Needless Loss:
Identifying solutions for making pregnancies safer through Maternal Death Audits in Jharkhand

- Tanmoy Saha and Amitav Gautam[1]

BACKGROUND

Jharkhand is one of the newest states in India and it was carved out of Bihar in November, 2000. It is characterised by forests and is rich in mineral deposits and has a large tribal population. The state has poor social and health indicators and the health infrastructure of the state was also inadequate compared to national standards when it was formed. Jharkhand is part of the high focus states under the National Rural Health Mission and in the five years since it started there has been a substantial increase in health infrastructure and personnel in the state (NRHM Meeting Peoples Health Needs in Partnership with States, MoHFW, 2010). Between 2005 and 2010, over Rs. 1200 crores have been allocated to the state under NRHM of which over 500 crores have been under the RCH 2 and NRHM Flexipool which are expected to improve maternal and child health outcomes (NRHM: Jharkhand State Report). The percentage of institutional deliveries according to NFHS 3 was 19.2% and there has been a steady increase of institutional deliveries from about 53 thousand in 2005 -06 to 3.45 lakh in 2010 – 2011 (NRHM MIS as on 31.12. 2011). However, the trend of maternal health related indicators from DLHS 2 (2002-04) and DLHS 3 (2007 -08) do not show a significant difference (see Table 1). The maternal mortality ratio of Jharkhand was higher than the national average at 312 maternal deaths for 1 lakh live births (2004 – 2006, SRS).

Table 1
Maternal health related indicators in Jharkhand

	DLHS 2 (02 -04)	DLHS 3 (07-08)
Mothers who received 3 or more antenatal check ups (%)	30.7	31.6
Mothers who had full antenatal check-up (%)	9.3	9.1
Institutional delivery(%)	21.2	17.8
Using any modern contraceptive (%)	31.1	30.8
Unmet need for family planning(%)	34.2	34.7

NEEDS is an NGO based in Santhal Parganas and working in 15 districts of the state. It is a member of the District Maternal Health Committee of Deoghar. In December 2010, NEEDS conducted a PHC Assessment in 9 blocks of 3 districts in the state, which found that Devipur PHC of Deoghar ranked the poorest in terms of quality service and infrastructure. In January 2011, NEEDS started its work in Devipur block with a view to improving the status of maternal and child health. NEEDS undertook the current study to review maternal deaths in this block and identify appropriate community based solutions so that it could start effective advocacy with the Jharkhand Government to reduce maternal deaths in the block.

STUDY OBJECTIVES

The study objectives were as follows:

1. To identify all maternal deaths in Devipur block in one year and to understand their causes.
2. To understand the community level practices that lead to adverse maternal outcomes.
3. To identify gaps in institutional mechanisms and practices which contributed to maternal deaths.
4. To develop solutions for improving maternal health outcomes in Jharkhand.

STUDY SETTING

This study was conducted in Devipur block of Deoghar district in the Santhal Pargana region in Jharkhand. Deoghar is situated in north-eastern Jharkhand. Devipur is a small block spread over an area of 400 km^2. The population of Deoghar district is 1491879 as per the 2011 Census and constitutes about 4.4% of the population of the state. The SC and ST populations in Devipur block comprise 13% and 11% respectively.

[1] Tanmoy and Amitav are researchers from NEEDS, Jharkhand

METHODOLOGY

The study was conducted in three parts. In the first part, all women in the age group 15 to 45 years who had died during the one year period between March 2010 to February 2011 were identified with the help of Sadar Hospital and PHC records and the assistance of ANMs and Sahiyas (ASHAs). A total of 40 death cases were identified and Verbal Autopsy was conducted using a standard tool. These forms were then reviewed by a former civil surgeon and 11 cases of maternal deaths were identified. In the second part, in-depth interviews were conducted with family members of all 11 women. However, in one case the family refused to be interviewed. In the third part, the basic elements emerging from these cases were discussed in 10 focus groups to identify ways in which these deaths could have been avoided. Of these ten focus group discussions (FGDs), four were with members of women's self help groups, four with members of Village Health and Sanitation Committees, one with Sahiyas and one with ANMs.

A team of 18 volunteers were trained to use the three different tools developed for this study – the Verbal Autopsy Form; In-depth interview checklist and the FGD checklist.

The study design was reviewed by the Institutional Ethics Committee of the School of Public Health, SRM University. Verbal consent was taken from all participants prior to their interviews and care was taken to ensure privacy, confidentiality and anonymity of the information. All names in the subsequent sections have been changed.

Box 1 : Two Stories One Ending

Sonu Murmu, (35 years, ST) was from a poor family. She registered her pregnancy in the aanganwadi center (AWC) and received one antenatal checkup from the ANM. After that she never went to the AWC for ANC, Sahiya had visited her house once and advised her to take the medicine regularly and go to the district hospital for any emergency. Her family members decided that she should deliver at home with the help of the local traditional dai. During her labour pain, she started to bleed and after delivery the bleeding continued. She failed to deliver the placenta, after 3 hours of her delivery, she lost consciousness and she died at her home.

Sabita Devi, (18 years, OBC), was from a poor family. She received 3 ANC checkups from the ANM, but her family members decided that she would deliver at home with support from the local traditional dai, because they were poor. During labour, she had severe pain and the dai referred her to the hospital. First, they went to the Deoghar district hospital but were refused by the hospital due to the unavailability of blood. Then they took her to a few private hospitals but there were no beds available. When a private hospital finally agreed to admit her, the doctor said that she needed an operation and asked them to deposit some money. It took a few hours to arrange the money and after her family deposited the money they came to know that Sabita Devi had already died without any treatment.

FINDINGS

The stories of how these women died provide a variety of reasons and experiences. Two of these stories are given in Box 1. However, there are a few key issues that also emerge which are summarized below:

Social and economic profile of the women

Out of the 11 women who died due to causes related to maternity, 2 were below 18 years of age, 3 between 18 and 21 years of age and 4 above the age of 30 years. Nine out of eleven women were non-literate. In five out of these eleven cases, it was the first pregnancy and in 3, it was the second. Ten women out of the eleven were from very poor families and 7 were from other backward castes (OBCs), 3 from scheduled castes (SCs) and one from scheduled tribes (STs), clearly highlighting the social and economic vulnerability of these women.

Antenatal care (ANC) services

Five out these ten women received antenatal care, of whom only two women received complete antenatal care. In two cases, they received antenatal care from private sources. In eight out these ten cases, the families had planned for home deliveries and were not aware of the benefits of antenatal care, institutional delivery or about the complications during pregnancy.

Status of emergency medical services in the public health system

This section is based on the information available from 10 cases as one family refused to be interviewed. In eight out

of these ten cases, the women's families took the women to health institutions when they recognised an emergency, while 2 women died at home.

- ***Lack of 24/7 service in block PHC:*** In three cases, women died on the road while travelling to Deoghar. Doctors were unavailable at the Devipur block PHC after 3 pm, i.e., after outdoor hours were over. This meant even during emergency, people had to visit Deoghar which is 20 kms away. The condition of the road is poor and it takes nearly 2 hours to travel this distance.
- ***Denial by the system:*** Among the 10 cases, denial of care by the health system occured in 3 cases. Deoghar district hospital refused to admit Sabita Devi due to the unavailability of blood. Dumka district hospital denied to admit Shanti Devi since there was no operation facility. In the case of Asha Devi, the staff at Deoghar district hospital refused to provide any service since her family members did not agree to give bribe for emergency services.
- ***Lack of appropriate referral systems:*** While it was clear that comprehensive emergency obstetric facilities were not available in district hospitals, there were no referral procedures for managing these emergencies.

Status of private emergency obstetric care services

In three cases, the women died in private health care institutions because 'timely' and 'rigorous' emergency procedures were not initiated. In one case, the woman was first refused admission in the government hospital and she died while the family was depositing advance fees for starting emergency procedures in the nursing home. In two cases, the doctors left the women after some preliminary care and the women died subsequently.

Community identified solutions

The following is a summary of the solutions generated through the group discussions organised with different stakeholder groups in the community.

- ***Role of ANM:*** The ANM should visit each pregnant woman at home for follow up and to educate the family members and pregnant women on maternal health care including complications. She should use real-life stories. ANM should check pregnant women thoroughly and if there is any problem, she should consult with the women and her family members about the problem and its solutions.
- ***Role of Sahiya:*** Sahiya should educate both husband and wife on different family planning methods to extend the spacing between children. Sahiya should convince the pregnant women for complete ANC and institutional delivery and link her to the service provider. Sahiya should have the important phone numbers, like that of ANM, doctors, PHC, district hospital, private hospitals, auto drivers, etc. Sahiya also needs to visit individual houses for follow up.
- ***Role of VHC:*** VHC members should regularise their monthly meetings. VHC can do advocacy with Government officials to regularise the ANM's visit and also to provide 24/7 health services from the sub centre. VHC needs to take initiative proactively to convince the family members for complete ANC and institutional deliveries.
- ***Role of SHG:*** SHG can lend money at low interest to the very poor families for institutional delivery and emergency cases which could be repaid after receiving the money from JSY. SHG can monitor VHC's and Sahiya's performance and also invite them in their monthly meeting to discuss the current status of maternal health in their village. If needed, SHG should visit pregnant women at their house also. SHG can create pressure on Sahiya and ANM to provide full package of services to the pregnant women as per the NRHM guidelines.
- ***Role of Community:*** Villagers can contribute for transport facilities to the poorest families of the villages. Community can organise gram sabha to educate in-laws on maternal health care. Village leaders and important persons should take an initiative to orient the villagers on maternal health care.

RECOMMENDATIONS

The proportion of maternal deaths in the reproductive age group in Devipur block was over 25%, which is much more than the proportion of maternal deaths as evident from a study of maternal deaths in Maharashtra, where it was less than 10% (IJMR 2010). In addition to the community generated solutions, the authors would like to offer the following recommendations to improve maternal health services in Devipur block:

- **24/7 and referral system in PHC:** Devipur PHC should provide 24/7 service, the doctor has to be there during the night time. The ambulance service needs to be there for 24 hours.
- **Proper implementation of VHND:** The Village Health and Nutrition Day (VHND) is known as Immunisation day, because the main focus of the day has become immunisation of pregnant women and children. All NRHM mandated services should be started at every AWC on VHND.
- **Home visit of Sahiya:** The role of Sahiya should be extended to individual home visits in her working area for identification of new pregnant women and follow up of those women who missed ANC on last VHND.
- **Strengthening of VHC:** In most of the villages, VHCs are not functioning. This needs to be addressed by providing training and orientation on maternal health management to the VHC members. Role of VHC should be cleared to each VHC member.
- **Partnership with private service providers:** The district hospital can establish an arrangement with the private doctors and nursing homes in local areas, which are competent to provide Emergency Obstetric Care services. If there is any service unavailable in the hospital, they can refer the women to the private partners as per need but the cost has to be paid by the district hospitals
- **Providing education on maternal health:** The health department must facilitate and conduct village level campaigning to educate community on maternal health care, specifically about ANC and PNC, institutional delivery, stopping early marriages, first pregnancy after 21 and family planning. Local market places, gram sabha, block offices, panchayat offices can be the places for campaign. VHC, Sahiya and women SHGs can also play a vital role in these campaigns.
- **Conduct maternal death audit:** All the maternal death cases should be referred to the District Maternal Death Committee by the system to conduct maternal death audits within 7 days of death and the system has to take action as per the committee report.

NEEDS will try to work closely with the community and with the health system in order to ensure that these recommendations are part of the plan of action to reduce maternal mortality in the district.

Acknowledgements: We would like to thank Dr. Abhijit Das, Director of Centre for Health and Social Justice and the entire CHSJ team for their support during the study. We also thank Prof. Satish Kumar, Dr Anil Krishna and the faculty at SRM University. We would also like to thank UNFPA for their financial and technical support. Mr. Murari M. Choudhury, the Executive Director of NEEDS, every member of NEEDS family have constantly encouraged us. We thank Ms. Supriya for her support on data compilation and all volunteers who worked very hard to collect all data from the villages.

About the Organisation: Network for Enterprise Enhancement and Development Support (NEEDS) is a professionally managed committed NGO active in community capacity building and issue based networking in Jharkhand and Bihar. The primary focus of NEEDS is on the problems of the poor in their struggle to obtain a life of justice and dignity. Environment stabilisation, food security and empowerment of the community for self-governance are the most important components of its mission. Gender justice, natural resource management and livelihood security are our primary areas of concern.

Mentoring: This study was mentored by Dr Abhijit Das and the report finalised with the support of Ms. Shreeti Shakya.

CHSJ	SPH, SRM University	UNFPA India
New Delhi	Kattankulathur, TN	New Delhi

Centre for Health and Social Justice
Basement of Young Women's Hostel No. 2, Avenue 21, G Block, Saket, New Delhi 110 017
Phone : 91-11-26511425, 26535203 Telefax : 91-11-26536041 E-mail: chsj@chsj.org Website: www.chsj.org