

A Study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge, Attitude and Practice Regarding Kangaroo Mother Care Among Post-Natal Mothers at Government Hospital, Sangareddy

Imtijungla T Ozukum¹, Nagababu Pyadala²

¹Assistant Professor, Department of Obstetrics and Gynaecology, MNR College of Nursing, Sangareddy, Telangana-502294.

²Professor, Department of Biochemistry, MNR Medical College & Hospital, Sangareddy, Telangana-502294.

Corresponding Author: Imtijungla T Ozukum

DOI: <https://doi.org/10.52403/ijrr.20250573>

ABSTRACT

The aim of this study to assess and evaluate the effectiveness of structured teaching program on knowledge regarding kangaroo mother care on low-birth weight infants among post-natal mothers in a selected hospital at Sangareddy, Telangana. Purposive sampling technique was used to collect data from 50 postnatal mothers who were admitted in Government Hospital, Sangareddy. One group test pre-test and post-test design was used to evaluate the effectiveness of structure. In the pre-test 6(12%) were having below average, 44(88%) were having average knowledge and 0(0%) mothers were having above average. In post-test majority of the post natal mothers have improved 31(62%) above average, 19(38%) have average knowledge. Therefore, the study concluded that there was significant improvement in the knowledge of postnatal mothers which was due to the structured teaching program on KMC among postnatal mothers.

Keywords: Postnatal mothers, Effectiveness, Low-birth weight infants, structured teaching program, Kangaroo mother care.

INTRODUCTION

Worldwide, 15% of all neonates are suffering with low birth weight, and which accounts 70% of all neonatal deaths. Mortality rate is very high among the infants, particularly those born in middle- and low-income countries in sub-Saharan Africa and Asia. So United Nations kept some sustainable goals to reduce the mortality rate among neonates as low as 12 deaths per 1000 live births by 2030¹⁻³. Premature birth imposes a tremendous stress for both the mother and infant. To stabilize and save neonatal life, infants are kept in warmer and incubators. The routine care procedures and treatment make infant's discomfort and cause pain. An alternative method was introduced "Kangaroo Mother Care (KMC)", which is easy to practice and having more advantages. KMC defined as continuous skin-to- skin contact between the mother and her preterm low birth weight infants and feeding with breast milk, is the most effective interventions for preventing deaths among low-birth-weight infants⁴⁻⁹. So the present study was aimed to evaluate the effectiveness of knowledge, attitude and practice regarding KMC among post natal mothers with low birth rate.

MATERIALS AND METHODS

Research Approach:

The research approach adopted for this study is an educative and evaluative

approach. Quantitative approach - Educative and Evaluative approach.

Research Design:

For this study, pre-experimental one group pre-test post-test design is selected.

Group	Pre Test	Intervention/ Treatment	Post Test
Post Natal Mothers	O1	X	O2

O1 = Pre assessment of knowledge, attitude and practice regarding kangaroo mother care.

X = Structured teaching programme regarding kangaroo mother care.

O2 = Post assessment of knowledge, attitude and practice regarding kangaroo mother care.

Study Setting:

Study was conducted at Government District Hospital, Sangareddy, Telangana, India.

Sampling Method and Sample size:

The sampling technique adopted for this study was non probability convenient sampling technique. 50 postnatal mothers were selected.

Criteria for sample selection:

Inclusive Criteria:

- ❖ Postnatal mothers who are willing to participate in the study.
- ❖ Postnatal mothers who are available at the time of data collection.
- ❖ Post natal mothers who delivered in Hospital.
- ❖ Postnatal mothers who can speak and understand Telugu.

Exclusive Criteria:

- ❖ New born with high risk conditions
- ❖ Postnatal mother who are not willing to participate.

Data collection procedure:

The data was collected at government maternity hospital, Sangareddy, Telangana. A formal permission for the study was obtained from the Medical superintendent

and Nursing superintendent. Total 50 post natal mothers were selected by using purposive sampling method. Written consent was obtained from the mothers. Investigator assured that all data would be kept strictly confidential and will be used only for study purpose. Socio- demographic data was collected by the investigator. The pre-test was conducted by distributing the structured knowledge questionnaire and instructions were given on answering the questions and doubts were clarified. Each mother took 10 minutes to answer the demographic data and 20 minutes to fill the questionnaire. Structured teaching programme was provided to the postnatal mothers by giving teaching for 30 minutes. Procedure of Kangaroo mother care was demonstrated for the mothers and encouraged them to do. Post-test was conducted on 5th day by administering the same structured knowledge questionnaire; mothers were co-operative during the study.

Method of data analysis:

Analysis is the strategy used in theory development in which concepts, statement or theories are clarified or refined the data was planned to include descriptive and inferential statics sample characteristics were analyzed in terms of frequencies and percentages: the knowledge scores of subjects were presented in mean, Standard deviation and in the form of/or column diagram. The significance of difference between pre-test and post-test knowledge score was determine by paired "t" test to see the effectiveness of structured teaching programme. The association between level of knowledge and demographic variables

were determined by using chi-square test.
The level of significance at 0.01 levels.

RESULTS

Table 1: Frequency and percentage wise distribution of Demographic variables of participants. (n=50)			
Demographic Variables		Frequency	Percentage
Age	18-22	10	20%
	23-28	15	30%
	29-34	15	30%
	35-40	10	20%
Educational Status of Mothers	Primary school	15	30%
	Secondary school	11	22%
	Intermediate & above	21	42%
	Illiterate	3	6%
Religion	Hindu	15	30%
	Muslim	25	50%
	Christian	10	20%
	Others	0	0%
Occupation	House wife	24	48%
	Collie	7	14%
	Business	5	10%
	Employee	14	28%
Area of residence	Urban	10	20%
	Rural	30	60%
	Sub Urban	10	20%
Type of family	Nuclear family	20	40%
	Joint family	30	60%
Number of children	One	11	22%
	Two	15	30%
	Three	15	30%
	Four & above	09	18%
Family income per month (Rs)	Below 3000/-	20	40%
	3001-6000/-	10	20%
	6001-9000/-	10	20%
	9001-above	10	20%
Source of Information	Health personnel	30	60%
	Mass media	10	20%
	Neighbour's	5	10%
	Literature	5	10%

Table 2: Frequency and percentage distribution of knowledge scores of post natal mothers in pre-test and post-test on kangaroo mother care.				
Categorization	Pre test		Post test	
	Frequency	%	Frequency	%
Below average 33%	6	12%	0	0%
Average <34-66%	44	88%	19	38%
Above average <66%	0	0%	31	62%
Total	50	100%	50%	100%

Table 2-Shows that the overall knowledge levels of post natal mothers on kangaroo mother care. In the pre-test 6(12%) were having below average, 44(88%) were having average knowledge and 0(0%)

mothers were having above average. In post-test majority of the post natal mothers have improved 31(62%) above average, 19(38%) have average knowledge.

			Attitude Level			
			Unfavourable	Moderate favourable	favourable	Total
TEST	Pre Test	F	28	22	0	50
		%	56.0%	44.0%	0.0%	100.0%
	Post Test	F	0	24	26	50
		%	0.0%	48.0%	52.0%	100.0%
Total		F	28	46	26	100
		%	28.0%	46.0%	26.0%	100.0%

Table 3, Shows that out of 50 sample, in pre-test 28(56%) were low favourable, 22(44%) were moderate favourable and 0(0%) were high average. In post-test 0(0%) were low favourable, 24(48%) moderate favourable and 26(52%) were favourable.

Table 4: Frequency and distribution of levels of practice regarding kangaroo mother care						
			Practice Level			Total
			Inadequate	Moderate adequate practice	Adequate practice	
TEST	Pre Test	F	6	42	2	50
		%	12.0%	84.0%	4.0%	100.0%
	Post Test	F	0	7	43	50
		%	0.0%	14.0%	86.0%	100.0%
Total		F	6	49	45	100
		%	6.0%	49.0%	45.0%	100.0%

Table 4, shows that among 50 sample in pre-test 6(12%) of post natal mother have inadequate practice of KMC, 42(84%) moderate adequate practice and 2(4%) adequate practice. In post-test 0(0%) inadequate, 7(14%) moderate adequate practice and 43(86%) adequate practices.

Table 5: Frequency and distribution of levels of practice regarding kangaroo mother care.						
			Practice Level			Total
			Inadequate	Moderate adequate practice	Adequate practice	
TEST	Pre Test	F	6	42	2	50
		%	12.0%	84.0%	4.0%	100.0%
	Post Test	F	0	7	43	50
		%	0.0%	14.0%	86.0%	100.0%
Total		F	6	49	45	100
		%	6.0%	49.0%	45.0%	100.0%

Table 5, Shows that among 50 sample in pre-test 6(12%) of post natal mother have inadequate practice of KMC, 42(84%) moderate adequate practice and 2(4%) adequate practice. In post-test 0(0%) inadequate, 7(14%) moderate adequate practice and 43(86%) adequate practices.

Table 6: shows the effectiveness of structured teaching program on knowledge, attitude, & practice regarding Kangaroo mother care among postnatal mothers (n=50)			
	Pre-test Mean \pm SD	Post-test Mean \pm SD	Paired 't' test value
Knowledge score among postnatal mothers	14.76 \pm 3.35	69 \pm 9.5	10.98
Attitude score among postnatal mothers	23.40 \pm 4.39	36.68 \pm 5.15	16.07
Practice score among postnatal mothers	4.90 \pm 1.22	7.96 \pm 1.26	11.14

Table 6, shows that the pre-test and post-test (Mean \pm SD) of knowledge, attitude, & practice regarding Kangaroo mother care among postnatal mothers (n=50). The pre-

test and post-test (Mean \pm SD) of knowledge was 14.76 ± 3.35 and 69 ± 9.5 . The calculated paired 't' value is 10.98. It shows that there is significant difference in pre-test and post-test. Hence it is concluded that after structured teaching programme on KMC the knowledge scores of post natal mothers have increased. The positive result is a clear indication of effectiveness of structured teaching programme on KMC. The pre-test and post-test (Mean \pm SD) of attitude was 23.40 ± 4.39 and 36.68 ± 5.15 .

The calculated paired 't' value is 16.07. It shows that there is significant difference in pre-test and post-test. Hence it is concluded that after structured teaching programme on KMC the attitude scores of post natal mothers have increased. The pre-test and post-test (Mean \pm SD) of practice was 4.90 ± 1.22 and 7.96 ± 1.26 . The calculated paired 't' value is 11.14. Hence it is concluded that after structured teaching programme on KMC the practice scores of post natal mothers have increased.

Table 7: The association between the pre-test knowledge score and selected demographic variables were analysed by using chi square test. (n=50).

SL no.	Variable	Category	Chi Square	Df	Critical Value
1.	Age	18-22yrs 23-28yrs 29-34yrs 35-40yrs	4.443 S*	3	0.217
2.	Religion	Hindu Muslim Christian	4.160 NS [#]	2	0.125
3.	Educational Qualification	Illiterate Primary Secondary Intermediate	9.032 S*	3	0.029
4.	Occupation	House wife Coli(labour) Business Employee	0.900 NS [#]	3	0.825
5.	Residence	Urban Sub urban Rural	7.697 NS [#]	2	0.021
6.	No Of Children	One Two Three Four &above	0.335 S*	3	0.953
7.	Family Income	Below 3000/ 3000- 6000/ 6000-9000/ 9000 above	2.037 NS [#]	3	0.565
8.	Type Of Family	Nuclear Joint	0.693 NS [#]	1	0.405

S*= Significant, NS[#] = Not Significant.

The above findings revealed that, there was significant association between post level of knowledge and demographic variables like age, education of the mothers, and number of children in the family as shown in the table 7.

CONCLUSION

KMC is the cost-effective and simple method with lot of benefits. The present study revealed that, there was significant improvement in the level of knowledge on KMC among postnatal mothers after structured teaching program. There was no significant association found between the knowledge and demographic variables like

Religion, Occupation, Family income, and type of family. It is mandatory to provide information about kangaroo mother care to all postnatal mothers and also to general population. Education not only place important role in the kangaroo mother care but also helps in practicing, changing attitudes and increases knowledge regarding kangaroo mother care. Nurses must get opportunities to assist in various procedures in all clinical care setting and conduct health education programme on kangaroo mother care. The present study reveals that, knowledge assessed could be used effectively for kangaroo mother care.

Declaration by Authors

Ethical Approval: Approved

Acknowledgement: None

Source of Funding: None

Conflict of Interest: No conflicts of interest declared.

REFERENCE

1. Liu L, Oza S, Hogan D, et al. Global, regional, and national causes of under-5 mortality in 2000-15: an updated systematic analysis with implications for the Sustainable Development Goals. *Lancet* 2016; 388:3027-35.
2. Low birthweight: country, regional and global estimates. New York: UNICEF, World Health Organization, 2004. (<https://apps.who.int/iris/handle/10665/43184>).
3. Lawn JE, Cousens S, Zupan J. 4 Million neonatal deaths: when? Where? Why? *Lancet* 2005; 365:891-900.
4. World Health Organization. Kangaroo mother care: a practical guide. 2003 (http://www.who.int/maternal_child_adolescent/documents/9241590351/en/).

5. Conde-Agudelo A, Díaz-Rossello JL. Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. *Cochrane Database Syst Rev* 2016;8: CD002771.
6. Alliance for Maternal and Newborn Health Improvement (AMANHI) mortality study group. Population-based rates, timing, and causes of maternal deaths, stillbirths, and neonatal deaths in south Asia and sub-Saharan Africa: a multi-country prospective cohort study. *Lancet Glob Health* 2018;6(12): e1297-e1308.
7. Rey E, Martínez H. Rational management of the premature child. Bogotá, Colombia: Universidad Nacional, Curso de Medicina Fetal. 1983; 17: 23-25.
8. Charpak N, Ruiz-Palaez JG. Resistance to implementing kangaroo mother care in developing countries, and proposed solutions. *Acta Pediatr.* 2006; 95: 529-34.
9. Bilal SM, Tadele H, Abebo T, Tadesse B, Muleta M, W/Gebriel F, et al. Barriers for kangaroo mother care (KMC) acceptance, and practices in southern Ethiopia: A model for scaling up uptake and adherence using qualitative study. *BMC Pregnancy and Childbirth.* 2021;21(1).

How to cite this article: Imtijungla T Ozukum, Nagababu Pyadala. A study to evaluate the effectiveness of structured teaching programme on Knowledge, Attitude and Practice regarding Kangaroo mother care among post-natal mothers at Government hospital, Sangareddy. *International Journal of Research and Review.* 2025; 12(5): 684-689. DOI: <https://doi.org/10.52403/ijrr.20250573>
