

EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING KANGAROO MOTHER CARE AMONG NURSING STUDENTS

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Abstract: Introduction: Nature's most precious gift to a woman is her baby and every woman look forward to have a healthy normal baby. Kangaroo mother care is a special way of caring low birth weight infants by skin to skin contact. It promotes their health and well being by effective thermal control, breast feeding and bonding. Kangaroo care seeks to provide restored closeness of the newborn with mother or father by placing the infant in direct skin-to-skin contact with one of them. This ensures physiological and psychological warmth and bonding. The kangaroo position provides ready access to nourishment.. **Method:** pre-experimental with one group pre-test and post-test research design was used in this study. Purposive sampling technique was used to select the sample and the sample size was 50 Nursing students of Sri Guru Harkrishan Sahib College of Nursing, Sohana. Data were collected by using structured knowledge questionnaire. Analysis was done by using descriptive and inferential statistics. **Results:** The Result showed that out of 50 samples the overall pre test knowledge of 50% nursing students had low knowledge, 50% nursing students had Average knowledge and 0% nursing students had High knowledge. Post test knowledge that is 60% had High knowledge, followed by 40% had Average knowledge and 0% adolescent in the Post test had Low knowledge. The pre test mean score was 13.40 (S.D=2.483) and post test it was 21.02 (S.D=2.254). The calculated chi square values was less than the table values indicated that there was no significant association between the demographic variables such as Age, Gender, Religion, Course of the study, Mother's Education, Father's education, Source of information about kangaroo mother care. **Conclusion:** The mean post test knowledge scores were significantly higher than the mean pre test knowledge scores of children regarding kangaroo mother care which indicated an improvement in the knowledge level of the respondents after video assisted teaching programme.

Keywords – knowledge, structured teaching programme, Effectiveness, kangaroo mother care.

1. INTRODUCTION:

Nature's most precious gift to a woman is her baby and every woman look forward to have a healthy normal baby. Kangaroo mother care is a special way of caring low birth weight infants by skin to skin contact. It promotes their health and well being by effective thermal control, breast feeding and bonding.[1] Kangaroo care seeks to provide restored closeness of the newborn with mother or father by placing the infant in direct skin-to-skin contact with one of them. This ensures physiological and psychological warmth and bonding. The kangaroo position provides ready access to nourishment. [2]

Birth weight of the baby is 1,500 to 2500 gm called as low birth weight baby and the problem faced by low birth weight infants are hypothermia and decreased heart rate, hypoglycemia. [3]Hypothermia is caused due to larger surface area that loses heat, decreased muscular activity and deficient brown fat in infants. And decreased heart rate because of immature lungs, and they have very poor resistance to fight infectious disease, because their immune system is not yet well developed. [4]

Kangaroo mother care helps in maintaining temperature of infant; facilitates breast feeding; improves growth; reduces infection; and improve mother-infant bonding. It involves holding a newborn in skin to skin contact, day and night, prone and upright on the chest of the mother or other family person if the mother is unable to do it all the time other family members can provide this care.[5]

Kangaroo mother care helps in thermal control and metabolism. Prolonged, continuous and direct skin to skin contact between mother and neonate provides effective thermal control and reduce risk of hypothermia. [6] Kangaroo mother care satisfies all five senses of infant. Baby feels warmth of the mother through skin to skin contact(touch),listen to mother voice and heart beat(hearing),sucks the breast to feed(taste),smells the mother's odor(olfaction) and makes eye contact with mother's(vision).[7]

Kangaroo mother care protects against nosocomial infection and reduces incidence of severe illness including pneumonia during infancy.[8]Kangaroo mother care facilitates better mother –infant bondage due to significantly less

stress during kangarooing than the incubator care of the baby. Kangaroo mother care is one of the best methods of transporting small babies by keeping them in continuous skin to skin contact with mother or family members. [9]

The educational offerings highlighting the knowledge and skill needed to provide kangaroo care safely and effectively enable the student nurses to overcome barrier to the practice of kangaroo care. In addition knowledgeable practitioners need for develop evidence based procedures that will lead to successful kangaroo care which can minimize the infant mortality rate to certain extent.

2. MATERIALS AND METHODS:

The research approach adopted in the present study was evaluative approach, and research design was one group pre test and post test design which belongs to pre- experimental design. Purposive Non random sampling technique was used to select the Shri Guru Harkrishan Sahib College of Nursing, Sohana mohali. The sample size was of 50 nursing students of B.sc nursing 3rd years. The tool consists of 28 items regarding kangaroo mother care.. The items was closed ended questions especially of multiple choice questions. The total score was 28. Each correct response carried out with one mark. The pilot study revealed the feasibility of the study. Reliability of the tool was determined by the test retest method. By using Karl Pearson’s co- efficient of co relation method “r” value is obtained.[r¹=0.90 .It shows that the tool was highly reliable for the final study. Data were collected by using structured questionnaire schedule through multiple choice questions and video assisting teaching programme was intervened, again after a gap of seven days post test was conducted with the same tool.. Wherever necessary, questions were cleared by explaining in simple terms. Ethical permission was obtained from Principal of Shri Guru Harkrishan Sahib College of Nursing, Sohana Analysis of the data was done using descriptive statistics as mean, standard deviation and inferential statistics as paired’ test and Chi- square test.

3. RESULTS:

The analysis and interpretation of data have been organized and presented under the following section.

Table – 1: Frequency and percentage distribution of adults by their socio demographic variables.

N=50

Demographic variables		Frequency(f)	Percentage (%)
Age(years)	18 - 20	14	28
	21 -23	26	52
	25 - 26	8	16
	27 & Above	2	4
Gender	Male	2	4
	Female	48	96
Religion	Hindu	11	22
	Muslim	18	36
	Sikh	21	42
Course of study	GNM	25	50
	B.Sc Nursing	25	50
Father’s Education	Illiterate	04	08
	Matriculation	20	40
	10+2	13	26
	Graduate & Above	13	26
Mother’s Education	Illiterate	01	02
	Matriculation	25	50
	10+2	15	30
	Graduate & Above	9	18
Source of information	Teachers	15	30
	Mass Media	13	26
	Friends & Family	05	10
	Textbooks & Journals	06	12
	Health care Professionals	03	06
	Others	08	16

- Revealed that majority (52%) of children were in age group 20-22 years, followed by age group of 18-20 years (28%)
- Majority of the sample are found to be females (96%) and followed by males (4%).

- Religion wise distribution of samples shows that % of children are Sikh, followed by, Hindu students % followed by 0% Muslim and others students children.
- Education wise distribution of samples shows that 50% of mothers have done matriculation, 30% have completed primary, 18 % have completed graduation and only 2% are illiterate.
- Sample included 50% nursing students from GNM 3rd year and 50% nursing students from Post Basic nursing 2nd year.
- Father’s education wise distribution of samples shows that 40% of fathers have completed their education till metrics, followed by (35%) , 17% have completed primary education, 5% have completed higher secondary education.
- Majority of nursing students have source of information on kangaroo mother care by teachers (30%), followed by mass media, internet, radio and TV (26%), family and friends (10%), textbook and journals (12%), health care professionals (6%) and other sources (16%).

**TABLE – 2 : Frequency and percentage of pre test & post test knowledge of Nursing Students
N=50**

Level of knowledge	PRE		POST	
	Frequency	Percentage	Frequency	Percentage
Low knowledge (0-13)	25	50%	0	00 %
Average knowledge (14-20)	25	50%	20	40%
High knowledge (21-28)	00	00%	30	60%

Tables 2 describe the percentage distribution of scores reveals that in Pre test 50 % Nursing students have the Low knowledge, 50% Nursing students have Average knowledge and no single informant had high knowledge. The score of post test indicated marked increase in knowledge levels of nursing students that is 40% Average knowledge, 60% High knowledge and it was also interesting to know that no single respondent in post test obtained low knowledge.

Table – 3 : Mean and Standard Deviation of pre test and post test knowledge scores regarding kangaroo mother care.

Knowledge regarding kangaroo mother care	Pre test		Post test	
	Mean	SD	Mean	SD
	13.40	2.483	21.02	2.254

Table 3 describes that the pre test mean score was 13.40 (S.D =2.483) and in post test it was 21.02 (S.D =2.254). The mean post test knowledge score were higher than the mean pretest scores which indicated an improvement in the knowledge level of the respondents after structured teaching programme.

Table – 4: Comparison of knowledge scores of nursing students before and after Video assisting teaching Programme regarding kangaroo mother care

Knowledge regarding kangaroo mother care	Mean difference	SD difference	Paired T-test
	7.62	0.229	18.587

Table 4 describes that Mean difference of 7.62, SD= 0.229 of overall knowledge with paired’t value (18.587).Thus it reveals that the mean post test knowledge scores was significantly higher than the mean pre test knowledge scores of nursing students , ‘t’=(18.587), p<0.05. Thus the research hypothesis (H₁) was accepted. It shows that there is a significant difference between pre test and post test knowledge scores of nursing students.

**Table – 5: Association between socio demographic variables of nursing students with their post test knowledge scores regarding kangaroo mother care
N = 50**

Variables	Calculated χ^2 value	P Value	Degree of freedom	Table Value	Association
Age	3.040	.551	4	9.49	NS
Gender	1.690	.429	2	5.99	NS
Religion	7.970	.093	4	9.49	NS

Course of study	4.967	.291	4	9.49	NS
Father's Education	1.459	.834	4	9.49	NS
Mother's Education	4.551	.603	6	12.59	NS
Source of information	11.372	.078	6	12.59	NS

Table 5 describes that the Association was done between demographic variables and posttest level of knowledge score of nursing students by using chi-square (χ^2) test. The calculated chi square values were less than the table values indicated that there was no significant association between the demographic variables such as Age, Gender, Religion, Course of the study, Mother's Education, Father's education, Source of information about kangaroo mother care. Hence the hypothesis H₂ has been rejected.

4. DISSCUSSION:

- The pretest Mean score of children was 13.40 (SD=2.483) and posttest mean score was 21.02 (SD=2.254). The comparison of pre and posttest knowledge of children reveals that the overall improvement mean was (7.62). The calculated “t” test value was (18.587) which were found greater than the table values. There for the hypothesis H₁ stating “there will be a significant difference between pretest and posttest knowledge scores of nursing students regarding kangaroo mother care is accepted”. This indicates that video assisted teaching programme was effective.
- Association was done between demographic variables and posttest level of knowledge score of nursing students by using chi-square (χ^2) test. The calculated chi square values were less than the table values indicated that there was no significant association between the demographic variables such as Age, Gender, Religion, Course of the study, Mother's Education, Father's education, Source of information about kangaroo mother care. Hence the hypothesis H₂ has been rejected.

5. CONCLUSION:

The pretest Mean score of children was 13.40 (SD=2.483) and posttest mean score was 21.02 (SD=2.254). The comparison of pre and posttest knowledge of children reveals that the overall improvement mean was (7.62). The calculated 't' test value was (18.587) which were found greater than the table values. There for the hypothesis H₁ was accepted”. No significant relationship was found in between the post test knowledge scores of nursing students regarding kangaroo mother care such as Age, Gender, Religion, Course of the study, Mother's Education, Father's education, Source of information about kangaroo mother care. Hence the hypothesis H₂ has been rejected.

6. ACKNOWLEDGMENTS:

We would like to thank the investigator, and study participants of this study.

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