

Utilization of essential neonatal care practices

S. Angayarkanni¹, Sonam Kalra^{**}, pooja negi^{***}

Professor cum principal shri swami Bhumanand college of nursing Haridwar, Assistant Professor
Shri Swami Bhumanand College of Nursing^{**} nursing officer Aiims Bhoapl^{***}

Abstract. Essential Newborn Care is a set of strategic and cost-effective interventions planned to improve the health of newborns through the care they receive from birth up to 28 days. The majority of 65% woman had belonged to 21-25 years age group; 20.3% women belonged to 26-30 years; 11.8% women belonged to less than 20years and rest of women belonged to more than 30 years age group in Haridwar district. The majority of 75.5% woman was Hindu; 24.1% women was Islam and 0.1% women was Sikh in Haridwar district. The majority of 83.1% woman was primary educated; 3.4% woman was other educated and 13.5% woman was no education in Haridwar district. The majority of 65% woman had other occupation; 11.4% woman was officer services; 5.5% woman was day laborer; 5.1% women had service (clerk, guard); 4.6% woman was professional and 4.2% had handicrafts occupation in Haridwar district. Table 3 shows that there is significant positive correlation between Postpartum and the new born with $r=0.271$, followed by Post partum is significant positive correlation between Postpartum and the knowledge about health services with $r = 0.277$..

Key words: essential new born care, practices, post natal women

Introduction- Global childhood mortality and the maternal mortality ratio (United Nations'[UN] Millennium Development Goals 4 and 5 respectively) had improved globally by the end of 2015, but goal target was not reached up to the desired level . Approximately 2.5 million neonatal deaths occurred in 2018 which accounts for 47% of deaths in children under age. The target on reducing maternal, childhood and particularly neonatal mortality continues to be a part of the UN's sustainable development goal 3 with new targets to be achieved in 2030. High quality of care during antenatal, intranatal, and immediately post-partum is critical to declining mortality rate of mother and child. This challenges is being partially addressed by an improvement in access to institutional deliveries and presence of a skilled birth attendant at delivery, but that does not indicate quality of care during delivery and postpartum period. And also essential newborn care package reduces neonatal mortality, but lacks a simple and valid composite index that

measures in terms of effectiveness. Recently world health organization has developed a framework and standards for health care facilities that includes 8 standards and 352 quality measures. In India, the practices of essential newborn care are not studied comprehensively. Hence less knowledge exists about the influence of practiced traditional newborn care practices on newborn survival. Studies on newborn care in some communities show that the knowledge and practice of basic newborn care for instance prevention of hypothermia, colostrum feeding practices and exclusive breast feeding care lacking due to culture restraints. There has been relatively little change in neonatal mortality rate as per recommendation of WHO in improving essential newborn care practices at birth, despite. implementation of proven cost-effective solution such as promoting antenatal tetanus toxoid immunization, skilled attendance during delivery, immediate and exclusive breast feeding and clean cord care. Effective promotion of essential newborn care at scale could contribute to reducing the leading cause of newborn deaths in low- income countries significantly, especially those due to sepsis/ pneumonia, preterm birth and tetanus. The essential practices include clean cord care, thermal care, breast feeding initiation immediately or within an hour after birth, skilled assistance at birth for resuscitation, care seeking and extra care for sick and low weight babies. These intervention emphasize strengthening the continuum of maternal, newborn and child care throughout perinatal period.

The time neonate is an essential time for the child to grow and most of them died during their birth. Worldwide, the magnitudes of neonatal mortality are estimated to be about 3 million due to insufficient care. Therefore, the mortality rate of under-five children becomes common across different countries. Although neonatal mortality rates are also decreasing globally, it was high in Sub-Saharan Africa. Among Sub-Saharan Africa, the rates of mortality were high in Ethiopia. Despite this, the proportion of neonatal death can be prevented by appropriate care of neonates. The components of neonatal care practices should be given during ANC and PNC as per WHO recommendations. This component includes immunization against tetanus, preparation of mothers for managing complications, ANC follow-up, skilled care of mothers like thermal care, cord care, breastfeeding, and bathing of neonates,

STATEMENT OF THE PROBLEM:-

“A study to assess the utilization of essential neonatal care practices among mother in selected PHC and CHC in Haridwar, Uttarakhand.”

OBJECTIVE OF THE STUDY:-

- To assess the postnatal newborn care practices among women in selected PHC and CHC of Haridwar Uttarakhand.
- To find out correlation between newborn care practices with selected variable .

HYPOTHESIS:-

Level of significance <0.05

H1:- there is a significance correlation between new born care practices and postnatal services.

H2:- there is no any correlation between new born care practices and postnatal services.

Research approach: - Quantitative research

Research design: - cross sectional design

Sampling method: - postnatal women are selected through purposive sampling and interviewed using pretested structured questionnaire.

Sample size: - 237

Sample: -postnatal women

Plan for data analysis:-

In this study descriptive statistics approach adopted for identity the PNC , household and health services related characteristics of the participant Chi –square test was performed to examine the association between neonatal care services and the utilization of the essential of postnatal services . Correlation between different factor of quality of Maternal and Newborn Health practices were also identified in this study with diferent variable.

Table 1: Frequency and percentage of demographical variables.

No.	Question	Response	frequency	%
1	How old were you at your last birthday?			
		≤20 years	28	11.8%
		21-25 years	154	65.0%
		26-30 years	48	20.3%
		31-35 years	4	1.7%
		36-40 years	3	1.3%

2	What is your religion	Hindu	179	75.5%
		Islam	57	24.1%
		Jainism	0	0.0%
		Sikh	1	0.4%
3	What is the highest grade you completed at that schooling?	Primary	197	83.1%
		Secondary	0	0.0%
		Higher secondary	0	0.0%
		Bachelors	0	0.0%
		Others	8	03.4%
		No	32	13.5%
4	Occupation	Service	39	16.5%
		Professional (doctor, engineer, teacher)	11	4.6%
		Garment worker	6	2.5%
		Handicraft	10	4.2%
		Day labourer	13	5.5%
		Carpenter	4	1.7%
		Other	154	65%

The majority of 65% woman had belonged to 21-25 years age group; 20.3% women belonged to 26-30 years; 11.8% women belonged to less than 20years and rest of women belonged to more than 30 years age group in Haridwar district. The majority of 75.5% woman was Hindu; 24.1% women was Islam and 0.1% women was Sikh in Haridwar district. The majority of 83.1% woman was primary educated; 3.4% woman was other educated and 13.5% woman was no education in Haridwar district. The majority of 65% woman had other occupation; 11.4% woman was officer services; 5.5% woman was day laborer; 5.1% women had service (clerk, guard); 4.6% woman was professional and 4.2% had handicrafts occupation in Haridwar district.

Table2: frequency and percentage distribution of women according to utilization of newborn care practices.

Variables	Category	Frequency	Percent (%)
Condition of the cloth which was used for wrapping the baby	Clean cloth and new	94	39.6
	Clean and dry	80	33.77
	Wet cloth	63	26.58
Placement of new-born immediately after delivery	On the floor	27	11.39
	On the mother's	68	28.69

Variables	Category	Frequency	Percent (%)
	chest/abdomen		
	Beside the mother	42	17.7
	With someone else	47	19.8
	On new-born bed/table	53	22.3
Instruments used to cut the cord	Blade	38	16.1
	Knife	12	5.0
	Scissor	187	78.9
The material used to tie the cord	String/thread	69	29.11
	Fiber from interplant	72	30.3
	Cord not tied	37	15.6
	Do not know	52	21.9
	Other*	7	2.9
Applications to the cord immediately after cutting	Not applied anything	160	67.5
	Butter applied	0	0.0
	Ash applied	2	0.84
	Ointment/powder applied	69	29.1
	Other substance applied**	6	2.5
First milk /colostrum that came from breast given for the new-born baby	Yes	190	80.1
	No	47	19.9
New-borns have given something other than breast milk during the first 3 days	Yes	93	39.2
	No	144	60.8
Types of foods/liquids given for new-borns to feed during the first 3 days	Plain water	73	30.8
	Sugar water	42	17.7
	Milk (other than breast milk)	122	51.4
Bathing	Immediately after delivery	7	2.9
	Within 24 h after birth	40	16.8
	After 24 h of birth	190	80.1

The majority of new born 39.6% was wrap in new and clean cloth, almost 28.69% of new born was placed on mother chest and abdomen, mostly 78.9% cord cutting done by scissor. 30.3 %

people tie the cord with fibre from plant, 67.5 % people were not using anything in the cord. 81.7% people were giving clostrum milk to the baby.60.8% person were not giving any other thing rather than breast milk to the baby. Majority of the baby 80.1% was taken bath after 245 hour of birth.

Table 3: Correlation between different factor of quality of Maternal and Newborn Health practices.

Variables	Variables	Correlation coefficient r (p-value)
		Haridwar
Post Partum	The new Born	0.271 (0.001)
Post Partum	Knowledge about health services	0.277 (0.001)
Post Partum	Still birth	-0.100 (0.124)
Post Partum	Neonatal verbal autopsy	-0.157 (0.016)
The new Born	Knowledge about health services	0.179 (0.006)
The new Born	Still birth	-0.148 (0.023)
The new Born	Neonatal verbal autopsy	-0.095 (0.143)
Knowledge about health services	Still birth	-0.157 (0.015)
Knowledge about health services	Neonatal verbal autopsy	-0.164 (0.011)

The above table shows that there is significant positive correlation between Postpartum and the new born with $r=0.271$, followed by Post partum is significant positive correlation between Postpartum and the knowledge about health services with $r = 0.277$

Recommendation

The evidence from this study suggests that ENCP (essential new born care practices) was not upto the mark because so many wrong practices are still there. Home visits by HEWs, (higher education worker) ANC visits, and HEW attendance at birth were independent positive predictors of good ENC practice.

Conclusion

This study revealed that high-risk factors such as immediate bathing, application of traditional substances on the cord, delayed initiation of breastfeeding, discarding colostrum and giving pre-lacteal feed to newborns were highly prevalent. This requires urgent attention of Maternal, Newborn and Child Health (MNCH) programs and health care delivery system to prevent harmful care practices and adopt healthy practices especially in the rural settings.

Acknowledgement = Nil

Ethical clearance = Taken from the ethical committee of shri swami Bhumanand college of nursing and hospital.

Source of funding = Nil

Conflict of interest = Nil

References

1. Liu L, Oza S, Hogan D, Perin J, Rudan I, Lawn JE, et al. Global, regional, and national causes of child mortality in 2000–13, with projections to inform post-2015 priorities: An updated systematic analysis. *The Lancet*. 2015;**385**(9966):430–440. doi: 10.1016/S0140-6736(14)61698-6.
2. Bhutta ZA, Darmstadt GL, Hasan BS, Haws RA. Community-based interventions for improving perinatal and neonatal health outcomes in developing countries: A review of the evidence. *Pediatrics*. 2005;**115**(Supplement 2):519–617. doi: 10.1542/peds.2004-1441.
3. Assefa Y, Tesfaye D, Van Damme W, Hill PS. Effectiveness and sustainability of a diagonal investment approach to strengthen the primary health-care system in Ethiopia. *The Lancet*. 2018;**392**(10156):1473–1481. doi: 10.1016/S0140-6736(18)32215-3. [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
4. Lawn JE, Kerber K, Enweronu-Laryea C, Masee BO. Newborn survival in low resource settings—Are we elivering? *BJOGInt.J.Obstetr.Gynaecol*. 2009;**116**:49–59. doi: 10.1111/j.1471-0528.2009.02328.x.
5. Liu L, Johnson HL, Cousens S, Perin J, Scott S, Lawn JE, et al. Global, regional, and national causes of child mortality: An updated systematic analysis for 2010 with time trends since 2000. *The Lancet*. 2012;**379**(9832):2151–2161. doi: 10.1016/S0140-6736(12)60560-1. [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
6. Wardlaw T, You D, Hug L, Amouzou A, Newby H. UNICEF report: Enormous progress in child survival but greater focus on newborns urgently needed. *Reprod. Health*. 2014;**11**(1):1–4. doi: 10.1186/1742-4755-11-82.

7. WHO. SDG 3: Ensure healthy lives and promote wellbeing for all at all ages. 2017. Accessed 20 Sep 2017

8. Nethra N, Udgiri R. A study on traditional beliefs and practices in newborn care among mothers in a tertiary health care centre in Vijayapura, North Karnataka. *Int J Community Med Public Health* 2018;5:1035-40.

9. Garg S, Dewangan M, Krishnendu C, Patel K. Coverage of homebased newborn care and screening by ASHA community health workers: Findings from a household survey in Chhattisgarh state of India. *J Family Med Prim Care* 2022;11:6356-62.