

Original Research Article

Knowledge and Practice Related to Breastfeeding among Caesarean Section Mothers of BPKIHS, Dharan, Nepal

Shah Shrooti¹, Dhakal Prativa², Shrestha Devkumari³

¹Lecturer, Department of Nursing, National Medical College & Teaching Hospital, Birganj, Nepal.

²Lecturer, Department of Nursing, Universal College of Medical Sciences, Nepal.

³Additional Professor, Department of Maternal Health Nursing, B.P. Koirala Institute of Health Sciences, Nepal.

Corresponding Author: Shah Shrooti

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ABSTRACT

Background: The immunological and nutritive values of breast milk are most suited for an infant. With the increase in the incidence of caesarean section, problems in breastfeeding in the first 24-48 hours have increased because of pain, discomfort, exhaustion and sedation effects of anesthesia.

Materials and methods: A descriptive, cross-sectional study was conducted among 30 mothers of BPKIHS, Dharan, who had undergone cesarean section to assess knowledge and practice related to breastfeeding. Knowledge regarding breastfeeding was assessed by self-prepared structured interview schedule and practice was observed using observational checklist.

Results: The study revealed that 50% of the respondent had knowledge about breastfeeding above median score (IQR) [7.5(6-9)]. Only 11.11% of respondents breastfed their infants effectively. Most of the mothers (83%) initiated feeding after one hour of birth. The reasons for delayed initiation were late shifting, pain and discomfort and inadequate milk secretion. The main problems during breastfeeding were pain and discomfort at incision site, inadequate milk secretion, pain in breast during sucking and poor sucking by the infant. Colostrum was fed by 93% of the mothers whereas 17% of the mothers fed prelacteal feeds. There was significant association of knowledge score and education ($p=0.02$) and there was a significant association between effectiveness of breastfeeding and age group ($p=0.007$).

Conclusion: Maternal knowledge regarding breastfeeding is inadequate. In our context, still there is persistence of cultural belief related to prelacteal feeds. The mothers are not able to practice effective techniques of breastfeeding. There is difficulty in initiation and establishment of breastfeeding after caesarean section.

Key words: Breastfeeding, Knowledge, Practice, Caesarean section, Mother.

INTRODUCTION

Breast milk is the natural first food for babies. WHO and UNICEF recommend: initiation of breastfeeding within the first hour of life, exclusive breastfeeding - that is the infant only receives breast milk without any additional food or drink, not even water, breastfeeding on demand - that is as often as the child wants, day and night and no use of bottles, teats or pacifiers. ^[1]

Breast milk promotes sensory and cognitive development, and protects the infant against infectious and chronic diseases. ^[2] Early initiation of breastfeeding is important for both the mother and the child. It is recommended that children be fed colostrum immediately after birth (within one hour) and that they continue to be exclusively breastfed even if the regular breast milk has not yet started to flow.

Ninety-eight percent of children have been breastfed at some time, with negligible differences by background characteristics. Less than half of children (45 percent) are breastfed within one hour of birth. The vast majority (85 percent) of children are breastfed within one day of birth. [3]

Introducing breast milk substitutes to infants before age 6 months can contribute to breastfeeding failure. The Breast Milk Substitute Act discourages the use of bottles with nipples (MOHP, 2004b). [4]

A cesarean delivery (also known as a cesarean section) is the birth of the baby through surgical incision made in both the wall of the mother's abdomen and her uterus. Anesthesia (general or regional) is required for the procedure. It can be emergency or elective. [5] Cesarean surgery is strongly associated with delayed lactogenesis, poorer infant sucking, delayed in early breastfeeding, decrease in success of breastfeeding, more supplementation, and shorter duration of breastfeeding. So, mothers who delivery by cesarean section and their babies will need extended, intense, skilled, and knowledge able to help from maternity care team to establish and maintain exclusive breastfeeding. [6]

The investigators during her clinical experience in postnatal ward, observed the despair and problems of cesarean mother while breastfeeding their babies. So, the study was conducted to assess knowledge and practice related to breastfeeding among cesarean section mothers.

MATERIALS AND METHODS

Descriptive cross-sectional research was conducted in postnatal ward of BPKIHS, Dharan among mothers who had undergone cesarean section. Total 30 mothers were included in the study. Samples were selected using purposive sampling. Data collection tool consisted of three sections related to socio-demographic and obstetric characteristics, knowledge related to breast feeding and breastfeeding practice. The data were collected by

interview using preset performas after 48 hours of caesarean section and observation checklist was used for infant breastfeeding practices. Data were collected by investigators themselves. Mothers who had undergone caesarean section admitted in postnatal ward were included. The mothers whose babies were nil per oral, admitted in Neonatal intensive care unit (NICU), nursery and paediatric ward, mothers who had undergone caesarean section within 48 hours and who delivered dead fetus were excluded from the study. Permission was taken from the Ethical review board of BPKIHS. Informed consent was obtained from respondents prior to interview. Confidentiality was maintained throughout the study.

Statistical analysis: The collected data were edited and entered in Microsoft Excel 2007 sheet for preparing Master Chart. Entered data were verified and converted in SPSS version 16 for statistical analysis. Descriptive Statistics (frequency, percentage) and inferential statistics (chi-square test) were used for analysis. The significance level was set at 0.05.

RESULTS

Majority (86.7%) of mother belonged to age group of 20-34 years, were literate (93.3%), were Hindus (86.7%), from Rural area (56.7%), house wife (86.7%) and 70% of them had per capita income less than USdollar 1.25. Regarding obstetric characteristics, 66.7% of the mothers were primiparous and 90% had undergone emergency cesarean section.

Table 2 depicts regarding knowledge of advantage of breastfeeding to baby, most of the mother replied, it is good for baby, similarly most of them said, it prevents breast engorgement.

Among 30 mothers, 83.3% had not received any kind of information about breastfeeding and 16.7% of mothers had received information from family members, friends, nurses in the ward and one had worked in nutrition programme.

Table 1: Socio-demographic and Obstetric Characteristics of Mother n=30

Characteristics	Category	n (%)
Age group	<19 years	2(6.7)
	20-34 years	26(86.7)
	>35 years	2(6.7)
Educational status	Illiterate	2(6.7)
	Upto secondary level	21(70.9)
	Higher secondary and above	7(23.4)
Religion	Hindu	26(86.7)
	Buddhist	3(10)
	Kirat	1(3.3)
Residence	Rural	17(56.7)
	Urban	13(43.3)
Occupation	House wife	26(86.7)
	Others	4(13.3)
Per capita income	≤1.25\$	21(70)
	>1.25\$	9(30)
Parity	1	20(66.7)
	2	6(20)
	3	4(13.3)
Type of cesarean section	Emergency cesarean section	27(90)
	Elective cesarean section	3(10)
Previous experience of breast feeding	Yes	10(33.3)
	No	20(66.7)
Birth companion	Husband	1(3.3)
	Sister	9(30)
	Mother	6(20)
	Sister-in-law	5(16.7)
	Mother-in-Law	9(30)

Table 2: Knowledge about Advantages of Breastfeeding

Advantages of Breastfeeding to Baby	Frequency
Good for baby	16
Growth and development of baby	3
Vitamins and other nutrient	9
Cheap	1
Fight against disease	1
No abdominal pain	1
Advantages of Breastfeeding To Mother	
Prevents breast engorgement	4
Contraception	1
Utilization of milk	1
Mother happy	1
Mother healthy	1
Prevention from cancer	1

Note: It was a multiple response question

Table 3: Knowledge about Breastfeeding

	Correct response n (%)	Wrong response n (%)
Exclusive breastfeeding	7 (23)	23 (77)
Infant should be given exclusive breastfeeding for 6 months	(80)	(20)
Baby should be fed at interval of two hours and whenever baby cries	(33.3)	(66.7)

Breastfeeding practice among cesarean section mothers

Only 17% of the mother initiated breastfeeding within 1 hour of birth while most of the mothers (70%) initiated within 1-2 hours of birth. Regarding reasons for delayed breastfeeding after cesarean delivery, 56% of mothers reported late shifting from recovery being the reason for delayed feeding followed by 20% complained pain and discomfort after cesarean section and 12% reported

decreased milk secretion for delayed feeding. Majority (93%) of mothers fed colostrums to their babies whereas 17% of mothers fed their babies with prelacteal feed. Substance used for prelacteal feed was honey and glucose water. It was found that 20% of mother feed formula feed to their babies and they used katori and spoon for feeding. The reason being decreased or no milk secretion.

According to the above figure, on asking about the problems faced during

breastfeeding, 6 mothers reported pain and discomfort due to cesarean section and inadequate milk secretion. Other problems were poor sucking (3), pain in breast (3), breast engorgement (1), inverted nipple (1), nipple sore (1) and tickling sensation (1).

According to table 4, there was significant association of knowledge score with education of mother whereas there was no significant association of knowledge score with other variables.

Table 4: Association of knowledge score with selected variables

Characteristics	Category	Median Knowledge about breastfeeding (7.5)		P-Value
		Below median score	Above median score	
Age group	≤19	1	1	1.00
	>19	14	14	
Religion	Hindu	12	14	0.597
	Others	3	1	
Residence	Rural	8	9	1.00
	Urban	7	6	
Education of mother	Upto lower secondary	8	2	0.02
	Secondary level and higher	7	13	
Occupation of mother	Housewife	14	12	0.59
	Others	1	3	
Parity	Primipara	11	9	0.44
	Multipara	4	6	
Per capita income	<1.25\$	12	9	0.427
	>1.25 \$	3	6	

Table 5: Association of Sociodemographic Variables with the Effectiveness of Breastfeeding

Characteristics	Category	Effective breastfeeding		P-Value
		Effective	Ineffective	
Age group	≤19	2	0	0.007*
	≥20	1	27	
Religion	Hindu	3	23	1.00
	Others	0	4	
Residence	Rural	3	14	0.238
	Urban	0	13	
Education of mother	Upto lower secondary	0	10	0.54
	Secondary level and higher	3	17	
Occupation of mother	Housewife	3	23	1.00
	Others	0	4	
Parity	Primipara	2	18	1.00
	Multipara	1	9	
Per capita income	<1.25\$	3	18	0.534
	>1.25 \$	0	9	

There was significant association between the effectiveness of breastfeeding and age group. There was no significant association of effectiveness of breastfeeding with other variables.

DISCUSSION

All of the mothers were aware about the advantages of the breastfeeding to the child and the results were contradictory with findings of study by Chaudhary R et al which stated only 30% of mothers had knowledge about advantages of breastfeeding. [7] Only 23% of mother had knowledge about meaning of exclusive breastfeeding. The study results were

supported by Chaudhary R et al which revealed only 15% of the mothers had idea regarding exclusive breastfeeding. [7]

Among 30 mothers, 16.70% of mothers received information related to breastfeeding mainly from family members, friends, and nurses and from nutrition programme. The results from Khan et al study conducted in southern India stated 50% of the women had received advice on breastfeeding during antenatal period. And among them only 17% received information from a healthcare worker. [8] The gap was felt regarding information related to breast feeding. So, it is reinforced that we require

more policies to educate the mothers regarding breast feeding.

The study results showed only 17% of the mothers initiated breastfeeding within one hour of birth and the major reason for delayed feeding being the shifting late from recovery (56%) followed by pain and discomfort because of cesarean section (20%). The similar results from study by Kapil U et al revealed pain in stitches (52%), difficulty in sitting (44%) and pain in lower abdomen (16%) as major difficulties in feeding. [9] Similarly another study by Saaed G et al the results for effect of cesarean section on infant feeding revealed following problems unable to position herself and the baby correctly (54.6%) followed by the problem of not enough milk for the baby (21%) and mother not inclined to feed (15.2%). [10]

The study results revealed that with higher education level, knowledge about breastfeeding increased, which were consistent with study findings by Ekambaram et al. [11]

The effectiveness of breastfeeding was assessed with ten steps of attachment and positioning. Among 30 mothers, only three (11.11%) mothers breastfed babies with proper attachment and positioning. There was significant association of effectiveness of breastfeeding with age group.

The limitation of the study was small sample size and hence, study results couldn't be generalized.

CONCLUSION

Most of the mothers had inadequate knowledge about breastfeeding and they were not able to breastfeed effectively. There were problems related to feeding among cesarean section mothers such as pain and discomfort due to cesarean section and inadequate milk secretion. Other problems were poor sucking, breast pain and engorgement, inverted nipple, nipple sore and tickling sensation. So, the mothers undergoing cesarean section requires special

attention and help to establish breastfeeding during the critical time period.

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