

Knowledge and Practice Regarding Newborn Care among Female Community Health Volunteer

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Abstract: A study entitled Knowledge and Practice Regarding Newborn Care was carried out to assess the knowledge and practice of newborn care among FCHVs of Lalitpur District from 2066/03/28 to 2066/05/14. A descriptive study design, in which multistage random sampling method was used to select 123 FCHVs. Data collection, was done by interview method using structured questionnaire and was entered in SPSS version 11.5 and analysed using descriptive statistics frequency and percentage. The findings of the study revealed that 98.4(%) knew about early initiation of breast feeding and almost all 100(%) knew about colostrum feeding. Similarly 98.4(%) mentioned about cutting cord with sterile blade and 43.9(%) mentioned about putting nothing on the cord stump whereas 95.1(%) knew about eye care and only 11.4(%) of the respondents knew about delaying bath for at least 24 hours, 74(%) mentioned that the newborn baby must be wrapped immediately after birth and around two third 83.7(%) mentioned that newborn should be bathed within 24 hours of delivery, almost 50(%) of the respondent stated that oil can be applied over the cord. Similarly practices regarding newborn care shows that 81.3(%) wiped the newborn baby immediately after birth, 59.3(%) of the respondent wrapped the baby immediately after birth, 80.5(%) of the respondents gave bath immediately after birth followed by only 13.8(%) after 24 hours of birth. Practice on cord care shows that 93.5(%) used boiled blade to cut cord, 95.2(%) advised to feed breast milk within first hour of birth and 65.9(%) practiced the correct way of cleaning eyes of the newborn. Thus it can be Concluded that breast feeding, colostrum feeding and cord cutting were well known to FCHVs where as putting nothing on cord stump, delaying bath and early initiation of breast feeding were less known to them.

Key words: Knowledge, Practice, FCHVs, Newborn.

Background: Globally every year an estimated four million babies die before they reach the age of one month, nearly same number die in late pregnancy and are rarely recorded. Millions and more are disabled because of poorly managed pregnancies, deliveries and neonatal care, death are far more likely to occur in the early neonatal period (Save Newborn Life, 2004). Nepal has the third highest neonatal mortality rate in the world that is 33/1000(NDHS, 2006), this rate contributes to 68(%) of current infant mortality rate, making it the key health problem that requires action to better the lives of all children. The national neonatal health strategy has focused on implementation of neonatal health care interventions, improve health

service delivery, coverage of skilled attendance at delivery and develop competence in all cadres of health workers in essential newborn care and preparing non-formal caregivers at delivery to assist in providing appropriate care for the neonate. Hence training should emphasize on non-formal caregivers in providing appropriate newborn care. In FY 2045/46 the government revised its policy and initiated the FCHVs in providing newborn care. According to the current strategy regardless of population size, there must be one FCHV per ward. After the completion of 15 days of initial training, FCHVs are provided with a drug kit free of cost, which are distributed free and are to be resupplied by the concerned health institution. The role of

the FCHVs is mainly to focus on motivation and education of local mothers and community members for the promotion of safe motherhood, mother and child health, family planning, community health and newborn care. Pilot studies have been conducted which have proved the importance and efficiency of involvement of FCHVs in health care delivery system.

Rational Of the Study: In the context of developing country like Nepal, where 80(%) delivery occurs in home setting (NDHS, 2006) the most accessible health manpowers are the FCHVs in the community. They treat pneumonia cases and refer complicated cases to the health institution but still the neonatal mortality is high that is 33/1000 live birth, contributing to 68(%) of total infant mortality. So FCHVs are undoubtedly the appropriate local health manpower for new born care programme. It is also shown that 48(%) of primary health services were delivered by FCHVs. So it will be justifiable to involve FCHVs in new born care to reduce NMR and the initial step is to assess their existing knowledge and practices for further learning and development.

Significance of the Study: This study would be helpful to identify the newborn care knowledge and practices of the FCHVs in the community which determines the health status of the newborn which is the focused area of national neonatal health strategy. It will provide foundation for the policy developer and programme implementers.

Methodology: A descriptive study design was used to explore the knowledge and practice of newborn care among FCHVs of Lalitpur District. Multi stage random sampling technique was used to collect the samples, Lalitpur District was purposively selected, it has 41 VDCs among them 50(%) that is 21 VDCs were selected randomly by using lottery method and the FCHVs of the selected VDCs were again selected randomly. The study population was the entire FCHVs of Lalitpur who were currently working under district health office. Altogether there were 369 FCHVs in number. The study included 123 numbers of FCHVs who were again randomly selected from the study population. All the selected FCHVs were interviewed using structured interview schedule and nature of data collected were

quantitative. The first part of the interview schedule contained questions related to socio demographic informations, second part contained questions related to knowledge regarding newborn care which includes wiping, wrapping, delayed bathing, cord eye care and recognition of danger signs. Similarly the third part contained questionnaire related to the practices in terms of verbal responses regarding newborn care. A verbal informed consent was taken from the respondent after explaining the purpose of the study. Using structured interview method the data were collected. The collected data were checked and entered in SPSS 11.5 version after coding. Descriptive statistical tools were used to describe characteristics of respondents and presented in the tables.

Findings: Demographic characteristics showed that 60(%) of the respondents were above 35 years of age. Brahmin/Chhetri was the leading group consisting 44.7(%) Tamang 24.4(%) followed by Newar 23.6%. More than half 59.3(%) were literate. Hindu was the major religion 70.2(%). Most of the FCHVs 85.4(%) were dependent on agriculture followed by business 8.1(%). All the respondents were married and 95.9(%) were living with their husband. Similarly 76.4(%) have had taken the basic FCHV training. Almost half of the groups have been working for more than 10 years (57.7%).

TABLE 1
Knowledge of Respondents on Newborn Care
(n=123)

New Born Care Components	Freq.	Percn. (%)
Time of wiping the baby		
Immediately after birth	86	69.9
After cutting cord	33	26.8
After delivery of placenta	3	2.4
Shouldnot be wiped	1	0.8
Time to wrap the baby		
Immediately after birth	91	74
After cutting the cord	29	23.6
After delivery of placenta	3	2.4
Time for the first bath		
Within 24 hours of birth	103	83.7
After 24 hours of birth	14	11.4
Immediately after birth	5	4.1

At naming ceremony	1	0.8
Cutting cord with		
New/boiled blade	121	98.4
Anything sharp we have	2	1.6
Applying over the cord		
Oil	61	49.6
Nothing	54	43.9
Talcum powder	7	5.7
Ash	1	0.8
Caring of eyes		
Yes	117	95.1
No	3	2.4
Don't know	3	2.4
Initiation of Breast feeding		
Within one hour of birth	121	98.6
Within 24 hour of birth	2	1.6
Colostrum feeding		
Yes	123	100

According to the above table among the respondent around 70(%) mentioned that the newborn baby must be wrapped immediately after birth, 74(%) said that the newborn should be wrapped immediately after birth. Almost two third 83.7(%) mentioned newborn should be bathed within 24 hours of delivery, around 98(%) stated that the cord must be cut with sterile or boiled blade, almost 50(%) stated that oil can be applied over the cord. Regarding knowledge on eye care 100(%) respondent mentioned that we need boiled and cooled water to clean the eyes but only 95.1(%) responded that the eyes need cleaning. Application of kajol is still contradictory, 96.7(%) preferred breast feeding, 100(%) were informed to colostrum feeding, 98.4% said that the baby should be breast fed within one hour of birth.

TABLE 2
Practices of Respondents on Newborn Care
(n=123)

New Born Care Components	Freq.	(%)
Time of wiping		
Immediately after birth	100	81.3
After delivery of placenta	19	15.4
After giving bath	4	3.3
Wrapping the newborn		
Immediately after birth	73	59.3
After delivery of placenta	46	37.4
After giving bath	4	3.3
Time of bathing		
Immediately after birth	99	80.5
After 24 hours of delivery	17	13.8
Have not given bath	7	5.7
Application over the cord		
Oil	57	46.3
Nothing	53	43.1
Talcum powder	3	10.6
Cutting cord by		
Boiled blade	115	93.5
Unboiled blade	6	4.9
Sickle/knife	2	1.6
Cleaning eyes		
From inner canthus to outer corner	81	65.9
In convenient way	36	29.3
From outer to inner canthus	6	4.9
Initiation of Breast feeding		
Within one hour of birth	117	95.2
After 24 hours of birth	6	4.8
Initial feeding		
Colostrum feeding	117	95.2
Ghee/honey/glucose water	6	4.8

As shown in the above table, regarding practices on new born care by the FCHVs around 81(%) wiped the newborn baby immediately after birth, nearly 60% of the respondent wrapped

the baby immediately after birth, 80.5(%) of the respondents have given bath immediately after birth followed by 13.8(%) after 24 hours of birth. Practices regarding cord care include 93.5(%) of the respondents used boiled blade to cut cord, 46.3(%) have applied oil over the cord, only 43.1(%) applied nothing followed by 10.6(%) who applied talcum powder over the cord stump. The eyes were cleaned from inner canthus to outer canthus by 65.9(%) followed by performed in the convenient way by 29.3(%), 95.2(%) have advised to feed breast milk in first hour of birth followed by 4.8(%) advised to feed after 24 hours of delivery, similarly 95.2(%) have advised to feed colostrum followed by 4.8(%) gave honey, ghee and glucose water. Based on the correct responses of the respondents, knowledge and practices regarding newborn care can be compared as;

TABLE 3
Knowledge and Practice of Respondents
Regarding New Born Care

New Born Care Components	(n=123)	
	Knowledge (%)	Practice (%)
Using new or boiled blade to cut the cord	98.4	93.5
Putting nothing on cord stump	43.9	43.1
Drying newborn before placenta delivery	69.9	81.3
Wrapping before placenta delivery.	74.0	59.3
Caring of eyes	95.	65.9
Delaying bath for 24 hours.	11.4	13.8
Colostrum feeding	100	95.2
Breast feeding within 1 hour of birth	98.4	95.2

Discussion: The study was carried out in Lalitpur District involving the FCHVs. Regarding new born care, it was found that FCHVs of Lalitpur District had the better knowledge than

that of the national coverage NDHS 2006, those were use of boiled blade 98.4(%) and 79(%) respectively, similar study conducted by NEW ERA 2007 found that over 90(%) of them knew about using a new boiled blade for cutting cord, baseline survey conducted in Kailali found only 73.6(%) using new or boiled blade, randomized controlled trail conducted in Sarlahi about newborn care knowledge among the mothers of newborn baby on use of boiled blade was 99(%) and in study at Siraha district Nepal by SNL with CDEPA reported that almost 94(%) used new blade to cut the cord 2.2(%) used old blade and 1(%) used sickle. So we can say that knowledge on cutting cord as per WHO standard is quite sufficient.

Comparing with the national coverage NDHS 2006 showed early initiation of breast feeding 35.4(%) where as this study showed 98.4(%), NEW ERA study 2007 found out 90(%) knew about early breast feeding as per Kailali study 99(%) breast fed the child but only 58.6(%) initiated breast feeding within 1 hour of birth. As per Sarlahi study almost 92(%) supported breast feeding immediately after birth, 6(%) replied after 1 hour of birth 22 (%) mentioned within one hour and 15 mentioned after 24 hours of birth. In Sarlahi study 95.3(%) had breast fed among them 22.5(%) had initiated breast feeding within an hour and only 62.8(%) fed colostrum. Knowledge regarding breast feeding is universal but early initiation of breast feeding that is within one hour of birth need to be re-inforced.

In this study and the NDHS 2006 showed putting nothing over the cord was 43.9(%) and 75(%) which was quite less than the national coverage. New era study showed 66(%) had said nothing to put on the stump, 16(%) recommended putting oil(%) said application of ointment and 6(%) told that they had kept other materials like ash, sindoor etc. (New Era). Kailali study regarding cord care 84(%) used oil and 22(%) used ash, sindoor and ointment. (Sarlahi) 66(%) said nothing to apply

over the cord 16(%) recommended putting oil, 7(%) said powder or antiseptic and 6(%) applied turmeric and sindoor. Siraha study 66(%) said nothing to apply over the cord, 6(%) recommended putting oil% said powder or antiseptic and 6(%) applied turmeric and sindoor. Keeping the cord clean and dry is the standard practice to prevent cord to get infected which is not practiced and need to be reinforced.

Findings of this study and the national coverage NDHS 2006 showed drying before placenta delivery was 69.9(%) and 43(%), wrapping before placenta delivery 74(%) and 44(%) respectively, although drying and wrapping was common practice to delay these actions until after the placenta was delivered 60(%) responded immediately after birth, 57(%) before placenta is delivered and 45(%) said within an hour (NEW ERA), Kailali study 41(%) wiped before placenta was delivered and 55(%) wrapped before placenta was delivered Sarlahi 57(%) wrapped immediately after delivery 5(%) before placenta was delivered and other within an hour. Siraha 43% dried the newborn baby immediately after birth 44(%) wrapped before placenta delivery .Preventing hypothermia is another milestone of preventing neonatal morbidity and mortality which need to be focused in coming newborn care program.

This study showed delayed bathing for 24 hours was among 11.4(%) but the national coverage NDHS 2006 showed 9(%). NEW ERA study regarding delayed bathing 64(%) recommended delayed bathing for 24 hours, 22(%) recommended bath within an hour and 15(%) within 24 hours. Sarlahi 70(%) reported that their child was bathed within an hour of delivery, 12.4(%) bathed within 24 hours and 12.4(%) bathed after 24 hours of delivery. Delaying bath is the most lacking part of knowledge regarding newborn care.

Recommendation: In this study practices were observed on the basis of knowledge which

may not be the actual practice so observational studies regarding the practice of newborn care in the community setting can be done which will provide more concise information that will provide base for improving knowledge and practice regarding newborn care.

Conclusion:

The study showed good knowledge about newborn care and well-practiced comparatively to that of the national coverage except in some areas. All the participants were well known to the breastfeeding, almost all have the knowledge but the practice related to it was found to be less than the actual knowledge. Similarly knowledge regarding colostrum is universal but the practice is lower than the knowledge. Knowledge of eye care seems the most lacking part. Application of oil is very common practice and cutting cord with sterile or boiled blade is the most satisfying result. Drying and wrapping the newborn care knowledge and practice was satisfactory which also exceeds national score. Knowledge regarding delayed bathing is the least known part of newborn care components which need to be inforced for better newborn care.

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