

## Skilled Birth Attendance By Auxilliary Nurse Midwives in Select Districts of Jharkhand – Key Baseline Survey Findings

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#### Introduction

The Government of Jharkhand (GoJH) is taking steps to tackle the situation of extremely high maternal mortality ratio (312 per 100,000 live births) in the state. The GoJH is instituting skilled birth attendance (SBA) training for all the auxiliary nurse midwives (ANMs) in the state to improve skilled attendance at birth. The USAID-funded Vistaar Project, which supports the National Rural Health Mission (NRHM) in the states of Uttar Pradesh and Jharkhand, has been requested by the GoJH to provide technical assistance (TA) in this endeavour.

To refine the programmatic interventions designed to improve SBA in Jharkhand, the Vistaar Project carried out a baseline survey among 136 untrained ANMs in Deoghar and Palamau districts. The primary focus was to identify the gaps in knowledge and practices which prevent the ANMs from functioning as effective skilled birth attendants. To facilitate a comprehensive approach to improving SBA, the survey also covered the supervisors of the ANMs (12 lady health visitors [LHVs], six staff nurses [SNs] and 18 medical officers-in-charge [MOICs]] and the health facilities the ANMs were associated with, consisting of 136 health subcentres (HSCs) and 18 primary health centres (PHCs). Since no major variance was observed in the Deoghar and Palamau findings, this technical brief provides the combined highlights of the baseline survey findings of both the districts and recommendations for action. A full report of the survey findings is also available, which offers more detailed data and analysis at the district level<sup>1</sup>.

#### **Profile of ANMs and Services Rendered**

The average age of the ANMs surveyed was 37 years and half of them had worked for at least 17 years. Each ANM was attached to an HSC, which covered a population of approximately 7,000 persons spread over 10 villages. Three-quarters of the ANMs lived outside the service area, at an average distance of 10 kms from the HSC. The ANMs who lived in the HSC service area made more antenatal care (ANC) visits and attended more deliveries in the facility and at home, as compared to ANMs who lived outside the HSC service area.

According to the ANMs, the top three services provided by them were immunisation (95%), antenatal care (35%) and distribution of oral pills/condoms (26%). Slightly less than a quarter (23%) ranked SBA among their top three job priorities.

More than 90 per cent of the ANMs kept records of the pregnant women registered in their area. Among these ANMs, on an average, each had registered 64 pregnant women and was providing ANC services to an almost equal number (61). The study indicates that more than three-fourths of ANMs were currently providing standard ANC (i.e. tetanus toxoid (TT) injections, iron supplementation, blood pressure and weight check-up during pregnancy). However, use of laboratory tests during pregnancy including haemoglobin, RH testing and urine testing was more limited, with less than one in five ANMs providing these services.

Regarding assistance with the labour and delivery care, poor record-keeping practices limited the study team's ability to readily assess these services, as more than 40 per cent of the ANMs did not have records of the deliveries conducted at the HSCs. Where records were available, on an average, each ANM conducted 19 deliveries in the HSC and attended 17 home births. Of these 36 births, the ANMs reported an average of 9 - 10 complicated deliveries, which they either handled themselves or referred to a higher level of care.

## **Key Findings**

### **Knowledge Levels of ANMs**

Antenatal and Delivery Care - The ANMs were asked, on an unaided basis (spontaneous), to name health problems and complications that can occur during pregnancy. As Figure 1 in the next page reveals, the ANMs' knowledge of specific pregnancy-related complications was quite limited (blurring of vision-7%; bursting of amniotic sac-13%; abnormal discharge from vagina-13%; pain/burning while urinating-15%). Only about half the ANMs had dealt with or referred complicated pregnancies to a higher level of health care.

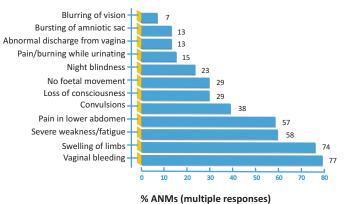
<sup>1</sup>Full report is available at www.intrahealth.org





Figure 1: Per cent ANMs by awareness about health problems/complications



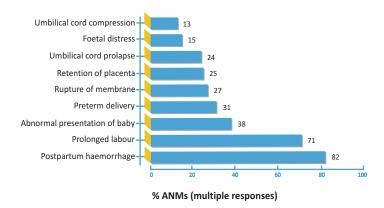


As Figure 2 reveals, spontaneous awareness of ANMs about delivery-related complications was mainly confined to postpartum haemorrhage and prolonged labour, with much less knowledge about specific complications such as umbilical cord compression (13%), foetal distress (15%), prolapsed umbilical cord (24%), retention of placenta (25%) and rupture of membrane (27%).

Merely 13 per cent of the ANMs were aware of the use of partographs to monitor pregnancies, and none had been trained in its use (Table 1). Less than 30 per cent were aware of active management of the third stage of labour (AMTSL). The ANMs had limited knowledge of the specific steps involved in managing the third stage of labour. Just one in three knew about the use of oxytocic drugs to prevent haemorrhage, while 43 per cent were aware of fundal massage as an element of AMTSL.

Even with their limited knowledge, the majority of the ANMs felt that the HSCs to which they were attached could not handle pregnancy complications. Less than four out of 10 felt that the HSCs could handle even the simpler pregnancy-related problems, i.e. night blindness (39%), swelling of limbs (38%), pain in lower abdomen (31%), and severe weakness/fatigue (29%).

Figure 2: Per cent ANMs by awareness about delivery-related complications



Almost none of the ANMs felt that the HSCs could handle more serious complications such as bursting of amniotic sac, vaginal bleeding (2% each), no foetal movement and convulsions (4% each). This is a reflection of the health functionaries' lack of confidence not only in the HSC staff, but also in the facilities' infrastructure and supplies situation.

Newborn Care -The awareness levels on essential newborn care services and postnatal care (PNC) were relatively high. 64 per cent knew about early and exclusive breastfeeding, 66 per cent were aware of maintaining clean cord for preventing infections, while 70 per cent and 62 per cent knew about BCG immunisation and initiation of breathing, respectively. However, there is still significant room for improvement as shown in (Table 2).

More than half of the ANMs reported ensuring immediate drying and wrapping of the newborn (52%) and initiating breastfeeding within one hour of birth (55%) as mandatory newborn care. Only around half of the ANMs claimed that they would ensure at least one PNC visit for all the women who had recently delivered (data not shown).

Table 1: Delivery care-related knowledge levels

Delivery Care Knowledge and Practices	% ANMs (N=136)
Knowledge and use of partograph	
<ul> <li>Ever heard of use of partograph to monitor labour</li> </ul>	12.5
Ever received training on use of partograph	0.0
Awareness of management of third stage of labour	
Aware of physiological management	41.2
Active management	28.7
Aware of specific steps involved in management of third stage of labour	
<ul> <li>Using oxytocics (Oxytocin/Misoprostol)</li> </ul>	33.1
<ul> <li>Clamping cord</li> </ul>	27.2
Placenta delivery by controlled cord traction	32.4
<ul> <li>Fundal massage</li> </ul>	42.6

Table 2: Knowledge of newborn and postnatal care services

Knowledge of Newborn and Postnatal Care	% ANMs (N=136)
Knowledge of essential newborn care services*	
<ul><li>Initiation of breathing</li></ul>	61.8
<ul> <li>Clean cord for preventing newborn infections (tetanus and sepsis)</li> </ul>	66.2
<ul> <li>Early and exclusive breastfeeding</li> </ul>	64.0
<ul> <li>Care of preterm and low birth weight newborns</li> </ul>	43.4
<ul> <li>Prevention and/or management of hypothermia</li> </ul>	35.3
<ul> <li>Eye care: prevention and management of ophthalmia neonatorum</li> </ul>	33.1
BCG immunisation	69.9
Knowledge of common danger signs in newborns*	
<ul><li>High fever</li></ul>	66.2
<ul> <li>Breathing difficulty</li> </ul>	57.4
<ul> <li>Difficulty in suckling</li> </ul>	56.6
Pale/yellow/blue complexion	49.3
<ul> <li>Does not pass stool in 24 hours</li> </ul>	41.9
Does not pass urine in 24 hours	33.1
• Sepsis/infection	19.9
<ul> <li>Rapid breathing</li> </ul>	17.6
*Multiple responses	

#### **Supervisory System**

As per the Indian Public Health Standards (IPHS) guidelines, an LHV must make a supervisory visit to an ANM at least once a week, while the MOIC of the respective PHC must do so once a month. The survey findings indicate that in the month preceding the survey, less than two-thirds (63%) of the ANMs reported that they had received a supervisory visit from an LHV, while three-fourths reported that the MOIC had visited their HSC. The mean duration of these visits was reported to be 101 minutes and the main topics of discussion reported were immunisation, family planning, ANC and record-keeping. Taking into consideration the time spent and the inputs provided during visits, 70 per cent of the ANMs reported that they were satisfied with the supportive supervision provided by the LHV and 96 per cent of the ANMs considered their MOIC to be supportive.

Interviews with the supervisors revealed that they often lacked the requisite knowledge and skills related to SBA, making it difficult for them to provide effective supervision for these services. For example, only about half of the LHVs and MOICs interviewed were aware of AMTSL and none of the LHVs knew about the use of partographs.

#### **Assessment of Health Facilities**

The health facility assessment (Figure 3) found that the HSCs are not currently well-equipped to provide labour and delivery services.

Water was obtained by using a hand-pump in 65 per cent of the assessed facilities; only 16 per cent had a functional toilet, while 19 per cent had electricity. Only 22 per cent had a labour room available.

At the HSCs, supplies were most commonly available for preventive services, e.g. IFA tablets, vitamin A solution, oral rehydration solution, metranidazole tablets, and TT injections. Excluding safe delivery kits and bleaching powder, availability of other essential stock for SBA was limited. Only 9 per cent of the health facilities had misoprostol or oxytocin supplies needed for AMTSL, and even fewer, 4 per cent, had magnesium sulphate which is necessary for treating eclampsia (data not shown). The PHCs included in the baseline survey were better-equipped to provide maternity services than the HSCs.

Govt. provided telephone
Staff quarters
Functional toilets
Electricity
Labour room available
Located in government building
Hand-pump as water source

0 10 20 30 40 50 60 70 % HSCs

Figure 3: Per cent HSCs with basic infrastructural facilities



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# The Purpose of the Vistaar Project

To assist the Government of India and the State Governments of Uttar Pradesh and Jharkhand in taking knowledge to practice for improved maternal, newborn, and child health and nutritional status

IntraHealth International, Inc. is the lead agency for the Vistaar Project

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### **Conclusions and Recommendations**

The baseline survey clearly shows that the current knowledge and performance levels of untrained ANMs fall short of what is considered appropriate or satisfactory for providing SBA services. The supervisors of these ANMs also lack the necessary knowledge to provide support. Many facilities are inadequately equipped or stocked to provide labour and delivery services. Findings from the baseline survey confirm the need to focus TA on upgrading the SBA skills of ANMs and supervisors. The baseline survey also highlights shortcomings in the infrastructure, essential drugs and equipment, supplies and record-keeping in the HSCs, which must improve in tandem with the knowledge and skills of the personnel using them.

Based on the findings of the survey, the following measures for refining the SBA training programme and improving the performance of the ANMs as skilled birth attendants are recommended:

- Educating the ANMs on ANC norms and equipping them with the skills to implement these norms
- Teaching the ANMs to recognise complicated/high-risk pregnancy and delivery cases and how to handle these cases within the limits of the HSC or refer them to a higher health facility
- Educating the ANMs on the use of a partograph and the AMTSL method, with the associated advantages and risks
- Stressing the importance of visiting the mother and newborn soon after delivery, to ensure drying and wrapping of newborn and early initiation of breastfeeding
- Alerting the ANMs to look for postpartum haemorrhage (PPH) symptoms in the mother and how to manage PPH cases
- Training the supervisors of ANMs on supportive supervision
- Ensuring that all health workers possess a copy of the IPHS guidelines for ANC, SBA, newborn care and PNC, in Hindi

To address the shortcomings of the HSC/PHC infrastructure and facilities, the recommendations are:

- All health workers should possess the guidelines for HSC infrastructure and stock requirements, so that they too can monitor the maintenance of required standards
- Accurate and updated records should be maintained to support the proper and accountable functioning of HSCs and their staff
- Frequency of supervisor visits should be increased to meet the established norms
- Infrastructural facilities at the HSCs such as labour rooms, toilets, electricity and telephones should be improved
- Residential quarters should be provided for the ANM to be on hand to provide round-theclock emergency services at the HSC/PHC
- Stocks of needed supplies and essential drugs should be available at all times and, if exhausted, should be speedily replenished

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