Research Article

EFFECT OF VIDEO ASSISTED TEACHING (VAT) ON KNOWLEDGE REGARDING CARE OF PRETERM BABY AMONG MOTHERS ADMITTED IN SELECTED HOSPITAL OF SILVASSA, DADRA AND NAGAR HAVELI (DNH)

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A R T I C L E   I N F O

A B S T R A C T

Introduction: Globally 135 million babies are born out of which 15 million babies were preterm with mortality rate of 1 million every year (WHO 2018). Mother can play a vital role in identifying the need of the baby and providing care in all aspects. So teaching the mothers regarding care of preterm baby will play a major role in reducing neonatal mortality as well as morbidity rate. Aim of the study was to determine knowledge of mothers before and after VAT regarding care of preterm baby.

Methods: A Pre experimental one group pretest-posttest design was used for this study.60 mothers was selected by using non probability purposive sampling technique. The pre and post test data was collected through self structured knowledge questionnaire .The collected data was analyzed by using Descriptive and Inferential statistics.

Result: Findings of the study showed posttest knowledge score was significant statically at 0.05 level (P<0.05). Hence, it was proved that VAT was effective in improving the knowledge of mothers. Parity has positive significant association with pretest knowledge score.

Discussion: It concluded that VAT programme was effective for increasing the knowledge regarding care of preterm baby among mothers under study.

INTRODUCTION

Today's healthy children makes nation healthier tomorrow. Every mothers and family hope their baby is healthy, stable and filled their life with joy. It is expected from a healthy newborn to born between 38 to 42 weeks, cries immediately after birth, establishes independent rhythmic respiration, quickly adapts with the extra uterine environment but many are born < 37 weeks of gestation called preterm baby. Preterm baby has vulnerable to many complications due to immature organ systems that are not yet prepared to support life in the extra uterine environment. Almost all premature babies require special care and attention after birth.

Globally 135 million babies are born out of which 15 million babies were preterm with mortality rate of 1 million every year (WHO2018). In India out of 26 million live births annually, 3.5 million are preterm and out of these 3.03 lakh preterm babies were died. In DNH 5289 babies are born among them 469 babies were preterm and 196 died due to complication of preterm birth (Health & Family Welfare Department, 2018).To prevent complication it is very important that mothers having a adequate knowledge and skill regarding identify the need of the baby and provide care in all special aspects.

So Educating mother regarding special home care aspects for their preterm babies will play a major role in reducing neonatal morbidity as well as mortality.

Objectives of the Study

- To assess the pretest and posttest knowledge score regarding care of preterm baby among mothers.
- To determine the effect of VAT on knowledge regarding care of preterm baby among mothers.
- To find the association between pretest knowledge score regarding care of preterm baby among mothers and selected socio demographic variables.

Hypotheses

Hypotheses is tested at the 0.05 level of significance

- There is a significant difference between pretest and posttest knowledge score regarding care of preterm baby among mothers.
- There is a significant association between pretest knowledge score regarding care of preterm baby among mothers and selected socio demographic variables.

METHODOLOGY

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The present study was conducted to evaluate the effect of Video Assisted Teaching (VAT) on knowledge regarding care of preterm baby among mothers admitted in selected hospital of Silvassa, Dadra and Nagar Haveli (DNH). The pre experimental design, of one group pretest and posttest design was adopted. Non probability purposive sampling technique was used to select the sixty mothers whose preterm baby was admitted in Shri Vinoba Bhave Civil Hospital , Silvassa.

A formal written permission was obtained from The Director, Medical and Health service, Silvassa, DNH. After getting the written consent from participant, pretest was conducted and provide Video Assisted Teaching. After 7 days posttest was conducted.

Description of instruments

1. Development of Video Assisted Teaching
2. Development of content blue print. Preparation of VAT. Establishment of content validity of the VAT. Preparation of final draft of VAT.

Development of Tool

The self structured knowledge questionnaire was prepared by the investigator based on literature review, consultation with guide, co- guide, subjects experts of child health nursing and obstetrics and gynaecology. It consist of two parts

Part 1: Demographic variable
Part 2: self structured Knowledge questionnaire of 30 items regarding care of preterm

baby which was divided in 7 sections

1. knowledge regarding Breast feeding and formula feeding
2. knowledge regarding Maintenance of thermoregulation
3. knowledge regarding Hygienic care
4. knowledge regarding Immunization
5. knowledge regarding Prevention of infection
6. knowledge regarding Identification of danger sign
7. knowledge regarding Care after discharge

For the 30 items related to care of preterm baby , each correct answer was awarded with score ' 1 ' and each wrong answer awarded with score ' 0 '

Scoring according to level of knowledge

Sr. No	Level of knowledge	Score	Percentage (%)
1	Poor	0-14	< 50
2	Average	15-22	50-75
3	Good	23-30	> 75

Min. Score = 0   Max. Score = 30

The collected data were analyzed by using descriptive and inferential statistics and based the objectives the results were interpreted

RESULTS

Organization of data analysis

The analysis of data was organized according to the objectives and presented under the following sections.

Section I: Percentage distribution of sample characteristics.
Section II: Findings related to comparison of pretest and posttest mean knowledge score regarding care of preterm baby among mothers.

Section III: Findings related to association between pretest knowledge score regarding care of preterm baby among mothers and selected socio demographic variables.
Section I: Percentage distribution of sample characteristics

Table 1 Frequencies and Percentage Distribution of Sample Characteristics

(N=60)

Sr. No.	Characteristic	Frequency	Percentage (%)
1	**Age (in years)**		
	18-22	31	51.67
	23-27	20	33.33
	28-32	7	11.67
	33-37	1	1.67
	>37	1	1.66
2	**Parity**		
	Primi	35	58.34
	Second	17	28.33
	Multipara	8	13.33
3	**Education**		
	Professional	0	0
	Graduate or PG	0	0
	Intermediate	2	3.33
	High school	14	23.33
	Middle school	23	38.34
	Primary school	21	35
4	**Husband's Education**		
	Professional	0	0
	Graduate or PG	3	5
	Intermediate	3	5
	High school	18	30
	Middle school	23	38.33
	Primary school	13	21.67
5	**Occupation**		
	Professional	1	1.67
	Semi professional	0	0
	Arithmetic job	2	3.33
	Skilled worker	2	3.33
	Semi skilled worker	5	8.33
	Unskilled	10	16.67
	Unemployed	40	66.67
6	**Husband's Occupation**		
	Professional	0	0
	Semi professional	3	5
	Arithmetic job	4	6.67
	Skilled worker	2	3.33
	Semi skilled worker	21	35
	Unskilled	30	50
	Unemployed	0	0
7	**Type of family**		
	Joint	11	18.33
	Nuclear	49	81.67
8	**Total monthly family income (rupees)**		
	≥ 41430	0	0
	20715-41429	7	11.66
	15536-20714	18	30
	10357-15535	19	31.67
	6214-10356	16	26.67
	2092-6213	0	0
	≤ 2091	0	0
9	**Place of residence**		
	Urban	14	23.33
	Semi urban	5	8.33
	Rural	41	68.34
10	**Religion**		
	Hindu	48	80
	Christian	9	15
	Muslim	3	5
	Others	0	0

Section II: Findings related to comparison of pretest and posttest mean knowledge score regarding care of preterm baby among mothers

Table 2 Frequency and Percentage distribution of pretest and posttest level of knowledge score regarding care of preterm baby among mothers

(N=60)

Level of knowledge	Score (%)	Pretest		Posttest	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Poor	<50	22	36.67	1	1.67
Average	50-75	38	63.33	13	21.67
Good	>75	0	0	46	76.66

Table 2 depicts that in pretest majority of mothers 38 (63.33%) had average knowledge regarding care of preterm baby followed by 22 (36.67%) had poor knowledge and none of them had good knowledge regarding care of preterm baby. In posttest majority 46 (76.66%) mothers had good knowledge followed by 13 (21.67%) mothers had average knowledge and 1 (1.67%) mother had poor knowledge regarding care of pre term baby.

Table 3 Mean, Mean difference, SD and paired 't' test of pretest and posttest knowledge score regarding care of preterm baby among mothers

(N=60)

	Knowledge score			Paired 't' test			Inference
	Mean	Mean Difference	SD	't' cal. value	df	Table value	
Pretest	15.76	7.98	3.15	25.64*	59	2.01	S
Posttest	23.75		3.06				

Significant at 0.05 level '*' significant   S Significant

Table 3 depicts the comparison of overall pretest and posttest knowledge score regarding care of preterm baby. It shows that mean posttest knowledge score was higher (23.75) compared to mean pretest knowledge score (15.76). Mean difference was 7.98. Above data shows that calculated 't' value (25.64, df 59) is greater than the table value (2.01) at 0.05 level of significance. So research hypothesis is accepted. There is a significant difference between pretest and posttest knowledge score. It concluded that VAT programme was effective teaching strategy in increasing the knowledge regarding care of preterm baby among mothers.

Section III: Findings related to association between pretest knowledge score regarding care of preterm baby among mothers and selected socio demographic variables

Table 4 depicts that among all demographic variable parity has only significant association with pretest knowledge score regarding care of preterm baby among mothers. No other variables has significant association with pretest knowledge score regarding care of preterm baby among mothers.

DISCUSSION

Findings Related to Knowledge of Mothers Regarding care of Preterm baby

The findings of the present study showed that in pretest majority of mothers 38 (63.33%) had average knowledge followed by 22 (36.67%) had poor knowledge and none of them had good knowledge regarding care of preterm baby. In posttest majority 46 (76.66%) mothers had good knowledge followed by 13 (21.67%) mothers had average knowledge and 1 (1.67%) mother had poor knowledge regarding care of pre term baby.

Table 4 Association of Pretest Knowledge Score regarding care of preterm baby among mothers with selected demographic variables

Sr No	Demographic Variable	Category	Level of knowledge		Chi square (χ²)		
			Poor	Average	Cal. Value	df	Table value
1	Age (in years)	18-22	11	20	3.20	4	9.49
		23-27	11	9			
		28-32	3	4			
		33-37	0	1			
		>37	0	1			
2	Parity	Primi	10	25	7.09*	2	5.99
		Second	11	6			
		Multipara	4	4			
3	Education	Intermediate	0	2	2.56	3	7.82
		High school	4	10			
		Middle school	9	14			
		Primary school	10	11			
4	Husband's Education	Graduate or PG	1	2	3.08	4	9.49
		Intermediate	2	1			
		High school	5	13			
		Middle school	9	14			
		Primary school	7	16			
5	Occupation	Professional	0	1	4.22	5	11.07
		Arithmetic job	0	2			
		Skilled worker	1	1			
		Semi skilled worker	2	3			
		Unskilled	3	7			
		Unemployed	20	20			
6	Husband's Occupation	Semi professional	0	3	7.43	4	9.49
		Arithmetic job	2	2			
		Skilled worker	0	2			
		Semi skilled worker	6	15			
		Unskilled	17	13			
7	Type of family	Joint	7	4	2.67	1	3.84
		Nuclear	18	31			
8	Total monthly family income (rupees)	20715-41429	3	4	0.68	3	7.82
		15536-20714	7	11			
		10357-15535	7	12			
		6214-10356	8	8			
9	Place of residence	Urban	4	10	1.35	2	5.99
		Semi urban	2	3			
		Rural	19	22			
10	Religion	Hindu	20	28	0.23	2	5.9*9
		Christian	3	6			
		Muslim	1	2			

Significant at 0.05level '*'Significant

This study was supported by a study done by Prabhakaran H. on enhancing the maternal knowledge in improving the life of low birth weight baby.

Findings Related to Effect of VAT on Knowledge Regarding care of Preterm baby Among Mothers

In the present study mean posttest knowledge score was higher (23.75) compared to mean pretest knowledge score (15.76). Calculated 't' value (25.64, df 59) is greater than the table value (2.01) at 0.05 level of significance. So research hypothesis is accepted.

The similar findings was supported by the study conducted to assess the effectiveness of planned teaching programme on knowledge of mothers regarding care of low birth weight baby found that mean posttest knowledge score (22.83) was higher than the mean pretest knowledge score (13.03).Knowledge gain was significant at 0.05 level of significance.

Findings Related to Association between Pretest Knowledge score Regarding care of Preterm baby Among Mothers and Selected socio Demographic Variables

The present study showed that parity has only significant association with pretest knowledge score regarding care of preterm baby among mothers. calculated chi square value (7.09, df 2) is greater than table value (5.99) at 0.05 level of significance.

Similar findings was supported by study conducted by Siddaling JA to assess perceived home care needs by parents of premature and low birth weight babies. Result found that F value (1.766) is greater than table value (0.164). It concluded that number of children having a highly significant association with perceived home care needs.

Recommendation

- Similar study can be replicable on a large scale to generalize the findings.
- An experimental study can be undertaken with control group for effective comparisons.
- Similar study can be conducted to assess the father knowledge regarding care of preterm baby and compare the mothers and fathers knowledge score.
- A study can be conducted to evaluate various teaching strategies like Structured Teaching Programme, Information Booklet and Self Instructional Module.
- Follow up study can be conducted to evaluate effectiveness of VAT.
- A comparative study can be done in rural and urban settings

COCLUSION

The study findings showed that the posttest mean knowledge score was found higher (23.75) when compared with pretest mean knowledge score (15.76). Calculated paired t' value (25.64, df 59) is greater than table value (2.01) at 0.05 level of significance. So there is a highly significant difference between pretest and posttest knowledge score.

Hence, it concluded that Video Assisted Teaching is a effective strategy to improve the knowledge regarding care of preterm baby among mothers.

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