

**Original Article****Effectiveness of Video Assisted Teaching on Knowledge and Practice Regarding Burping Technique of Newborn among Primi Postnatal Mothers****Diksha Bhandari, Basant Kumar Karn**

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Article Received: 24<sup>th</sup> April, 2025; Accepted: 30<sup>th</sup> May, 2025; Published: 31<sup>st</sup> July, 2025**DOI: <https://doi.org/10.3126/jonmc.v14i1.83560>****Abstract****Background**

Burping is the release of gas from the upper digestive tract (esophagus and stomach) through the mouth. Burping baby is a key part of baby's feeding routine. When baby swallows, air bubbles can become trapped in the stomach and cause discomfort. Burping allows baby to remove some of that gassiness to relieve the pain. It also helps prevent spitting up and provides the comfort. The objective of the study was to assess the effect of video assisted teaching on knowledge and practice regarding burping technique of newborn among primi-postnatal mothers.

**Materials and Methods**

The study was conducted by adopting a pre-experimental design among 51 primi-postnatal mother of post-natal ward, neonatal ward and MCH Ward. Primi-postnatal mothers who fulfilled the inclusive criteria were selected by purposive sampling. A semi-structured interview questionnaire was used to assess the level of knowledge and practice. The tool was explained in detail and the pre-test was conducted. Video-assisted teaching on burping technique was conducted for the primi postnatal mothers and then the post-test was conducted after the 2 weeks of pre-test with the help of same semi structured interview questionnaire.


**Results**

The findings of the study revealed that the overall mean improvement showed both knowledge and practice. A paired t-value of knowledge 11.01, which was statistically significant at ( $P < 0.001$ ) level and similarly a paired t-test value of practice was 13.13, which was statistically significant at ( $P < 0.001$ ) level and hence both indicates effectiveness of video assisted teaching.

**Conclusion**

The findings suggest that Video-Assisted Teaching is effective in increasing the knowledge and practice of mothers regarding burping technique.

**Keywords:** Knowledge, Mother, Newborn

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## Introduction

Burping is an important part of feeding a baby. Burping (also called belching and eructation) is the release of gas, air from the digestive tract (mainly esophagus and stomach) through the mouth with noise sound. It is usually but not always audible. There are different positions for burping that are comfortable for baby. Many parents use one of these (upright position, sit on lap and hold baby upright) three methods [1].

Burping baby is a key part of baby's feeding routine. When baby swallows, air bubbles can become trapped in the stomach and cause discomfort. Burping allows baby to remove some of that gassiness to relieve the pain. It also helps prevent spitting up and provides the comfort [2].

Regurgitation is the passage of refluxed gastric content into the oral pharynx whilst vomiting is defined of the refluxed gastric content from the mouth. The frequency of regurgitation may vary largely in relation to age and younger infants up to first months of age are more frequently affected by regurgitation [3, 4].

A study conducted in Nepal shows that among 220 mothers 7.27% have knowledge on method on maintaining aseptic precaution during breastfeeding. Only 15% mothers got proper method of breastfeeding advice after birth. 30% practiced burping after breastfeeding. 30% underwent practice of proper food to increase breast milk secretion, 0% of the mothers had idea on importance of night feeding [5].

## Material and Methods

A pre-experimental, one group pre-test – post-test design was used for the study. Pre test study was conducted in Post-natal ward, MCH ward and Neonatal ward. After the two weeks of video assisted teaching in the hospital, post test was done in the community settings by the researcher through home visiting. Study population included primi postnatal mother admitted in Post-natal ward, MCH ward and mothers of Neonatal ward of BPKIHS. The total sample size was 51. Purposive sampling technique was used in the study. Semi- structured interview questionnaire was used to collect socio-demographic data of the participants. A video clip on burping technique was prepared in Nepali language was shown to the mothers. The durations of video clip was approximately 4 minutes. Research instrument consisted of the questions related to socio-demographic characteristics of postnatal mother like, Semi-structured questionnaire regarding knowledge and observational checklist was used to assess the knowledge and practice level as

per objectives of the study. The research instrument is divided in part I, part II and part II.

Part I: Socio-Demographic Data

Part II: Knowledge Regarding Burping Technique (Structured Questionnaire)

Part III: Practice Regarding Burping Technique (Observational Check List)

The validity of instrument was established by consulting with expert of Medical, Nursing and Biostatistics Faculties. Pre-testing was done in 10% of subjects meeting the inclusion criteria in the similar setting to identify the feasibility, completeness, comprehensiveness and appropriateness before actual data collection. The pretest sampled participants were not included in study.

Pre test was conducted in hospital setting Post-natal, MCH and neonatal ward of BPKIHS. After completion of the pre test video was showed to the mothers individually. After two weeks of pre test, post test was conducted by follow up in community (home visit). For burping practice one observation before video assisted teaching and one observation after 2 weeks of video assisted teaching was observed by researcher during the time of data collection due to time bond of researcher (2 weeks).

For descriptive statistics, frequency, percentage, mean, standard deviation was used. For inferential statistics paired t-test used for find out effectiveness and chie-square test was used for find out the association.

## Results

**Table 1: Frequency and Percentage Distribution of Pre-test Knowledge Score Regarding Burping Technique of Newborn among Primi-Postnatal Mothers (n=51)**

Characteristics	Category	N	%
Pre test knowledge on burping technique	Good Knowledge	0	0
	Satisfactory knowledge	18	35.3
	Poor knowledge	33	64.7
Mean score $\pm$ SD= 11.61 $\pm$ 2.99, Range= 4-17			

The above table 1 depicts that in pre-test none of the respondents had good knowledge level, 35.3% of the respondents had satisfactory knowledge level and majority of the respondents i.e. 64.7% had poor knowledge level regarding burping technique of newborn among primi-postnatal mothers, whereas mean score was 11.6.



**Table 2: Frequency and Percentage Distribution of Pre-test Practice Score Regarding Burping Technique of Newborn among Primi-Postnatal Mothers (n=51)**

Characteristics	Category	n	%
Pre test Practice on burping technique	Adequate	4	7.8
	Inadequate	47	92.2
Mean score $\pm$ SD= 4.96 $\pm$ 1.95 Range= 1-11			

The above table 2 depicts that in pre-test only 7.8% of the respondents had adequate practice and majority of the respondents i.e. 92.2% had inadequate practice regarding burping technique of newborn among primi-postnatal mothers, whereas mean score was 4.96.

**Table 3: Frequency and Percentage Distribution of Post-test Knowledge Score Regarding Burping Technique among Primi-Postnatal Mothers (n=51)**

Characteristics	Category	n	%
Post-test knowledge on burping technique	Good Knowledge	19	37.3
	Satisfactory knowledge	30	58.8
	Poor knowledge	2	3.9
	Mean score $\pm$ SD= 17.31 $\pm$ 2.34, Range= 10-21		

The table 3 depicts that in post-test 37.3% of the respondents had good knowledge level, majority of the respondents i.e. 58.8% had satisfactory knowledge level and only 3.9% of the respondents had poor knowledge level regarding burping technique of newborn among primi-postnatal mothers, whereas mean score 17.31.

**Table 4: Frequency and Percentage Distribution of Post-test Practice Score Regarding Burping Technique of Newborn among Primi-Postnatal Mothers (n=51)**

Characteristics	Category	N	%
Post- test Practice on burping technique	Adequate	39	76.5
	Inadequate	12	23.5
Mean score $\pm$ SD= 9.74 $\pm$ 1.70 Range= 6-14			

The table 4 depicts that in post-test majority of the respondents i.e. 76.5% had adequate practice and 23.5% of the respondents had inadequate practice regarding burping technique of newborn among primi-postnatal mothers, whereas mean score 9.74.

**Table5: Effectiveness of Video Assisted Teaching on Burping Technique of Newborn among Primi Postnatal Mothers (n= 51)**

Aspects		Pre test	Post test	Difference	Paired test	P value
Knowledge of respondents	Mean score	11.61	17.31	5.7	t= -11.01	P=0.001 df=50
	SD	2.99	2.34	0.65		
Practice of respondents	Mean score	4.96	9.74	4.78	t= -13.13	P=0.001 df=50
	SD	1.95	1.70	0.25		

The above table shows that, paired t-test was applied to test the significance on the score obtained before and after video assisted teaching on burping technique of neonates among primi post-natal mothers. The results reveals that mean percentage score in pre-test knowledge was 11.61 with SD  $\pm$  2.99 whereas, in post-test knowledge the same figure was reached to 17.31 with SD  $\pm$  2.3 .whereas, the pre test practice was 4.96 with SD  $\pm$  1.95 and post test practice was 9.74 with SD  $\pm$  1.70. In the significance test the t-value was obtained in 11.0, in 50 degree of freedom with p value 0.001 in knowledge and conforming the video assisted teaching highly significant, with practice 13.13, in 50 degree of freedom with p value 0.001.

## Discussion

The study showed that 37.3% of the respondents were age between 28-32 years, which the mean age was 26.25 years, and SD  $\pm$ 4.77. Which is contradictory to the study conducted by Rajkumari B.P in Tamil Nadu 2022 in which 40% of respondents were age between 26-29 years? [6] Another study findings were contradictory to the study conducted by Joseph J. in which 53.33% of respondents were age 23-27 years [1]. Majority of the respondent were Hindu religion i.e.64.7% and only 2% of the respondents were from muslim religion. This finding is similar to the study conducted by Joseph J. in which 75% of the respondents were Hindu religion and 3.33% of the respondents were Muslim [1].

The study showed that, among 51 respondents 64.7% were found with inadequate knowledge and 35.3% with satisfactory knowledge regarding the burping technique of newborn among primi postnatal mother in pre-test. The overall pre-test knowledge score mean and SD was



11.61±2.99. Regarding practice the study shows that majority i.e. 92.2% of the respondents was found inadequate practice and only 7.8% of the respondents were found adequate practice regarding burping technique of newborn in pre-test. The overall pre-test practice score mean and SD was 4.96 ± 1.95. This finding were somehow consistent with the study findings conducted by Joseph J. in india showed that out of 60 respondents in pre-test 61.66% had poor knowledge, 20% had very poor knowledge, whereas 16.6% had average knowledge while in practice revealed that percent of the respondents had poor practice [1].

In the study, post test results showed that 37.3% of the respondents had good knowledge level, majority of the respondents i.e. 58.8% had satisfactory knowledge level and only 3.9% of the respondents had poor knowledge level regarding burping technique of newborn among primi-postnatal mothers. The overall post-test knowledge score mean and SD was 17.31 ± 2.34. Similarly the study shows that post-test results majority of the respondents i.e. 76.5% had adequate practice and 23.5% of the respondents had inadequate practice regarding burping technique of newborn among primi-postnatal mothers, whereas mean score post-test majority of the respondents i.e. 76.5% had adequate practice and 23.5% of the respondents had inadequate practice regarding burping technique of newborn among primi-postnatal mothers, whereas mean score and SD was 9.74±1.70 in post-test.

This finding were somehow consistent with the study findings conducted by Joseph J. in india showed that out of 60 respondents in post-test 61.66% had good knowledge, 21.66% had average knowledge, whereas 16.6% had excellent knowledge while in post-test practice revealed that 60% had excellent practice and 40% had good practice [1].

The study showed that burping done after each feed by 64.7% of the respondents in pre-test whereas, cent percent of the respondents answered it in post-test. Practice regarding burping technique where, 76.5% of the respondents used over the shoulder in pre-test whereas, in post-test 98% of the respondents practiced it above the finding supported by descriptive study conducted by Kumari T. Dash L., Chandola A., in Bargarh district, India which showed majority i.e. 63.33% of the mothers had breast fed in sitting position and 88.33% mothers had induced burping after breastfeeding. Burping techniques, 90.56% lactating mothers were

putting the child on shoulder for burping whereas 9.43% were by hands [7]. Another study findings were similar to the study conducted by Mohite RV, Mohite VR, Kakade SV, showed 93.5% of the respondents burping after breastfeeding [8]. Another study findings were contradictory to the study conducted by Parashar M, Singh S, Kishore J, Patavegar BN showed 74.5% of mothers was not adopted the burping after breastfeeding [9]. The study showed that practice regarding burping technique where, 76.5% of the respondents used over the shoulder in pre-test whereas, in post-test 98% of the respondents practiced it above the finding supported by descriptive study conducted by Bala K, Shani B, Narangyal A showed 72.1% of the respondents used the shoulder for burping after breastfeeding [10]. Another study finding contradictory to the study conducted by Yadav N, Vyas H, Mamta Goyal M showed only 45% of the respondents used the shoulder for burping after breastfeeding [11].

## Conclusion

The burping techniques of newborn taught to the primi postnatal mothers with the help of the planned video-assisted teaching however after the introduction of planned teaching was effective. The study revealed that the knowledge score and practice score regarding burping technique was significantly increased after administering video-assisted teaching program. The findings suggested that as knowledge levels increase, practice also increases. Therefore, it can be concluded the video assisted education plays an important role in increasing the knowledge as well as practice. Therefore it can be concluded the video assisted teaching is effective in increasing the knowledge and practice of mother

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**Conflicts of interest:** None

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