Increasing Institutional Deliveries by Strengthening Emergency Referral Transport and Community Awareness and its Impact on Maternal and Neonatal Mortality: A Case Study from Uttar Pradesh

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Introduction

- Every day, 800 women worldwide die from pregnancy or childbirth-related complications (World Health Organization 2012)
- 99 percent of them belong to developing countries (Paxton, et al. 2006) and India alone accounts for more than one quarter of maternal mortality
- The majority of these deaths are largely preventable and treatable with prompt referral transport services and adequate medical attention

Introduction 1

- One third of rural women cite distance as being a big obstacle to obtaining medical care
- Delay in reaching a health facility is one of 'the three delays' and referral transportation also indirectly affects the other two delays, that is, the decision to seek care and delay in receiving adequate care
- Referral and transport strategies can contribute to 80% reduction in maternal mortality (Goldie et al. 2010)
- most obstetric emergencies can be managed if comprehensive emergency obstetric care is reached within 12 hours (Forster et al. 2009)

Introduction 2

- In 2005, the Government of India launched Janani Suraksha Yojana (JSY), a conditional cash transfer scheme to incentivise women to give birth in a health facility
- ASHA assist frontline health functionaries (ANM) to provide comprehensive antenatal care to pregnant women and motivate them to opt for institutional delivery
- ASHAs were expected to also facilitate arranging transport, accompany and stay with the pregnant woman at health facility

Study Area

•Aligarh district in Uttar Pradesh, India, one of the ten high focus states having low in-facility birth coverage

•The district has 12 blocks and a population of 2.99 million. Almost 90,000 births take place in a year in the district.

•About 400 maternal deaths and close to 35000 infant deaths per year

Aligarh has many positive potentials like tertiary and teaching hospital level of institutions (District Female Hospital and JN Medical College Hospital)
In the whole district, only 36.3% of pregnant women were registered for ANC during their first trimester and only 20.2% had 3 Ante-natal visits.
While all block have more than 90% ASHAs in place, only 1.6% pregnant women were motivated by them to seek Ante-natal care and only 0.2% were counseled by ASHAs to seek institutional care for delivery (DLHS-2)



Study Area 1

- A baseline survey conducted by GVSUP in the district during November 2010 and January 2011
- The most commonly reported problem is distance to a health facility, reported to be a big problem by a quarter of women who didn't seek service to a health facility.
- majority of currently pregnant women (CPW) (53%) and (56%) recently delivered women (RDW) did not have any ANC check up. 56% of CPW and 42% of RDW had their first ANC check up in the first trimester

Study Area 2

- Majority of CPW (55%) did not receive any TT vaccination. Similarly, large number of the CPW (69%) and 54% of RDW did not receive iron folic acid (IFA) tablets
- Preferred place of delivery was home in CPW (59%) and RDW (71%)
- Unavailability of transport and distance to the facility were the main reasons for choosing home delivery (42 percent).

About project

- This project was conceived to set up a system for promoting birth preparedness among pregnant women and their families in all twelve blocks of Aligarh district.
- An obstetric helpline was simultaneously established and a community based referral transport network organized to provide affordable transport facilities to pregnant women to reach health facilities without delay.
- It was envisaged that increase in birth preparedness among pregnant women and timely referrals with the help of a helpline and a community based transport network will bring about a reduction in maternal mortality by increasing institutional deliveries under the umbrella of JSY and its incentive based scheme

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The project was a joint initiative of UNICEF and GVSUP. While the UNICEF provided financial and technical support, GVSUP, the NGO, had the responsibility of implementing and planning interventions and the logistics.

Objectives

- Establish an Obstetric Helpline and develop community based transport network for referral services(CBTN)
- Coordinate with transport network, health providers, Community and pregnant women
- Track birth plans & identify gaps in healthcare delivery for poor maternal health indicators
- Strengthen linkages between the community and healthcare providers, JSY and other maternal health interventions being set up through NRHM

Data and Methods

- study used both qualitative and quantitative methods for analysing the outcomes of the interventions of the project
- In-depth interviews with key players related to project at state, district and block level, volunteers, PRI members were done
- Helpline data and birth plans and birth plan tracking of 30785 women was analysed

Continued...

- Major part of the study has been covered by qualitative analysis with inter personal communication with 100 beneficiaries, their husbands and mothers in laws; Village health and Sanitation Committee (VHSC), and ASHAs
- Statistical tools have been used where needed

Project Design

- This project involved coordination between health department, the community (volunteers, private vehicle owners) and the project team
- Helpline established by the project team worked as the coordinating centre; project team worked with the frontline health workers (ASHAs, ANMs, AWWs) to sensitize the pregnant women and their families on birth-preparedness, use of maternal health services, availability of community transport and importance of institutional deliveries

Project Implementation

- 1. Putting in place infrastructure and capacity building of health workers and community leaders: First to third month
- 2. Working with target group and community: Fourth month to sixth month
 - I. Creating awareness in community
 - II. Helpline and facility of referral transport with the assistance of ASHA, ANMs and Volunteers

Project Implementation contd..

- Training of Project Staff
- Sensitization of service providers
- Field volunteers linked to the project
- Establishing Network of community based transporters
- Development of IEC/IPC Material for Project Activities
- Registration and Birth Planning
- Capacity development and sensitization
- Community dialogue and IEC
- Payment to transporters

Project Outputs and Outcomes

- Helpline Fully Functional- Community Transport
 Network Developed; Birth plan tracking in Full Swing
- Massive Capacity Building of Health Providers (2100 ASHAs 300 ANMs)
- At least 40% of all pregnant women had birth-plan developed
- Massive awareness generated
- Atleast 60% of villages linked to 24X7 referral transport

Project Outputs and Outcomes 1

- Use of referral transport improved manyfold
- Substantial increase in institutional Deliveries- and decrease in home deliveries
- Status of ANC and PNC Services improved substantially
- Availability of transport led to increased general utilization of public health services : immunization, general check ups and consultancy ,substantially

Preferred place of delivery in January 2011(in %, N=1200)



Source. Paseline survey GVSUP (November 2010 and Jan 2011)

Place of delivery January2011 – December 2012



Notes: "Presents total institutional deliveries (Public and Private facility). January data based on the baseline survey conducted during November 2010 and Jan 2011. December 2011 data based on Project field data December 2011. Numbers in parenthesis are %.

Services received: Status in December 2012(in %)

	CPW (n=1200)	RDW (n=1200)
Services		
Received TT Injection		
Nil	00	00
1	36	30
2/Booster	67	70
No. of ANC		
1	12	10
2	26	24
3	51	50
4	11	16
Nil	00	00
Total	100.0	100.0

Source: Based on helpline birth plan data Oct-December 2012

Home Versus Institutional Delivery



Delivery in Jun, July, Aug-2011 Delivery in Jun, July, Aug-2012 Delivery in Sep, Oct, Nov-2012

Source. Calculated from ASHA Registers and Panchayat Survey conducted in June, July, August, 2011 & 2012 and September, Cetaber, November–2012; Panchayats (n) = 110, Blocks (n) = 12, Ashas (n) = 196

- Project outputs and outcomes have made certain things very clear
- the interventions carried out have implications beyond their current timelines and spaces
- Birth Plans of pregnant women were included in the Helpline database so that their progress regarding ANC check ups and finally institutional delivery may be monitored

- It also increased use of Community Networked transport motivated a number of women to avail post natal services as well.
- women who had earlier planned to have home delivery, now used transport service vehicle to have her delivery at the health centre

- though, the significant increase in the number of institutional deliveries and substantial reduction in home deliveries, can directly be attributed to the easy availability of affordable transport vehicles, it still required a large scale involvement of community and the health providers to convince many a women and their family members to avail the services.
- outcomes have not been uniform in the entire district. The blocks in which community transport services were well networked, institutional deliveries have also increased significantly

- Transport services have also impacted the use of ANC and Postnatal Services, which is evident from increased number of women utilizing these services in blocks where more women were utilising transport services
- The response of women who have utilised transport services for delivery is also significant as they believe they will be utilizing post natal care because during ANC visits they were told about the benefits of post natal care by ASHA.

The positive association between women using 3 or more ANCs also using post natal services in the first week of delivery is also significant.

Conclusion

- Project outcomes show that the community transport network had a significant positive impact on increasing institutional deliveries in the remotest parts of the district
- People in lowest economic quintiles have used the transport more than other categories
- Analysis has shown that improved referral transport leads to improved access of the community to healthcare facilities.

Thank You