

Original Research Article

Knowledge and practices among health functionaries working at first referral units: a cross sectional study in a district of Uttar Pradesh

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ABSTRACT

Background: Pregnancy and child birth are normal event in the life of women. Most pregnancy results in normal birth but any pregnancy can develop complication at any stage so timely provision of obstetric services is extremely important and to the care by a skill birth attendant. So knowledge, skills and practices of these are very important. In light of above the study was carried out with objective to assess the knowledge and practices of medical officer and paramedical staffs (staff nurses and ANM) regarding antenatal services, intra-natal services, postnatal services.

Methods: A cross sectional study was conducted at first referral units (FRUs) of Agra district of Uttar Pradesh, India from June 2015–August 2016. Structured open ended interview schedule were use d to collect the desired information. Before commencing the interview, informed written consent were taken from respondents. All medical officer and all staff nurse, public health nurse and auxiliary nurse midwives (ANM) were included as study subjects. Data were collected by first author himself. A total of 25 medical officers and 30 paramedical staff were interview for the study.

Results: Almost all the medical staffs (100%) have knowledge regarding antenatal care except minimum ANC visit (80%) as practice of ANC services concerned less than half of them doing it as routine, nearly 1/3rd of medical staff (32.0%) conducted or assists delivery (i.e. only LSCS) in routine practices.

Conclusions: Knowledge about maternal health services was more among medical staffs than paramedical staffs. Paramedical staffs have less knowledge as well as practice about neonatal resuscitation and infection control measure. Only less than 1/3rd of medical staffs conducting or assisting deliveries.

Keywords: First referral units, ANC, INC, PNC

INTRODUCTION

The National Rural Health Mission (NRHM) was launched in the year 2005 with the goal to improve the availability of and access to quality health care for people, especially for those residing in rural areas, the poor, women and children. The mission has led to considerable expansion of health services through rapid expansion of infrastructure, increased availability of skilled human resources and greater local level flexibility in operations, increased budgetary allocation and

improved financial management¹. The main objective of NRHM is to reduce maternal and child mortality. First referral units (FRUs) whose component is both essential and emergency obstetrics care services plays an important role to achieve this.

Most pregnancy results in normal birth but any pregnancy can develop complications at any stage so functional provision of obstetric services is extremely important and so every pregnancy needs to be cared for by a skilled birth attendant (SBA) during pregnancy, childbirth and

the post-partum period.² These providers must have appropriate knowledge related to routine care provision including identification and immediate management of complications arising during pregnancy and childbirth. So knowledge, skills and practices of these are very important. In light of this background the study was planned to assess the knowledge and their practice/advocacy among skilled health workers regarding maternal health services at FRU level.

METHODS

A cross sectional study was conducted in all four FRUs of Agra district from June 2015–August 2016. All medical officer and all staff nurse, public health nurse and auxiliary nurse midwives (ANM) posted at four FRUs, were included as study subjects. Data was collected by first author himself. A total of 25 medical officers and 30 paramedical staff were interviewed for the study. The participants were explained the purpose of study and were motivated to participate and reveal the

correct information. Before commencing the study informed written consent were taken from chief medical officer (CMO) Agra and participants. The questions focused on the knowledge and practice about the maternal health services like antenatal services, natal services, post natal services and family planning services. Information collected on the predesigned pretested interview schedule and was transferred on the pre-designed classified tables and analysed according to the aim and objectives.

RESULTS

Table 1 depicts the level of knowledge and practices among health functionaries and it is observed that knowledge was found good (>80%) however practices in most parameter was good for paramedical staffs while it was less than 50% for medical staffs were doing by its own as they were referring to or ensuring it to be completed by paramedical staffs.

Table 1: Knowledge and practices regarding ANC (antenatal) services among health functionaries.

ANC services	Knowledge		Practice	
	Medical staff	Paramedical staff	Medical staff	Paramedical staff
	Yes (%)	Yes (%)	Yes (%)	Yes
ANC registration	25 (100)	28 (93.3)	25 (100)	30 (100)
Minimum 4 visit	20 (80)	25 (83.3)	11 (44.0)	25 (83.3)
Services offered during ANC visit				
IFA	25 (100)	24 (80.0)	11 (44.0)	24 (80.0)
TT immunization	25 (100)	26 (86.7)	25 (100)	17 (56.7)
Pre-natal advices-				
Diet & rest	25 (100)	27 (90.0)	11 (44.0)	25 (83.3)
BPCR	25 (100)	13 (43.3)	11 (44.0)	24 (80.0)
Danger sign	25 (100)	26 (86.7)	11 (44.0)	25 (83.3)
Measurement-				
Weight	25 (100)	30 (100)	25 (100)	24 (80)
BP measurement	25 (100)	30 (100)	11 (44.0)	24 (80)
Investigation				
Pregnancy confirmation (UPT)	25 (100)	30 (100)	25 (100)	30 (100)
Hb estimation	25 (100)	30 (100)	17 (68)	23 (76.7)
Urine examination	25 (100)	28 (93.3)	17 (68)	23 (76.7)
History taking				
	25 (100)	24 (80.0)	11 (44.0)	24 (80.0)
Physical examination				
Pallor	25 (100)	22 (73.3)	11 (44.0)	24 (80.0)
Icterus	25 (100)	22 (73.3)	11 (44.0)	24 (80.0)
Oedema	25 (100)	22 (73.3)	11 (44.0)	24 (80.0)
Abdominal examination	25 (100)	22 (73.3)	11 (44.0)	24 (80.0)

Table 2 reflects knowledge about natal services was found good among both type of health functionaries except infection control measures and neonatal resuscitation which was 53% and 56% among paramedical staffs. Only 1/3rd of medical officer conduct or assisted deliveries in routine and 3/4th of staffs practicing the danger sign counselling.

Table 3 shows the knowledge and practice about post natal services among medical staffs. All of the have good knowledge (>92%) but none of them making PNC home visits (0%), only 56% of them doing PNC visits at Institutional delivery cases. Only four (13.3%) paramedical staffs knew the minimum post natal visits and none of them doing home visits. All of them have good knowledge about services offered during PNC visits

(>80%) but 90% of them were practice for breast feeding advices and weight measurement.

Table 2: Knowledge and practices regarding intranatal services among health functionaries.

INC services	Knowledge		Practices	
	Medical staff	Paramedical staff	Medical staff	Paramedical staff
	Yes (%)	Yes (%)	Yes (%)	Yes (%)
Delivery conducted	25 (100)	24 (80.0)	8 (32.0)	24 (80.0)
Knowledge of 5 Clean	25 (100)	24 (80.0)	8 (32.0)	24 (80.0)
Danger sign for mother	25 (100)	24 (80.0)	18 (72.0)	22 (73.3)
Danger sign of new born	25 (100)	24 (80.0)	20 (80.0)	19 (63.3)
New born care				
Resuscitation	23 (92.0)	17 (56.7)	20 (80.0)	17 (56.7)
Care of eye/cord/skin	23 (92.0)	24 (80.0)	20 (80.0)	17 (56.7)
Breast feeding advices	25 (100)	28 (93.3)	23 (92.0)	27 (90.0)
Weight	25 (100)	30 (100)	25 (100)	27 (90.0)
Vaccination	25 (100)	30 (100)	25 (100)	22 (73.3)
Infection control measure	23 (92.0)	16 (53.3)	20 (80.0)	16 (53.3)
Prevention of hypothermia	23 (92.0)	24 (80.0)	20 (80.0)	21 (70.0)

Table 3: Knowledge and practices regarding postnatal services among health functionaries.

PNC services	Knowledge		Practices	
	Medical staff	Paramedical staff	Medical staff	Paramedical staff
	Yes (%)	Yes (%)	Yes (%)	Yes (%)
Recommended PNC visit				
Institutional delivery	23 (92.0)	4 (13.3)	14 (56.0)	25 (83.3)
Domiciliary delivery	23 (92.0)	4 (13.3)	0 (0)	0 (0)
Services offered during each visit				
Look for danger sign for mother	25 (100)	24 (80.0)	23 (92.0)	21 (70.0)
Look for danger sign for new-born	25 (100)	27 (90.0)	14 (56.0)	19 (63.3)
Breast feeding advices	25 (100)	28 (93.3)	20 (80.0)	27 (90.0)
Weight measurement	25 (100)	30 (100)	0 (0)	27 (90.0)
Postnatal advices (care of eye, cord and skin)	25 (100)	24 (80.0)	20 (80.0)	18 (60.0)
Family planning	25 (100)	27 (90.0)	18 (72.0)	19 (63.3)

DISCUSSION

This cross sectional study carried out among health functionaries of FRUs to assess their knowledge and practices about maternal health services. In our study knowledge of antenatal service among medical staffs found good (~100%) but among paramedicals, knowledge were found variable like measurement and investigation it was 100% and for birth preparedness and complication it was 43.3% but practice in concern it was approximately 80% by paramedical staffs and among medical staffs it were ranging from 0 to 40%. In a study conducted by Kushwaha et al, the medical officer and nursing staffs knowledge score was found to be 70%.³ Another study conducted by Nehral et al in tribal area of Vilaspur district, Chhattisgarh, found that knowledge about antenatal objective were 64% and IFA supplementation schedule was 68%, number of antenatal visits 60% among the paramedical staffs. In our study these statics were higher this is because study done by Nehral et al at tribal areas of Vilaspur district.⁴

Knowledge and practices regarding intra natal care among medical staffs was found good (>90%). However none of medical staffs conduct normal and assisted vaginal delivery, only planned LSC carried out by 32% of medical officers. However knowledge among paramedical staffs for intra natal service were 80-100% except infection control measure which is least known (53.3%) and almost all of them practicing the intra natal services, only 63-73% advocating danger sign of mother and new-born. Nehral et al⁴ in his study reported that knowledge related delivery conduction was 53%, method of new-born resuscitation known to 53.6% among the paramedical staffs and another study carried out by Kaushik et al found 54.3% of health worker had knowledge regarding new-born resuscitation, knowledge regarding vaccination were known to 29.7% reported by Nehral et al however in our study it was 100% so this indicate that clinical skills of new-born resuscitation is lacking which is very crucial for reduction in neonatal mortality rate.^{4,5}

In our study knowledge and practice regarding post natal service among medical staffs found good (>92%) but among Para-medical staffs only 13.3% of them knowing the number of post natal visits however services offered during PNC visits were adequate (>80%). Study carried out by Makwana et al carried out in Jamnagar district (Gujarat) reported that about post natal visit 96%, for family planning method 76%, breast feeding advices 98.4%, and this finding are in accordance to our study.⁶ Kaushal et al study carried out at Kanpur district (U.P) reported knowledge among paramedical staffs regarding PNC check up 92% and post natal advices it was 24% this finding not met with our study finding because of time gap of 10 year.⁷

Most of deliveries conducted by paramedical staffs, LSCS performed electively in all FRUs despite of good knowledge about maternal health services. There is a visible disparity between knowledge and its practices among health functionaries and it is more significant among medical staffs as comparison to paramedical staffs. The challenge is how to make safe motherhood strategies in the future more successful.

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