

A QUASI-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF HYPOTHERMIA IN NEONATES AMONG MOTHERS OF NEONATES ADMITTED IN SELECTED HOSPITAL OF JAIPUR CITY RAJASTHAN

Mr. Krishna Nand Mittal

Ph.D. Scholar, Manwanchal University, Indore

M.Sc. (N), Child Health Nursing,

Principal, D. H. College of Nursing, Jaipur

Dr. Sreemini Pillai

Ph.D. Guide, Malwanchal University, Indore

Corresponding E-mail : knmittal03@gmail.com

ABSTRACT

Introduction : A newborn baby is a god's divine precious gift given to a mother. Hence the birth of a newborn is one of the most awe inspiring and marvelous joyful events that occur in every woman's life time.

Research methodology : in present study researcher identified quasi-experimental design with Nonrandomized control group design, In this study non-probability, convenient sampling technique used to recruit the samples in the study, Sample comprise of 300 Mothers of neonates, the setting of this study will be baby loan, hospitals of Jaipur city of Rajasthan.

Result : It was divulged that in experimental group in pre-test majority of mothers 76% (114) were having inadequate knowledge, which become 79.33% (119) were shown adequate level of knowledge during post-test after video assisted teaching program intervention. Whereas in control group during pre-test and post-test the majority of mothers 67.33% (101) and 62.66% (94) were having inadequate knowledge, respectively.

Discussion : Further the F ratio identified as 10.40 among experimental and control group which suggested accepting the research hypothesis H1 at 0.05 level of significance. It helped to stating that the provided intervention video-assisted teaching program found effective to enhance the knowledge level of mothers regarding prevention of hypothermia among neonates.

Keywords : Quasi-Experimental Study, Assess, Effectiveness, Video Assisted Teaching Programme, Hypothermia In Neonates

INTRODUCTION:

Hypothermia is defined by the World Health Organization as a core temperature $< 36.5^{\circ}\text{C}$ (97.7°F). In premature infants, hypothermia increases morbidity and mortality. Hypothermia may be purely environmental or represent intercurrent illness (eg, sepsis). Maintaining an appropriate environmental temperature in the delivery room or operating room is critical in preventing neonatal hypothermia. Hypothermic infants should be rewarmed, and any underlying condition must be diagnosed and treated.

Hypothermia is caused by prolonged exposures to very cold temperatures. When exposed to cold temperatures, your body begins to lose heat faster than it's produced. Lengthy exposures will eventually use up your body's stored energy, which leads to lower body temperature.

Hypothermia is a condition that occurs when your body

temperature drops below 95°F . Major complications can result from this drop in temperature, including death. Hypothermia is particularly dangerous because it affects your ability to think clearly. This can decrease your likelihood of seeking medical help.

Newborn hypothermia is a global health problem with higher rates in countries with low resource settings and can subsequently lead to diverse neonatal health consequences. In hospital and home settings, prevalence varies from 32 to 85% and from 11 to 92% respectively, and this situation is more challenging in tropical environments.

The international commission on alpine rescue classifies hypothermia into five stages based on core body temperature. Each stage can also be differentiated by clinical findings in the field when core temperature reading may not be available.

One of the major risk factors for morbidity and mortality in the first 28 days of life is neonatal hypothermia. Hypothermia has also been shown to be a risk factor for neonatal sepsis, intra-ventricular hemorrhage, and necrotizing enterocolitis. In low resource settings, a high incidence of hypothermia has been documented in hospitals immediately following birth.

Hypothermia during the newborn period is widely regarded as a major contributory cause of significant morbidity in developing countries and, at its extreme, mortality. High prevalence of hypothermia has been reported from countries with the highest burden of neonatal mortality, where hypothermia is increasingly gaining attention and significance as a critical intervention for newborn survival. The World Health Organization (WHO) adopted thermal control among the essential components of newborn care. However, the context, paradigms and risk factors for thermal care within these low resource settings differ markedly from high-income countries.

RESEARCH METHODOLOGY:-

Research approach: The research approach is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection, analysis and interpretations.(1)

In short research approaches govern research design.

Here Investigator identified quantitative research approach to lead the investigation.

Research design : In present study researcher identified quasi-experimental design with Nonrandomized control group design. In Non-randomized control group design, there are two group of samples used for study and here, one group will be known as experimental group which will be exposed to video assisted teaching program and the second group known as control group which will not be receiving any intervention and will work as comparison for experimental group findings.

Setting of the Study:

Setting refers to the region or locality where the study is to be carried out. It is the physical location and condition in which data collection process should be takes place. There search setting can be spot as the physical, social and cultural place in which the researcher conducts the study. The setting of this study will be selected hospitals of Jaipur city of Rajasthan.

Sampling techniques

In this study non-probability, convenient sampling technique used to recruit the samples in the study. After recruitment the study participants will be allocated to two groups the experimental and control group by using simple random sampling method, here researcher opted simple computer randomization method were used.

Researcher used convenient sampling technique because here, we select the samples according to convenience to conduct the research study.

Sample size

Sample comprise of 300 Mothers of neonates admitted in selected hospitals for children in Jaipur city Rajasthan. These samples will be randomly allocated to both experimental and control group with 150 mothers in each group.

RESULT:

FINDINGS IN REGARD TO PRE-TEST AND POST-TEST LEVEL OF KNOWLEDGE AMONG MOTHERS IN BOTH GROUPS

Table:1 Frequency and percentage distribution of mother's knowledge regarding prevention of hypothermia among experimental group:

N-150

Mother's level of knowledge regarding prevention of hypothermia	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Adequate knowledge	10	6.66	119	79.33
Average knowledge	26	17.33	18	12
Inadequate knowledge	114	76	13	8.66

Presented table stated that the frequency and percentage of level of knowledge among mothers regarding prevention of hypothermia among neonates in an experimental group. The analysed data reflected that the majority of mothers 76% (114) were having inadequate knowledge, then 17.33% (26) were having average level of knowledge then rest 6.66% (10) were having adequate level of knowledge regarding prevention of hypothermia among neonates. Then after video assisted teaching program intervention highest number of mothers 79.33% (119) were shown adequate level of knowledge, 12% (18) remain as average knowledge level and rest 8.66% (13) mothers found with inadequate knowledge.

Table:2 Frequency and percentage distribution of mother's knowledge regarding prevention of hypothermia among control group:

N-150

Mother's level of knowledge regarding prevention of hypothermia	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Adequate knowledge	18	12	29	19.33
Average knowledge	31	20.66	27	18
Inadequate knowledge	101	67.33	94	62.66

Presented table stated that the frequency and percentage of level of knowledge among mothers regarding prevention of hypothermia among neonates in control group. The analysed data reflected that the majority of mothers 67.33% (101) were having inadequate knowledge, then 20.66% (31) were having average level of knowledge then rest 12% (18) were having adequate level of knowledge regarding prevention of hypothermia among neonates. Then there was no intervention offered but post-test conducted at similar time as experimental group and it observed that highest number of mothers 62.66% (94) were shown inadequate level of knowledge, 19.33% (29) remain as adequate knowledge level and rest 18% (27) mothers found with average level of knowledge.

SECTION-III: FINDINGS IN REGARD TO EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAM REGARDING PREVENTION OF HYPOTHERMIA AMONG IN NEONATES.

Table: 3 Mean, Standard Deviation, Mean Difference, t-test and p-value of pretest and posttest of knowledge level of mothers in experimental group:

N-150

Knowledge Level	Mean	SD	Mean difference	t-test	P value	Significant/ Non-significant
Pre-test	13.89	5.30	11.73	30.223	<0.001	S
Post-test	25.62	5.13				

S-Significant

P<0.05 level of significance

Table4 data revealed that the mean and standard deviation of mothers in pre-test total knowledge score was 13.89 ± 5.30 and in post-test 25.62 ± 5.13 . The mean difference was found as 11.73 ± 0.17 , the obtained t-value was 30.223, and the calculated P value was <0.001.

Table: 4 Mean, Standard Deviation, Mean Difference, t-test and p-value of pretest and posttest of knowledge level of mothers in experimental group:

N-150

Knowledge Level	Mean	SD	Mean difference	t-test	P value	Significant/ Non-significant
Pre-test	17.28	2.30	0.58	20.223	<0.524	NS
Post-test	17.86	2.13				

S-Significant

P<0.05 level of significance

Placed table revealed that the mean and standard deviation of mothers in pre-test total knowledge score was 17.28 ± 2.03 and in post-test 17.86 ± 2.13 . The mean difference was found as 0.58 ± 0.10 , the obtained t-value was 20.223, and the calculated P value was <0.524.

rejected the research hypothesis H2 for control group.

Table: 5 Comparing Mean, Mean Difference, degree of freedom and F ratio of pretest and posttest knowledge level of mothers among experimental and control group:

Two Groups	Mean		Mean Difference	d.f.	F Ratio
	Pre-test	Post-test			
Experimental Group	13.89	25.62	11.73	1	10.4*
Control Group	17.28	17.86	0.58		

* Significant at level of <0.05

DISCUSSION:

It was divulged that in experimental group in pre-test majority of mothers 76% (114) were having inadequate knowledge, which become 79.33% (119) were shown adequate level of knowledge during post-test after video assisted teaching program intervention. Whereas in control group during pre-test and post-test the majority of mothers 67.33% (101) and 62.66% (94) were having inadequate knowledge, respectively. Section-III divulged the overall impact of video-assisted teaching program on knowledge level of mothers in experimental group compare to control group. It revealed that based on analysis report researcher accepted the research hypothesis H2 for experimental group while rejected H2 for control group. for these the research hypothesis H3 accepted. Among control group only age ($p < .005$) found significantly associated with pre-test knowledge level of mother, hence for age in years' variable the research hypothesis H4 accepted and for other variables the H4 hypothesis rejected.

REFERENCES:

- 1) Abdellah F.G and Zerine E. Better patient care through nursing research, New York: McMillan Publishing co. 1979, pp- 696.
- 2) Dorothy R. Marlow, Textbook of Pediatric Nursing, 6th edition, Pp 814-815.
- 3) Ghai O.P., Essential Pediatric, CBS publishers & Distributors, 6th edition, Pp: - 107,153.
- 4) Gupta Piyush, Essential Pediatric, 2nd edition, CBS publishers, Pp: -170-173.
- 5) Meharban Singh, Care of the New Born, 5th edition, Sagar Publication New Delhi Pp: 119,192,196.
- 6) Parthasarathy A, IAP TEXT book of Pediatric, 3rd edition, Pp: 251-253.
- 7) Mercer (1995) "hypothermia is not uncommon in full term, low risk newborns. Indian journal of pediatrics volume 31 number 5 pages 298-304.
- 8) Basvanthappa, " Nursing theories", first edition, 2006, jaypee publication new delhi, pp-217-208

