



ASSESS THE EFFECT OF VIDEO ASSISTED TEACHING REGARDING PREVENTION OF NEONATAL HYPOTHERMIA AMONG ANTENATAL MOTHERS IN SELECTED HOSPITAL, ASSAM.

Nursing

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ABSTRACT

Introduction and objectives: Neonatal hypothermia is a common and wide spread problem in developed countries. Neonatal hypothermia is alternation of thermoregulatory state of neonates, which occurs when axillaries temperature falls below 36.5°C (WHO). The aims of the study is to assess the effectiveness of video assisted teaching regarding prevention neonatal hypothermia. **Materials and methods:** The research design adopted for this study was pre-experimental and evaluative research approach to evaluate the effectiveness of video assisted teaching. The study was conducted in Guwahati Medical College and Hospital, Guwahati, Assam. In this study, 60 antenatal mothers were selected by using non-probability purposive sampling technique. **Results and analysis:** The finding of the study revealed that the mean post-test knowledge score (25.8) was higher than the mean pre-test knowledge score (17.27) with a mean difference of 8.53. The obtained "t" value 28.08 was found to be significant at 0.001. This indicates that video assisted teaching was effective. Significant association was found between pre-test knowledge score and selected demographic variables of age, education, occupation, type of family, source of information, parity and place of residency. **Conclusion:** The study revealed that, video assisted teaching was effective in improving the knowledge regarding prevention of neonatal hypothermia.

KEYWORDS

Neonate, Hypothermia, Prevention, video assisted teaching

INTRODUCTION:

Motherhood is the dream of every mother from the time of conception until delivery the fetus is safe in the mother's uterus. Once the newborn comes out from the mother's uterus it has to make much adjustment to the extra uterine life. It is the transition from intrauterine life to the extra uterine life. Hypothermia occurs when the newborns body temperature drops below 36.5°C (97.7°F) generally because the environment is too cold for the baby. Hypothermia is caused more by lack of knowledge than lack of equipment. Newborn may suffer from hypothermia. They lose heat because of little subcutaneous fat; poorly developed autonomic thermoregulatory response, body surface area is more in relation to weight. The main causes of neonatal hypothermia are separation of baby from mother, cold environment, change of temperature, inadequate warming, excessive loss of heat, low birth weight and pre term neonates.

MATERIALS AND METHODS:

An ethical clearance has been obtained from the institutional ethical Committee. A pre-experimental and evaluative research approach was used with one group pre-test post-test design to evaluate the effectiveness of video assisted teaching. The study was conducted in antenatal ward, GMCH, Guwahati, Assam. A sample of 60 antenatal mothers was selected by using purposive sampling technique. Initial knowledge of the mothers on prevention of neonatal hypothermia was determined by administering self-structured knowledge questionnaire. A pre-test with the knowledge questionnaire was given on the first day, followed by a copy of validated video assisted teaching on prevention of neonatal hypothermia was given to mothers and post-test was done after 5 days using the same questionnaires.

RESULTS AND DISCUSSION:

The data gathered were analysed by using descriptive and inferential statistics in order to find the effectiveness paired "t" test was computed. Chi square was computed to find association between pre-test knowledge and selected demographic variables.

Frequency and percentage distribution of demographic variables of the antenatal mothers.

Findings of the study showed out of 60 sample 45 (27%) of the antenatal mothers belonged to the age group of 20-25 years of age, 39 (65%) finished secondary education, 36 (60%) belongs to Hindu, 34 (56.67%) of the antenatal mothers occupation were housewife, 34 (56.67%) of the families belongs from joint family. Among the sample 51 (85%) of the antenatal mothers sources of information were health personnel, 36 (60%) were multipara and 36 (60%) of the antenatal mothers were lives in rural area.

Knowledge of the antenatal mothers regarding prevention of neonatal hypothermia.

n=60

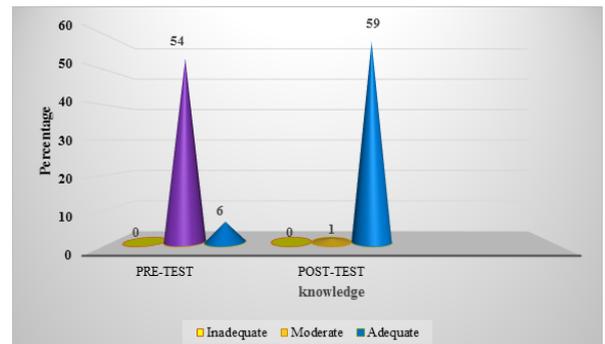


Fig- Graph showing percentage distribution of pre-test and post-test knowledge score of antenatal mothers on prevention of neonatal hypothermia.

Data presented in the figure showed that, in the pre-test, majority 54 (90%) of the antenatal mothers have moderate knowledge and post-test, majority 59 (98.33%) of the antenatal mothers have adequate knowledge.

The present study is supported by a study conducted by **K.M. Ankita Jacob, R. Kavitha, K Radhika, Clement N, Clement I (2019)** to evaluate the effectiveness of STP on knowledge regarding prevention of neonatal hypothermia among pregnant mothers at Kengeri PHC, Bangalore. Finding shows that 26 were having inadequate, 24 were having moderate knowledge regarding prevention of neonatal hypothermia. None of the study participants has adequate knowledge about prevention of neonatal hypothermia before planned teaching programme. However the post-test scores shows, 49(98%) had adequate knowledge and 1(2%) had moderately adequate knowledge regarding neonatal hypothermia among pregnant mothers. Paired't' test revealed that the pre-test mean score of knowledge was 8.92 with S.D 2.99 and the post-test mean score of knowledge was 18.68 with S.D 1.25. The mean difference was 9.76 and the calculated paired 't' value of t = 21.002 was found to be statistically significant at p<0.001 level. So the researcher concluded that STP was effective in gaining knowledge regarding prevention of neonatal hypothermia.

Effectiveness of video assisted teaching regarding prevention of neonatal hypothermia among antenatal mothers

Table 1: Mean, standard deviation, t-value, df and inference of pre-test and post-test knowledge score of antenatal mothers regarding prevention of neonatal hypothermia. n=60

Knowledge score	Range	Mean	SD	Mean Diff	SD Diff	Paired t-value	Df	P value	Inference
Pre-test	23-12	17.27	2.58	8.53	0.62	28.08	59	2	S
Post-test	29-17	25.8	1.96						

S=Significant at p<0.001

The data presented in **table 1** shows that the mean post-test knowledge score (25.8) was higher than the mean pre-test knowledge score (17.27). The calculated paired t-value was 28.08 and tabulated value of df 59 at 0.001 level of significance was 2.00. Thus the calculated value is greater than tabulated value and hence null hypothesis (H_0) was rejected and accepted the research hypothesis i.e. the post-test knowledge score is significantly higher than the pre-test knowledge of prevention of neonatal hypothermia. This indicates that video assisted teaching on prevention of neonatal hypothermia was effective in improving the knowledge of antenatal mothers.

The finding is supported by a study conducted by **Bellundagi G G and Patil N G (2018)** on Effectiveness of structured teaching programme

on knowledge regarding usage of embrace for prevention and management of hypothermia among female care givers of preterm and low birth weight infants admitted in selected hospitals at Vijayapur. 50 female care givers selected by purposive sampling technique. The result showed improvement in post-test level of knowledge and calculated paired “t” test value 22.01 at (p<0.05) which was highly significant. The study concluded that STP was effective in improving knowledge regarding prevention and management of hypothermia.

Association between the pre-test knowledge scores of antenatal mothers regarding prevention of neonatal hypothermia with selected demographic variables.

Table 2: Association of pre-test knowledge score on prevention of neonatal hypothermia among antenatal mothers with selected demographic variables n=60

Sl no	Variables	Category	Pre-test score			Df	χ ²	p-value	Inference
			Inadequate	Moderate	Adequate				
1	Age	<20	-	8	-	6	126.32	<.00001	Significant
		21-25	-	26	2				
		26-31	-	14	4				
		>32	-	6	-				
2	Educational status	Primary	-	9	2	4	21.11	.0003	Significant
		Secondary	-	37	2				
		Graduate and above	-	8	2				
3	Religion	Hindu	-	32	4	6	10.2	.1165	Not significant
		Islam	-	22	2				
		Christian	-	-	-				
		Others	-	-	-				
4	Occupation	Housewife	-	32	2	8	68.4	<.0001	Significant
		Daily labour	-	8	-				
		Private employee	-	2	4				
		Govt. employee	-	12	-				
		Others	-	-	-				
5	Type of family	Nuclear	-	26	-	4	29.62	.0001	Significant
		Joint	-	28	6				
		Extended	-	-	-				
6	Source of information	Mass media	-	9	-	6	88	<.0001	Significant
		Family friends	-	-	-				
		Health personnel	-	45	6				
		No source of information	-	-	-				
7	Parity	Primi	-	24	-	1	476.83	<.0001	Significant
		Multi	-	31	5				
8	Place of residency	Rural	-	36	-	4	39	<.0001	Significant
		Urban	-	18	6				
		Slum	-	-	-				

Significant at p<0.001

The result of chi-square analysis presented in **table 2** indicated that the pre-test knowledge scores is significantly associated with selected demographic variables of antenatal mothers at 0.001 level of significance. Thus, the research hypothesis H_1 is partially accepted and null hypothesis H_0 is rejected. Hence, it is concluded that knowledge regarding prevention of neonatal hypothermia is dependent on age, education, occupation, type of family, source of information, parity and place of residency.

A study is supported by a study conducted by **Shrishail. B. Tambakadl, Sumitra. LA (2015)** to evaluate the effectiveness of Planned Teaching Programme (PTP) on knowledge regarding prevention of neonatal hypothermia among postnatal mothers admitted in postnatal ward of KLE'S Dr. Prabhakar Kore Charitable Hospital Belgaum, Karnataka. The result showed that there was a significant difference between pre-test and post-test knowledge score as assessed by the paired t-test value at 32.73 was higher than the tabulated t- value 1.96 at p<0.05 level of significant. There was significant association between knowledge and the selected demographic variables (age, religion, educational status of mother, occupation and parity of mother). Thus, the study concluded that PTP helps to improve the knowledge of postnatal mothers on prevention of

neonatal hypothermia.

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CONCLUSION:

The present study was aimed to assess the effect of video assisted teaching regarding prevention of neonatal hypothermia among antenatal mothers. The result shows that there was a significant improvement in the knowledge of the antenatal mothers after administering video assisted teaching. Hence it was concluded that the video assisted teaching was found to be effective strategy for improving the knowledge of the antenatal mothers regarding prevention of neonatal hypothermia

REFERENCES:

1. Crowder S. Sep 10, 2013 Thermal protection of the newborn: a practical guide. Available from <http://www.healthynewbornnetwork.org/resource/thermal-protection-of-the-newborn-a-practical-guide/>
2. Ball J, Bindler R, Cowen K. 2015. Principles of pediatric nursing. 6th edition. Pearson education publication.
3. Jacob K.M.A, Kavitha.R, Radhika.K, Clement.N, Clement.I. 2019. Effectiveness of

- STP on knowledge regarding prevention of neonatal hypothermia among pregnant mothers. *Journal of nurses voice and impact*. (1):14-21. Available from <http://doi.org/10.5281/zenodo.2549294>
4. Bellundagi G.G, Patil N.G. 2018. Effectiveness of structure teaching programme on knowledge regarding usage of embrace for prevention and management of hypothermia among female care givers of preterm and low birth weight infants admitted in selected hospitals at Vijayapur. *International journal of applied research*.4(8):94-98. Available from www.allresearchjournal.com
 5. Shrishail.B, Tambakad, Sumitra LA. 2015. Effectiveness of planned teaching programme on knowledge regarding prevention of neonatal hypothermia among postnatal mothers. *Asian J.Nursing Education and research*.5(1).128-136. Available from 10.5958/2349-2996.2015.00028.2.