaths for many cases. Summary of 54 entries abide by the three delays that occur during obstetric care.

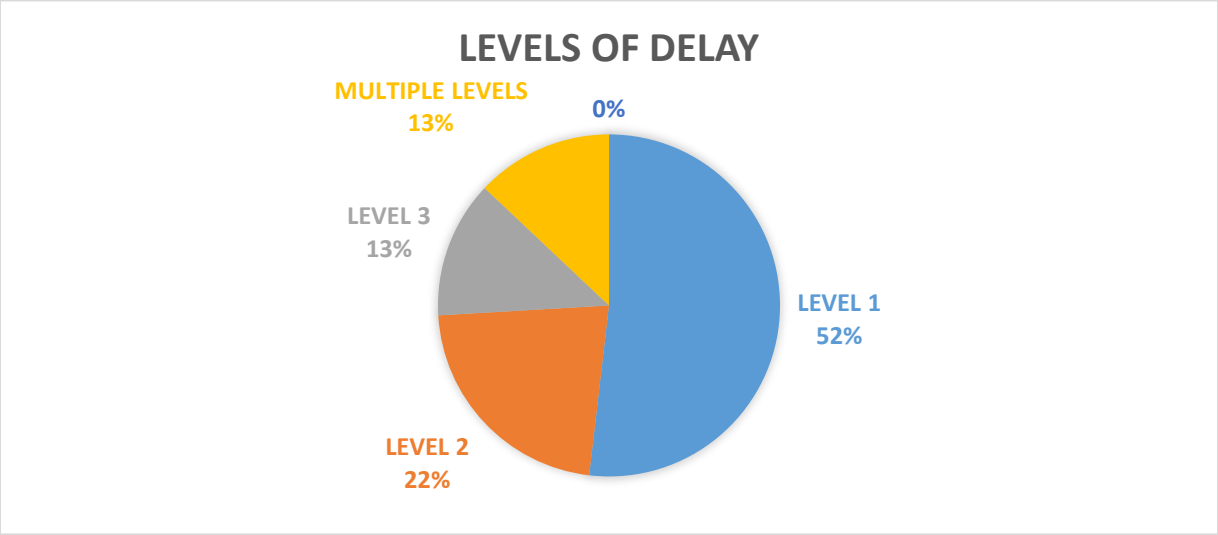
1. *Frequency analysis:*
   Total districts in Rajasthan are 33, social audit for 90 deaths has been done from them. The pie chart below represents the distribution of cases from each district.



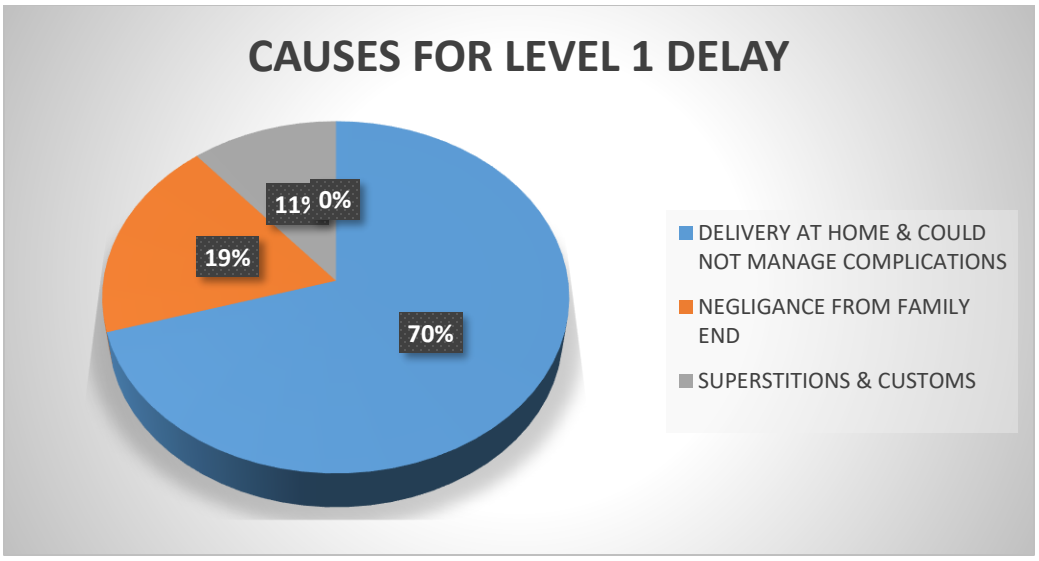
[Maximum is from Bharatpur 12 %(n=11) and minimum is from Ajmer, Boondi, Bikaner, Chittorgarh, Jodhpur and Pali all having one case each. About 50% of the cases are from Bharatpur 12 %(n=11), Barmer 10 %(n=9), Tonk 8% (n=7), Baran 5% (n=5), Banswara 6 %(n=5), Churu 6%, Kota 3 %(n=3).

No social audit recorded from Dungarpur, Ganganagar, Jaisalmer, Jhalawar, Jhunjhunu, and Sikar.

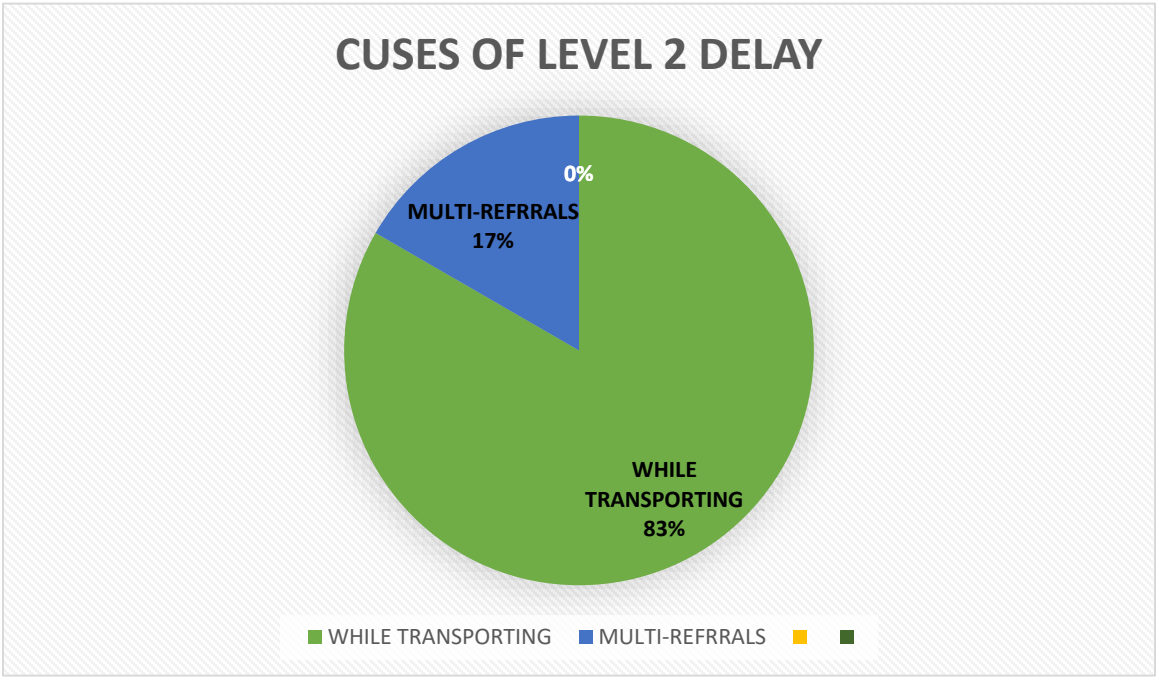
2. *<u>Cause of Delay Analysis:</u>*



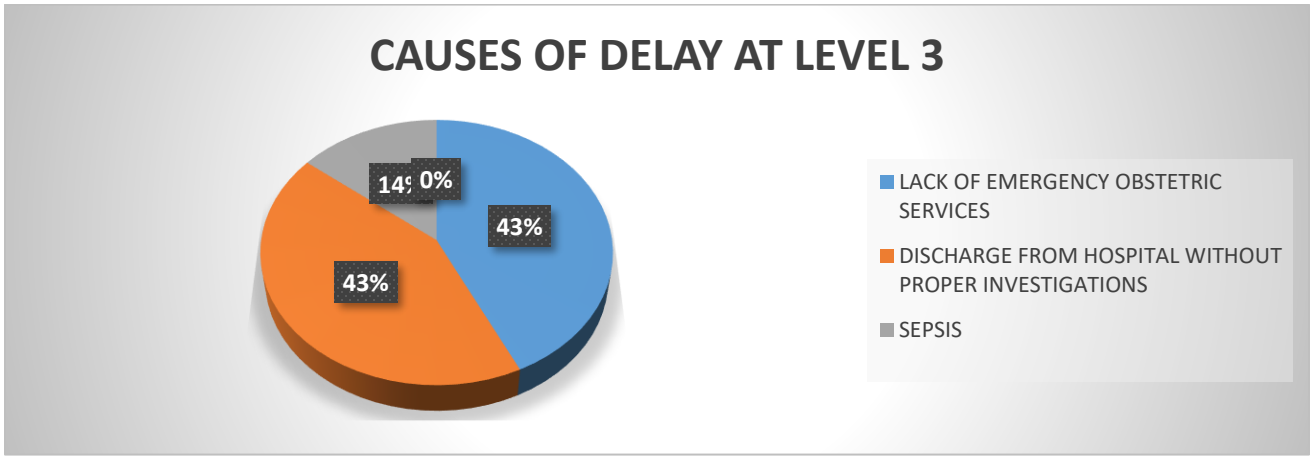
- 28 out of 54 i.e. 52% were due to delay at level 1.



- 12 out of 54 i.e. 22% were due to delay at level 2. The only causes found were delay in transportation of the patient or while transporting the patient and multi-referrals.
-



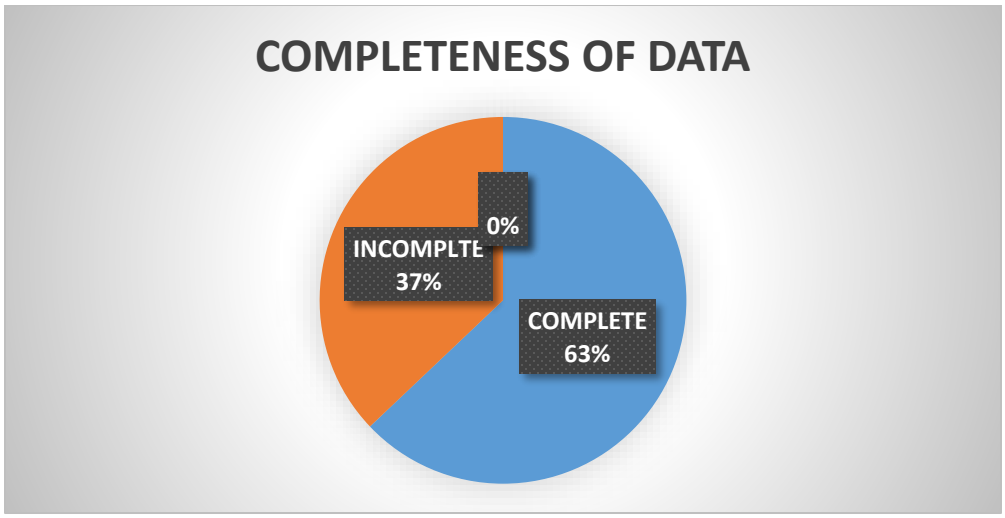
- 7 out of 54 i.e. 13% were due to delay at level 3.



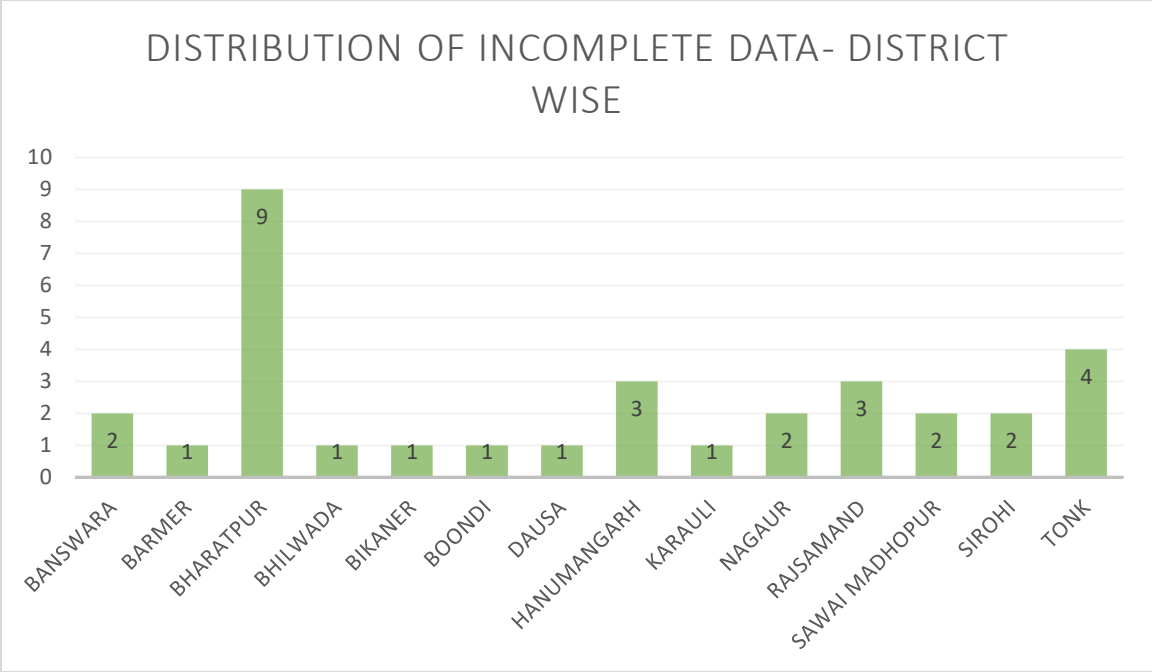
- There were 7 cases that had multiple level of delay. Level 1+2 (2 cases), level 2+3 (5 cases) and level 1+3 (0 case).

3. *Completeness of Data:*

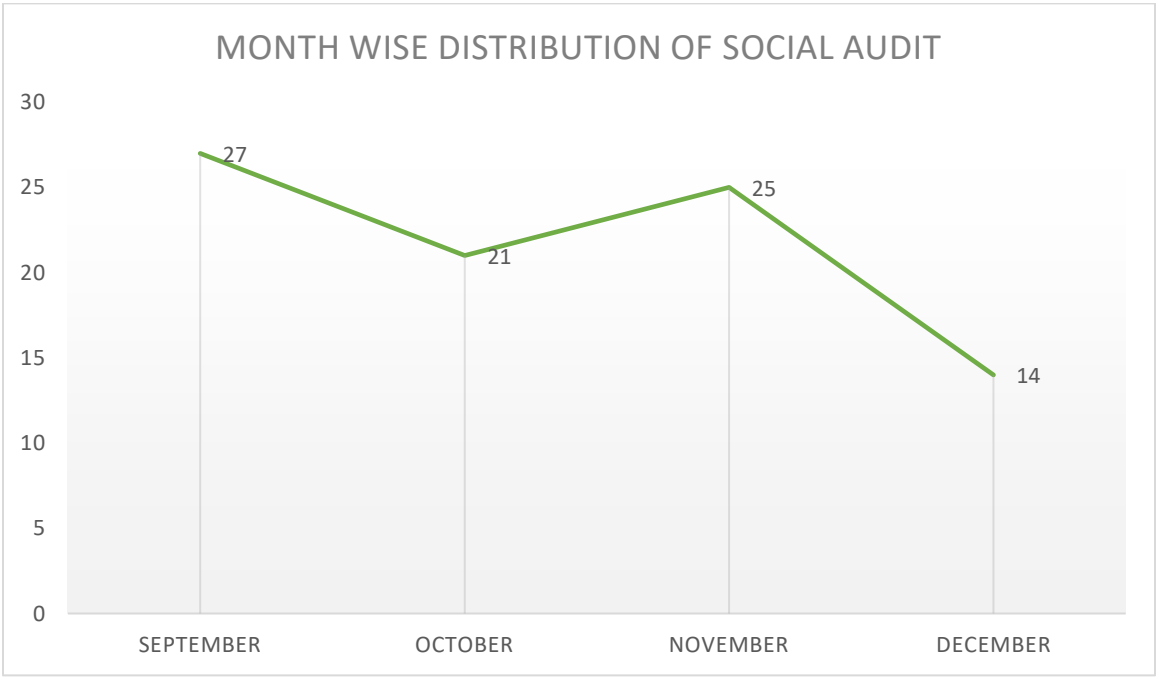
Out of 90 deaths, the social audit was incomplete in 37 %(n=33) cases.



Out of the 33 cases with incomplete data the graph below shows district were distribution.

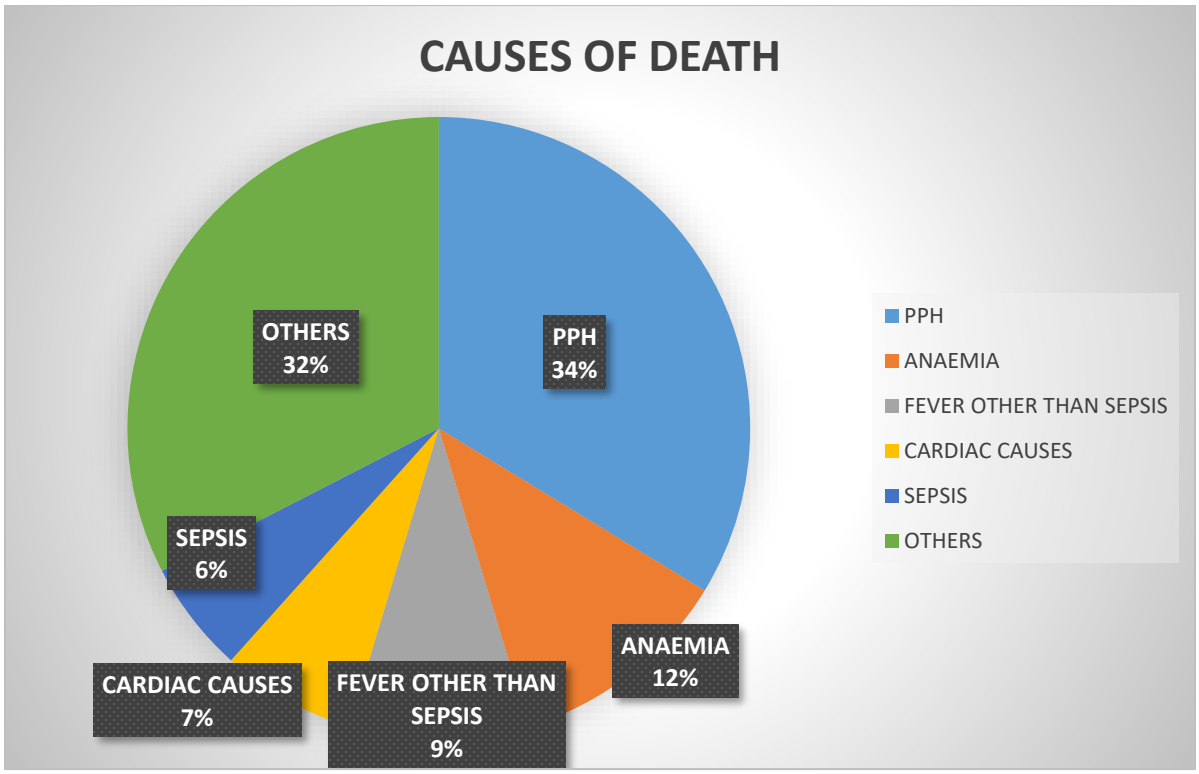


4. *Month-wise collection of data:*



The pattern of above histogram shows that there was:

5. *Cause of death analysis:*



Out of 86 known cause of death , the maximum deaths as reported were because of PPH 33.7%(n=29) followed by anaemia 11.6%(n=10) fever other than sepsis 9.3%(n=8) cardiac causes 6.9%(n=6) and others %(n= 28).

[In the category of there we have five cases each of respiratory causes & sepsis, four cases of cardiac arrest , three cases each of seizure and obstructed labour, two cases each of thromboembolism, eclampsia, APH and pain abdomen . one case each of HIV , TB. , Placental causes, Paralysis , and Ectopic Pregnancy.

For 4 cases the cause of death was not mentioned.

DISCUSSION:

Total deaths encountered in 33 districts during the four months (September 2014-december 2014) are 345 and the social audit for deaths at community level has been

done for 90 deaths. The 6 districts for which we do not have any social audit of maternal deaths are Dungarpur, Ganganagr, Jaislmer, Jhalawar, Jhunjhunu and Sikar. The maternal deaths from these 6 districts as reported in PCTS are 40, out of these the PCTS ID has been generated for 31, which means these women were tracked during the pregnancy and were those who died at facility level only. About 51% of cases have been audited from Bharatpur, Barmer, Tonk, Baran, Banswara, Churu and Kota. This signifies that half of the deaths at community level have occurred here. This draws attention for us to provide some more efforts to lower the count.

The major causes for the delay at first level were: - delivery at home & not institution where patient had PPH and could not be managed in time (14 cases), negligence from the family end where they did not care enough to get their patient treated at some medical facility (5 cases), non-institutional deliveries where in the patient died of complications of delivery (5 cases) and superstitions or belief in customs like taking the patient to some Devta rather than hospital for treatment (3 cases).22% were due to delay at level 2. The only causes found were delay in transportation of the patient or while transporting the patient and multi referrals. The major causes for delay at third level were: - Lack of emergency obstetric services to prevent maternal death (7 cases), discharge from hospital without proper investigations that led to preventable deaths soon after the patient reached home (3 cases) and sepsis (2 cases).As evident from the results we can see that about half of the deaths are due to delay at level 1 and not to ignore the fact that half are due to delay at level 2 and 3. This shows that community awareness and acceptance about safe motherhood has a long way to go. Transportation, although the 104 Janani express is available at many facilities, but the core problems are remote locations, non-availability of conveyance at the time of need and multi referrals. There are cases in this study where it has been observed that the facility could not manage PPH and had referred the patient to higher facility. It is obvious that a case if not able to be handled by a facility can be referred to higher centers, but the reasons why the health professionals were not able to manage complications are not stated in the social audit summaries. The fact that, whether it was a non-functional blood bank, lack of expertise, lack of obstetric instruments or a mere chance of negligence by either patient party or the facility, is not yet made clear.

Rajasthan was facing a daunting task to bring down the count of deaths of women due to maternity and its complications. NRHM (Rajasthan) has therefore constituted a 3 member team to conduct the social audit of maternal deaths occurring at community level. It is done at gram panchayat Aganwadi Centre. The team analysis the cause of death and sends its report within 15 to 20 days .during the social audit , the people are made aware of the facilities being provided by the government for safe motherhood. The importance of antenatal check-ups, 104 Janani Express and institutional deliveries are explained to them. [10] Based on the report of social audit, health department takes preventive measures and develops and implementation plan. Hence a major part of the

decision making rests on the quality of information revealed through social audit. Out of 90 social audits the summary for 33 deaths was not mentioned which is about 37% of the total. This is a matter of concern as to we do not know the root cause or delays that have led to these maternal deaths. The incomplete summaries have been reported maximum from Bharatpur where 9 out of 11 entries have been left blank. The next in the line are Tonk, Rajsamand and Hanumangarh.

PPH is the most common cause of maternal mortality and this is evident in the results we get after organizing the cause of deaths in our study. it is followed by anaemia , Iron And Folic- Acid supplementation is being provided by the government during antenatal check-ups but these being given to the beneficiaries or if these being given are utilized by them or a possible cause could be that they did not underwent antenatal check-up so that would have received IFA. This gap needs to be addressed if we really want to arrest a major chunk of mortality due to PPH and anaemia.

Other domains where some efforts need to be put are - safe delivery practices to avoid deaths due to sepsis, placental causes and embolism.

CONCLUSION:

Strict implementation of Antenatal checkups and detection of high risk pregnancies in early stages of gestation can help the state to achieve MDG at faster pace. Skilled obstetric care during pregnancy, delivery and post-delivery can reduce the maternal death count significantly. From 1990 to 2008, maternal mortality has dropped by one third across the globe [8] and the credit rests upon factors like as training, education, provision of supplies and upgrading of equipment, transport infrastructure. [9]

LIMITATIONS:

The data provided was secondary, had it been a primary data, results could be more accurate and the study could have been more meaningful.

Incomplete data for many entries was also an issue that created a challenge in the study.

RECOMMENDATIONS:

1. Early registration of pregnancy shall be encouraged
2. Education for the benefits of institutional deliveries to all
3. ASHA & ANM should help in registration of pregnancy and encourage ANC visits during pregnancy, moreover a vigilance over their productivity should be there.
4. Well-equipped ambulatory services for referred cases should be there

5. Timely decision making for referrals to higher centers.
6. Training for handling emergency obstetric services to all health professionals at all levels of healthcare

REFRENCES:

1. Sample registration survey (SRS) 2010-2012, India
2. Maternal Death Reviews – guidelines and tools for Health professionals by FIGO (International Federation of Gynaecology and Obstetrics), August 2013
3. NRHM, Department of Health & Family Welfare, Government of Punjab (July 2010) – guidelines for rolling out
4. World Health Organization. Reproductive Health Indicators: Guidelines for Their Generation and Analysis for Global Monitoring. World Health Organization: WHO Press, 20 Avenue Appia, 2011, Geneva 27, Switzerland, 2006.
5. Rai RK, Tulchinsky TH. Addressing the Sluggish Progress in Reducing Maternal Mortality in India. Asia Pac J Public Health. 2012.
6. Singh L, Rai RK, Singh PK. Assessing the Utilization Of Maternal and Child Health Care among Married Adolescent Women: Evidence from India. J Biosoc Sci. 2012; 44(1):p.1-26.
7. Ross L, Simkhada P, Smith WC. Evaluating Effectiveness of Complex Interventions Aimed at Reducing Maternal Mortality in Developing Countries. J Public Health (Oxf). 2005; 27(4):331-7.
8. World Health Organization. Maternal Mortality. Media Centre.2012. [Cited 2012 Fem 28]; Available from:http://www.who.int/mediacentre/factsheets/fs348/en/index.html
9. Ross L, Simkhada P, Smith WC. Evaluating Effectiveness of Complex Interventions Aimed at Reducing Maternal Mortality in Developing Countries. J Public Health (Oxf). 2005; 27(4):331-7.
10. http://timesofindia.indiatimes.com/city/jaipur/Panels-formed-to-bring-down-maternity-deaths/articleshow/44298253.cms

Learnings from summer training:-

1. UNICEF, Rajasthan: - How they plan quality research, collect data to understand issues, implement innovative interventions.

2. SHIFW: - Learn about how they provide technical support in different plans and projects.
3. PCTS: - How does the system work what all aspects are considered and designed for data entry.