ORIGINAL RESEARCH ARTICLE

DETERMINANTS OF NEWBORN CARE AT HOME AMONG THE PARENTS ATTENDING MATERNAL AND CHILD HEALTH CLINIC IN MATERNITY HOSPITAL, THAPATHALI, KATHMANDU, NEPAL

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ABSTRACT

Maternal and child health reveals the basic status of women and child in Nepal. High Infant Mortality rate and Neonatal Mortality rates reveal the inadequate health care delivery and inadequate knowledge and practice of traditional birthing practice and newborn care at home in rural areas. This study was conducted to identify the various determining factors affecting care of the newborn babies at home. A convenient purposive sampling technique was used for the purpose. The leaflets regarding newborn care and common health problems and their management were also distributed to the parents as they needed. The data were collected from 100 parents attending MCH clinic Maternity Hospital, Thapathali by using the semi structured questionnaire consisting of socio-demographic characteristics, knowledge and practice related to care and common health problems of the newborn baby. The obtained data were analyzed by using frequency, percentage, mean value, standard deviation and calculation of P value. This study revealed that the majority (88%) of the literate respondents were from the urban area. 71.42% of the respondents had knowledge about the management of difficulty breathing at home delivery situation. All the respondents fed colostrum and 86% of them had their baby exposed to sun in the morning for about 1-2 hours and 57% had knowledge of common health problems like poor sucking, eye infection and cord infection. The scoring of the knowledge shows that 33% of respondents had adequate knowledge and only 9% had inadequate knowledge of care of the newborn. On the practice side, 33% of the respondents had inadequate practice and only 15 % had adequate practice. Among the respondents of SLC/campus level 68% had the practice of bath on the 2nd day after birth and 64% of the respondents who were literate/ primary level had practiced of bath to their baby immediately after birth. There is statistically significant association between education level and practice of giving bath, (P Value=0.003). Development of leaflets regarding information of care of the newborn and common heath problems and their management at home situation were necessary to prepare and provide information to the parents.

Key words: Common Health problems, Determinants, Newborn Care, Practice.

INTRODUCTION

Globally 140 million babies are born and nine out of ten of them are born in developing countries.[1] In addition to maternal mortality, almost 8 million early neonatal deaths and still births occur each year. These deaths are due to poor maternal health, inadequate care and poor hygiene and management of delivery as well as lack of newborn care. [2]

Infant mortality rate is high in 33 in 1000 live births and the neonatal mortality is 50/1000 live births. Most of deaths are due to birth asphyxia, hypothermia and infant mortality is 50 – 60% of all neonatal deaths within the first month of life. [3] Every community has

its own way of rearing children which is ingrained in the society through tradition over countries. The traditional practices are influenced by educational level, socio-economic status and value system of the family and society. [4]

In Nepal, Perinatal mortality rate (PMR) of 56.9 / 1000 live births and Nepal Family Health Survey (NFHS) also found a decline perinatal mortality rate by 17% in the last 15 years. Forty two thousand newborn died before completing their first year of life. The goal of Ministry of Health is to reduce the neonatal mortality rate to 28 by the year 2000.

However, it is still 49.8 / 1000 live births. Still Infant Mortality Rate (IMR) and Neonatal death are high among Asian Countries. That is 33 / 1000 live births respectively. In 1993, Nepal Government began to focus on inter sectoral approach to reduce the maternal and neonatal mortality and develop the safe motherhood program through the Ministry of Health. The main elements of the program is to strengthen the maternity care by improving the quality of basic antenatal, delivery and postpartum care, insure clean and safe deliveries and provide essential for neonatal care at all levels. [5]

The greatest burden of childhood illness occurs in developing countries where neonatal mortality accounts for two thirds of infant deaths.[6] Regarding the birth preparedness practices more than half did not practice for each of pregnancy, delivery and newborn care. The common reasons behind harmful practices were lack of awareness, traditional cultural practices and lack of free time for the mothers.[7]

Great efforts have been made to improve health of child around the world but mortality rates are still high in neonates. Trend of neonatal, infant, and under-five mortality rates in Nepal over the past 15 years reveals that neonatal mortality has decreased at a slower pace than infant and child mortality. The direct causes of these deaths are birth asphyxia, infections, prematurity, low birth weight, hypothermia, and congenital anomalies. Contributing factors include inadequate medical facilities for antenatal and natal services and inappropriate newborn care practices in the family and in the community, nutritional status of mothers, educational and general status of women in the family. [8]

MATERIAL AND METHODS

The research study is based on descriptive exploratory research design which includes information on the current situation to identify various factors affecting the newborn care at home. The data was collected by using a semi structured questionnaire. A leaflet containing an essential newborn care at home was developed after pretesting of the study and disseminated to the parents attending MCH clinic Maternity Hospital, Thapathali.

This study was conducted in Paropakar Maternity and Women's Hospital, Thapathali, Kathmandu. This study area was selected purposively because it is one of the central and tertiary levels Maternity Hospital of Nepal.

RESULTS

TABLE 1. Socio demographic information of the respondents (n=100)

Socio – demographic characteristics			Number	%
1	Age	18 – 21	35	35
		22 – 25	39	39
		26 – 29	18	18
		30 – 33	6	6
		34 -	2	2
	Mean=	23.6	SD=	3.6
2	Ethnic	Brahman	21	21
		Chhetri	31	31
		Newar	24	24
		Others	24	24
3	Religion	Hindu	79	79
		Buddhist	21	21
4	Education	Literate	38	38
		Primary	15	15
		SLC	32	32
		Campus	15	15
5	Occupation	Service	32	32
		Agriculture	26	26
		Others	42	42
6	Residence	Urban	88	88
		Rural	12	12

Table1 reveals that most of the respondents (39%0 belong to <25 years and 31 percent were from chhetri ethnic group.

The large number 79 percent respondents were from Hindu religion.

Most of the respondents seemed literate (38%) and 32%of the respondents were service holders. It might be due to literate and most of them 88 percent were from urban area.
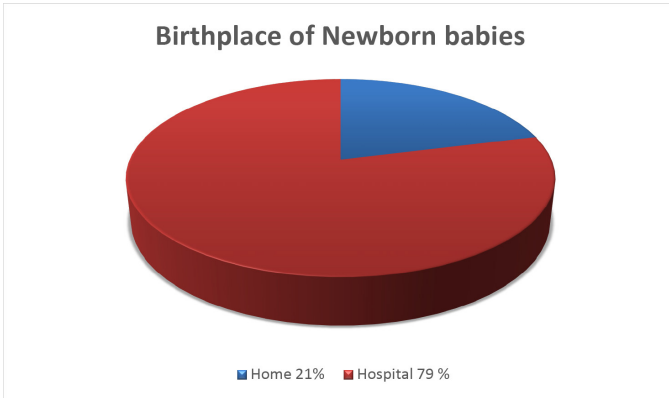

Fig: 1 Information related to knowledge of newborn care at home

Figure 1 indicates most of the respondents (79%) had given birth at hospital and 21percent of the respondents gave birth at home.

TABEL 2. Respondents' level of awareness to attend hospital (n=100)

Level of awareness	Number	%
Yes	84	84
No	16	16
If yes		
Bluishness of the body	54	54
Coldness of the body and fever	44	44
Don't know	2	2

Table 2 shows most of the respondents (54 %) have knowledge of conditions need to go hospital bluishness of the body and (44%) respondents from coldness of the body and fever and very least respondents (2 %) did not know.

TABLE 3. Respondents' knowledge regarding reasons to expose baby to sun (n=100)

Reasons to expose newborn baby to sun	Number	%
To receive Vitamin D	67	67
To make strong	24	24
To make healthy	9	9
Others	---	---

Table 3 shows that majority of the responds (67%) had knowledge about reason to expose newborn baby to sun while 24% of the respondents had knowledge about reason to make strong and make healthy.

TABLE 4. Respondents' knowledge on care of umbilical cord infection at home (n=100)

Care of cord infection	Number	%
By applying oil & keep it open	49	49
By applying Neosporin powder	36	36
Don't know	15	15

Table 4 reveals that most of the respondents (49%) applied oil for management of cord infection; where as 36% responds had applied Neosporin powder only 15% respondents did not know about it.
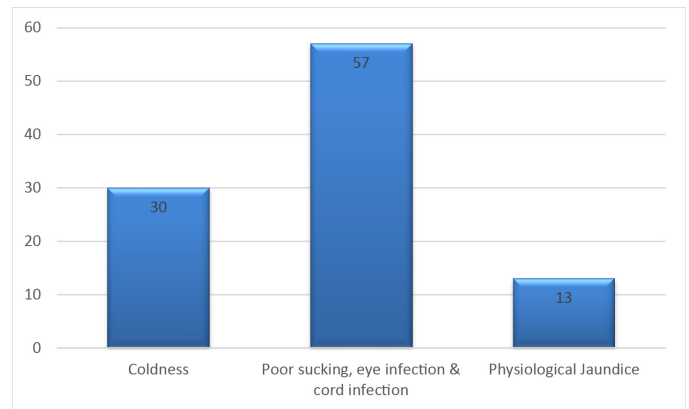

Figure 2 shows that most respondents (57%) had stated common health problems of newborns (Poor sucking eye infection & cord infection) while 30% respondents had knowledge of hypothermia and 13% respondents had knowledge of only physiological jaundice.

TABLE 5. Respondents' knowledge about danger signs of new born baby (n=100)

Danger signs of new born baby	Number	%
Pneumonia (chest infection) fever	53	53
	24	24
Abdomen distension, diarrhea / vomiting	23	23
Don't know		

Table 5 shows that , most of the respondents(53%) knowledge of danger signs (pneumonia, fever)and 24% of the responds had knowledge of abdomen distension ,diarrhea and vomiting and only 23% respondents did not know.

TABLE 6. Respondents' Priority of care seeking behavior during sickness of newborn (n=100)

Priorities	Number	Percentage
Medical practitioner	50	50
Traditional healer	33	33
Trying to manage at home	4	4
Others (Puja)	13	13

Table 6 highlights most of the respondents (50%) had preferred to attend first during sickness of newborn baby to medical practitioner and next 33% of the respondents preferred to traditional healer .It might be due to Nepali culture and tradition.

TABLE 7. Association with mother's parity and knowledge about common health problem of newborn baby (n=100)

Common health problems	Parity				P Value = 0.018
	Primi		2nd parity onward		
	No.	%	No.	%	
Coldness	12	20.7	18	42.9	
Poor sucking eyes, and cord infection	35	60.3	22	52.3	
Physiological Jaundice	11	19.0	2	4.8	

Table 7 shows that majority of the respondents (60%) primi para had more knowledge of common problems of newborn baby, similarly 52% 2nd parity onward had same knowledge of common problem oh newborn baby. There is statistically significant association between parity and common problems. (P Value=0.018)

TABLE 8. Association with mother's age and knowledge about common problems of newborn baby (n=100)

Common health problems	Mothers age				P Value = 0.042
	<25		>25		
	No.	%	No.	%	
Coldness	16	26.2	14	35.9	
Poor sucking eyes, and cord infection	33	54.1	24	61.5	
Physiological Jaundice	12	19.1	1	2.6	

Table 8 indicates that most of the respondents (61.5%) with the age group >25 years had more knowledge about common problems of newborn baby and 54.1% with age group <25 yrs had stated same knowledge of common problem. There is significant association between mothers' age and common problem (P Value=0.042).

TABLE 9. Association with mother's education and common health problems of newbornbaby (n=100)

Common health problems	Educational Status				
	Literate/ Primary		SLC/ Campus		
	No.	%	No.	%	
Coldness	15	28.3	15	31.9	P Value = 0.452
Poor sucking eyes, and cord infection	29	54.7	28	59.6	
Physiological Jaundice	9	17	4	8.5	

Table 9 shows that a higher proportion (59.6%) SLC and campus educated group of the respondents having knowledge of common health problems of newborn baby and (54.7%) of literate and primary educated group had same knowledge of common health problem. There is no significant association between educational status and common health problem of newborn. (P.Value=0.452)

TABLE 10. Association with mother's practice of giving bath and age (n=100)

Practice of giving bath	Mother's Age (in years)				
	<25		>25		
	No.	%	No.	%	
Immediately after birth	28	45.3	19	48.7	P Value = 0.407
On the 2nd day	31	50.8	19	48.7	
On the 3rd day	-	-	1	2.6	
Others	2	3.3	-	-	

Table 10 shows that most of the respondents (50.8%) age group <25yrs were practiced bath on 2nd day similarly 48.7 percent age group >25 yrs practiced on same day. There is no significant between the mother's age and practice. (P Value=0.407).

DISCUSSION

The investigator found that majority of the respondents (39%) belonged to 22 – 25 years because this is the most fertile period. Similarly, the chhetri ethnic group had covered more (31%) than the other ethnic groups, because it might be due to awareness of health. Most of the respondents (71.42%) had knowledge about how to manage during difficulty in breathing at birth. This is performed by helper (relatives, traditional birth attendant and mother in laws).

Majority of the respondents (67%) had knowledge of expose baby to sun to receive vitamin D which helps to maintain and development of newborn baby. Vitamin D is essential for calcium homeostasis, although vitamin D is important for the development and maintenance a healthy skeleton.

The major function of vitamin D is to maintain circulating concentration of calcium within narrow physiologically acceptable. [9]

Most of the respondents (57%) had knowledge of common problem (Poor sucking, eye infection and cord infection) and least respondents (13%) had knowledge of physiological jaundice.

The author stated that most of the babies do not have any health problem except appearance of certain development peculiarities and minor problems (vomiting, diarrhea, physiological jaundice etc.), which need identification, reassurance and advise to the mother. [4]

More than 50% respondents had stated the danger signs (Pneumonia and fever etc.) of the newborn

babies which needed to go to hospital for further management.

Similarly the author emphasized on danger signs should be watched closely and brought to hospital as needed such as bleeding from any site, appearance of jaundice within 24 hour cyanosis respiratory distress, sudden rise or fall in body temperature etc.[4]

100% of the respondents had practiced warm cloths, caps and bhoto for newborn baby. Similarly 100% of the respondents fed colostrum to their newborn babies which are good and expected practice 53% of the practiced exclusive breast feeding for five months which should be increased 100% in later. Supporting the research report of SNL, SC /US also shows that almost all newborn babies have exclusively breast feeding in first six months.

100% of respondents had practiced oil massage for well growth and development of the newborn baby which is supported by traditional baby care practice prevalent in this country is oil massaging the baby from the scalp to the sole. [10]

Most of the respondents (64%) had practiced of hand washing before and after caring the newborn baby. 85% of neonatal death occurs because of infection. So that basic care like hand washing before and after caring newborn baby cleanliness, cord care and eye care is important. [11]

CONCLUSION

The study concluded that overall knowledge and practice about the care of the newborn at home where moderate 58% and 55% respectively. 15 percent of the respondents had adequate practice of caring baby at home. The majority 60.3% of the primi para respondents and 52% of 2nd onward parity respondents had more knowledge about common problems of newborn. There is statistically significant association between mother's parity and knowledge of common problem. (P.Value = 0.018)

Similarly, on the practice side most of the primi para respondents (60.4%) and 42.9 percent of 2nd onward parity practiced exclusive breast feeding for 5 months. There is statistically insignificant association between practice of exclusive breast feeding and parity. (P Value = 0.223)

The findings indicate that the knowledge and practice are affected by social culture oil instillation in ear is still in practice in Nepal.

Therefore, more and more attempts should be made as far as possible, to remove the defects or the negative aspects of knowledge and practice of caring newborn at home.

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