# A Study to Assess the Effect of Structured Teaching Programme on Knowledge and Practice Regarding Kangaroo Mother Care among the Nursing Mothers

# Jophy Mary Philip<sup>1</sup>, Niza. Subramanian<sup>2</sup>

<sup>1</sup>Nurse Specialist, Aflaj General Hospital, Saudi Arabia

<sup>2</sup>Associate Professor, Samarth Nursing College, Dervan, Ratnagiri District, Maharashtra, India

Abstract: Kangaroo care is a technique of direct skin to skin contact between mothers (or fathers) and their pre mature infants. It has shown to improve the mother's psychological state, strengthen mother and infant bonding and stimulate maternal lactation. The present study assessed the the effect of structured teaching program on knowledge and practice regarding kangaroo mother care among the nursing mothers. The design was adopted by the investigator in this study was pretest and post test quasi experimental design. A total of 50 nursing mothers were selected from the postnatal ward by using convenient sampling technique. The purpose of the study was explained to the mothers and consent was taken from all the participants. A structured pretest questionnaire related to Kangaroo mother care were asked to them for scoring knowledge, and an observational check list was used to assess the practice and STP was given to the mothers. The study found that the mothers had inadequate knowledge and practice regarding kangaroo mother care in pretest. After the STP on kangaroo mother care there was a significant improvement in knowledge and practice of the nursing mothers regarding kangaroo mother care. The study concluded that the STP was effective in improving the knowledge and practice of the nursing mothers regarding kangaroo mother care. The formulated hypothesis was supported.

Keywords: Kangaroo mother care, kangaroo nursing, Assessing knowledge of mothers regarding kangaroo care, KMC

## 1. Introduction

Kangaroo care is a technique of direct skin to skin contact between mothers (or fathers) and their pre mature infants. It has shown to improve the mother's psychological state, strengthen mother and infant bonding and stimulate maternal lactation. In the past few years neonatal care had been rapidly advanced in terms of technology and treatment along with the advancement of knowledge .One such advanced mode is the implementation of kangaroo care .For infants born too soon, being premature on top of being immature: continuing the gestation on mothers skin to skin contact and with breast milk is even more important than for full term infants.

Kangaroo Mother care satisfies all five senses of the baby .The baby feels warmth of the mother through skin to skin contact (touch), She listens to mothers voice(hearing), sucks on breast (taste), has an eye to eye contact with mother (vision) and smells mothers odour (olfaction).As science discovers more and more benefits about breast feeding, the more is unrivalled position in human nutrition and development is confirmed. *Kangaroo Mother Care to low birth weight babies gives babies the best in life with humane touch*.

# 2. Statement of the Problem

"A study to assess the effect of structured teaching program on knowledge and practice regarding kangaroo mother care among the nursing mothers at selected hospital Dervan"

#### Objectives

1) To assess the knowledge and practice regarding Kangaroo Mother Care among the Nursing Mothers.

- 2) To assess the effect of structured teaching Program on knowledge and practice regarding Kangaroo Mother Care among the nursing mothers.
- 3) To find the association between post test knowledge and practice regarding kangaroo mother care among the nursing mothers with their selected demographic variables.

#### Hypotheses

 $H_0$ : There will not be any significant difference between pre test knowledge and practice score and post test knowledge and practice score.

 $H_1$ : There will be significant difference between pre test knowledge score and post test knowledge score and pre test practice score and post test practice score.

H<sub>2</sub>: There will be significant association between post test knowledge score and practice score regarding Kangaroo Mother Care with their selected demographic variables among the nursing mothers.

#### **Conceptual Framework**

The conceptual frame work of the present study is based on general system theory with input, through put ,out put and feedback .This theory was introduced by Ludwig von Bertalanffy.

#### **Research Approach**

In the present study investigator aims to determine the effectiveness of structured teaching program on knowledge and practice of nursing mothers regarding kangaroo mother care using a quantitative research approach.

#### **Research Design**

Quasi experimental research design that is One group pre test and post test design.

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#### Variables of the Study

The demographic variables were the independent variable and the dependent variables were knowledge and practice of nursing mothers regarding Kangaroo mother care.

#### Setting of the Study:

The study was carried out in postnatal ward of selected hospital.

#### Population

The population for the study consisted of the nursing mothers presented in the postnatal ward of selected hospital during the data collection time .

#### Sample Size

50 nursing mothers.

#### **Sampling Technique**

The sampling technique used in this study was non-probability convenience sampling.

#### **Tool and Techniques**

Based on the objectives of the study, the investigator selected the structured questionnaire as a tool for assessing knowledge and an observational checklist for assessing the practice.

#### Validity

The content validity of the tool along with the problem statement, objective, operational definition and hypothesis was carried out by 13 experts

#### Reliability

The reliability coefficient was found to be significant that is for knowledge 0.812981 and for practice 0.803966, which shows that the tool was reliable.

#### **Pilot Study**

The pilot study was conducted in postnatal ward of selected hospital and the sample was collected using the Non Probability Convenient technique. Data was collected through structured questionnaire for collecting demographic information of the participants and for the knowledge assessment. An observational checklist was used for assessing the practice regarding Kangaroo Mother Care. Pre test was given on the first day followed by the structured teaching program on the same day .The post test was conducted on the 5 th day with the same tool.

# 3. Data Collection Technique

After securing the permission from concerned authority, the investigator contacted to the study samples. Based on predetermined sample selection criteria, the samples who met the study criteria were requested to participate in the study. Purpose of the study, right to confidentiality and right to withdrawal was explained to each sample and additional doubts asked by them were cleared with appropriate explanation. Those samples that were willing to participate in the study were requested to sign an informed consent about their willingness to participate in the study. After confirming their participation, each sample was given an identification number to maintain confidentiality.

Structured questionnaire related to Kangaroo mother care were asked to them for scoring knowledge, and an observational check list was used to assess the practice. Preference was given to each sample willingness, convenience, and comfort. Daily data was collected from 2-5 samples, frequent explanation was given regarding questions wherever they were having difficulty to understand, the investigator spent the needed time with each sample. Each structure questionnaire scoring lasted for 5-10 minutes. The process continued until the investigator achieved the required sample size.

The entire sample co-operated well with the investigator during the data collection period. Data collection process was ended after thanking the respondents for their cooperation and patience.

The collected data was then complied for data analysis.

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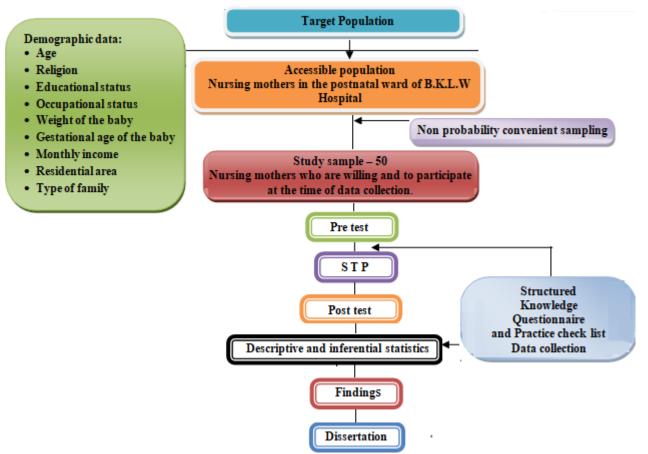


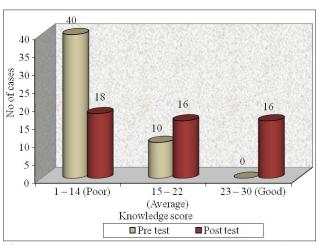
Figure 2: The schematic representation of the research design

#### 4. Results

Distribution of data related to pre test and post test knowledge and practice score of nursing mothers regarding kangaroo mother care, n = 50

	Knowledge	Pr	e test	Post test	
	score	Number	Percentage	Number	Percentage 36%
	1 – 14 (poor)	40	80%	18	
	15—22(average)	10	20%	16	32%
	23 – 30 (good)	0	0%	16	32%
ſ	Total	50	100%	50	100%

Table 1 shows that in pre test 40(80%) of nursing mothers have poor knowledge , 10(20%) nursing mothers have average knowledge and a single nursing mothers not having good knowledge and in post test 18(36%) nursing mothers have poor knowledge ,16(32%) nursing mothers have average knowledge and 16(32%) nursing mothers have good knowledge.



**Graph 1:** Clustered cylinder showing distribution of data related to pre test and post test knowledge score of nursing mothers regarding kangaroo mother care.

**Table 2:** Distribution of data related to pre test and post test

 practice score of nursing mothers regarding kangaroo

mother care, $n = 50$								
	Pr	e test	Post test					
Practice score	Number	Percentage	Number	Percentage				
1 –5 (poor)	39	78%	0	0%				
6 10(average)	11	22%	0	0%				
11 – 15 (good)	0	0%	50	100%				
Total	50	100%	50	100%				

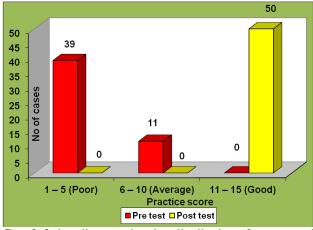
**Table No 2** shows that in pre test 39(78%) nursing mothers have poor practice ,11(22%) nursing mothers have average practice and no single nursing mothers have good practice

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regarding kangaroo mother care and in post test all the nursing mothers 50(100%) have good practice regarding kangaroo mother care.



**Graph 2:** bar diagram showing distribution of pre test and post test practice score of nursing mothers regarding kangaroo mother care

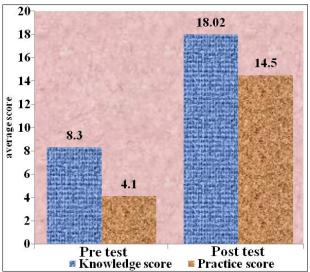
Analysis of data to assess the effectiveness of structured teaching program on knowledge and practice of nursing mothers regarding Kangaroo Mother Care.

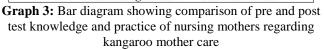
**Table 3:** Comparison of pre and post test knowledge and practice score among nursing mothers regarding kangaroo mother area n = 50

mother care, n= 50								
	Parameter	Pre test		Post test		Wilcoxon	P Value	
		Mean	SD	Mean	SD	Z Value		
	Knowledge score	8.30	5.17	18.02	5.69	6.19	<0.0001 (S)	
	Practice score	4.10	1.54	14.50	0.97	6.18	<0.0001 (S)	
	S Significant							

Table No. 7 shows that the pre test knowledge score is 8.30 . After the administration of structured teaching program the mean post test knowledge score is 18.02. Thus the difference in level of knowledge was confirmed by 'Z' value is (6.19), which was significant as p value is <0.0001 . And in pre test practice score is 4.10. After the administration of structured teaching program the mean post test practice score is 14.50. Thus the difference in level of knowledge was confirmed by 'Z' value is (6.18), which was significant as p value is <0.0001.

So there was a significant difference between pre and post knowledge and practice score regarding kangaroo mother care among the nursing mothers. Thus the structured teaching program is significantly effective in increasing the knowledge and practice of nursing mothers regarding kangaroo mother care. Hence the Hypothesis is supported. That is post test knowledge and practice score is more than the pre test knowledge and practice score.





# 5. Major Findings of the Study

#### Findings related to pre test and post test knowledge and practice score of nursing mothers regarding kangaroo mother care.

In pre test 40(80%) of nursing mothers have poor knowledge , 10(20%) nursing mothers have average knowledge and a single nursing mothers not having good knowledge and in post test 18(36%) nursing mothers have poor knowledge, 16(32%) nursing mothers have average knowledge and 16(32%) nursing mothers have good knowledge.

In post test 39(78%) nursing mothers have poor practice ,11(22%) nursing mothers have average practice and no single nursing mothers have good practice regarding kangaroo mother care and in post test all the nursing mothers 50(100%)have good practice regarding kangaroo mother care.

#### Findings related to effectiveness of structured teaching program on knowledge and practice regarding Kangaroo Mother Care

The pre test knowledge score is 8.30 .After the administration of structured teaching program the mean post test knowledge score is 18.02.Thus the difference in level of knowledge was confirmed by 'Z' value is (6.19), which was significant as p value is <0.0001

The pre test practice score is 4.10. After the administration of structured teaching program the mean post test knowledge score is 14.50. Thus the difference in level of knowledge was confirmed by 'Z' value is (6.18), which was significant as p value is <0.0001

So there was a significant difference between pre and post knowledge and practice score regarding kangaroo mother care among the nursing mothers. Thus the structured teaching program is significantly effective in increasing the knowledge and practice of nursing mothers regarding kangaroo mother care. Hence the Hypothesis is supported. That is post test knowledge score is more than the pre test knowledge score.

#### Findings related to association of post test knowledge and practice score of nursing mothers with selected demographic variables.

There is significant association between knowledge score with age, educational status, occupation, residence and monthly income of nursing mothers as 'P' value is <0.05.Hence the research hypotheses is accepted.

However, there is no significant association between other demographic variables such as religion and family type as 'P' value is >0.05.

There was no association between post test practice score and selected demographic variables like age, religion, educational status, occupation, residence, family type and monthly income as 'P' value is >0.05.Hence we accept research hypotheses.

Hence it is revealed that there is no significant association between the overall practice score and demographic variables such as age, religion, educational status, occupation, residence, family type and monthly income.

# 6. Conclusion

The findings of the study show that there is highly significant difference between the pre test and post test knowledge score of the study group. Hence the Structured teaching program significantly brought out an improvement in knowledge and practice among the nursing mothers regarding Kangaroo mother care .

The following analysis allowed the investigator to draw to conclusion with effect the following thoughts that the structured teaching program was effective in increasing the knowledge and practice of nursing mothers regarding Kangaroo mother care. Thus it brings out the fact that nursing mothers play an important role in caring their newborns and the structured teaching program is an effective method in moving towards the same goal.

# 7. Implications

# Nursing practice

- Nursing professional working in clinical setting will be able to find opportunities to teach and improve knowledge and practice on kangaroo mother care .
- Pre tem and low birth weight babies need care in the emergency department for varying periods and frequency, when they are adequately knowledgeable nursing personnel at the emergency department.

## Nursing education

• As a nurse educator, there is opportunity, in ample measure, for the nursing professional to educate the nursing mothers regarding kangaroo mother care and practice it in the hospital as well as in the home.

## Nursing research

• Today nurses are actively generating, publishing and applying research in practice to improve client care and enhance scientific knowledge base of Nursing.

There is a lot of scope for exploring this area research can be done on the various beneficial effects of Kangaroo care and also comparison of Kangaroo care with other conventional methods of care

# 8. Recommendations

- 1) A program orientation related to various aspect of the kangaroo mother care and its benefits over conventional methods of care could be beneficial for the nursing mothers.
- 2) A similar study can be replicated for the antenatal mothers and on a large population.
- 3) A survey to assess the belief and practice can be undertaken.
- 4) A similar study can be conducted in community with non literate and literate women.
- 5) A similar study can be conducted in different settings.
- 6) A comparative study may be undertaken to find out the difference in knowledge among urban and rural nursing mothers on kangaroo mother care.
- 7) The result can be utilized for the future studies.

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## **Author Profile**



**Mrs. Jophy Mary Philip**, M.Sc Nursing Specialty in Obstetric and Gynaecology Nursing working as nurse specialist at Aflaj General Hospital, Saudi Arabia since 3 years. She received B.Sc Nursing degree in the year of 2009 to 2012 at SSPM college of nursing,

Barshi, Maharashtra. She Received M.Sc Nursing in 2012 to 2014 at Samarth Nursing College, Dervan, Ratnagiri District, Maharashtra under M.U.H.S.



**Niza.S,** M.Sc Nursing specialty in obstetric and gynaecology Nursing working as vice Principal at Samarth Nursing College, Dervan, Ratnagiri District, Maharashtra. She received B.Sc Nursing degree in the year of 2001 to 2006 at Madras Medical College, Dr.

M.G.R University, Tamil Nadu. Received M.Sc Nursing in 2008 to 2010 at Rani Meyyamai College Of Nursing Annmalai University, Tamil Nadu. Worked in Godavari College Of Nursing Jalgaon in the year of 2011 to 2013 as a lecturer and she was the research guide for M.Sc Nursing students under M.U.H.S. In Samarth Nursing College she is working since 2014 as associate professor cum vice principal and guided M.Sc Nursing students in research work.