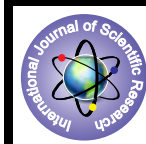


## Effect of Educational Intervention On Knowledge Regarding Kangaroo Mother Care (KMC) Among Nursing Students, Ahmedabad."



### Medical Science

**KEYWORDS :** Nursing students, KMC, Knowledge

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### ABSTRACT

*Objectives: (1) To give an overview and importance of KMC to nursing students. (2) To assess and improve the knowledge regarding the KMC.*

*Methodology: An educational interventional study was conducted in five selected Nursing colleges from March-July 2012 in Ahmedabad. 3rd year GNM and 3rd & 4th year BSc students were selected. Questionnaire was prepared, covering KMC into five components. Data was collected for 243 students. After the pretest, one hour interactive session on KMC was taken. Post-test was conducted one month later.*

*Results: Among 243 nursing students, 218(89.7%) were females. Mean age was 20.36 years. Majority 155(64%) were GNM students. All students had significant improvement in all questions. Mean pretest score was improved from 15.46(36.8%) to 32.89(78.3%) ( $P<0.0001$ ). Mean difference in pre-post scores of GNM students(18.53) had higher improvement.*

*Conclusion: Significant improvement in knowledge regarding KMC after educational intervention.*

### Introduction:

Some 20 million low-birth-weight (LBW) babies are born each year, because of either preterm birth or impaired prenatal growth, mostly in less developed countries.<sup>1,2</sup> They contribute substantially to a high rate of neonatal and infant mortality and morbidity.<sup>3</sup> The care of such infants becomes a burden for health and social systems everywhere. For many small preterm infants, receiving prolonged medical care is important. However, kangaroo mother care (KMC) is an effective way to meet baby's needs for warmth, breastfeeding, protection from infection, stimulation, safety and love.<sup>4,5</sup>

KMC is care of preterm infants carried skin-to-skin with the mother. It is a powerful, easy-to-use method to promote the health and well-being of infants born preterm as well as full-term.<sup>6</sup> KMC should be initiated at a health facility and continued at home under the supervision of the health facility (domiciliary KMC).<sup>7</sup>

### Objectives:

(1) To give an overview and importance of KMC to nursing students. (2) To assess and improve the knowledge regarding the KMC.

### Materials and Methods:

An educational interventional study was conducted at five selected nursing colleges of Ahmedabad. The study period was from March to July 2012. Due permission was taken from the principal of nursing colleges and ethical committee of NHL medical college. All 3<sup>rd</sup> year GNM and 3<sup>rd</sup> & 4<sup>th</sup> year BSc nursing students were selected for study purpose. The selection was done on the basis of their study curriculum of pediatric subject. 1<sup>st</sup> & 2<sup>nd</sup> year students have no pediatric subject in their study curriculum. Data was collected for 243 nursing students. Questionnaire was prepared having general details of KMC. Questionnaire was subdivided in to five components (Table-1). Pretest was conducted to assess the knowledge among them. Then one hour interactive session was taken on KMC. The session was conducted by using chalk & talk, posters, charts and photographs etc. One month later post test was conducted to assess the gain in knowledge.

### Results and Discussion:

Among 243 nursing students, majority 218 (89.7%) were females. Mean age was 20.36±1.05 year. Majority students 98 (40.3%) were of 20 year followed by 54 (22.3%) were of 19 year. majority 155 (64%) were GNM nursing students while 88 (36%) were of BSc nursing students. All the students had significant improvement in all the questions. (Table-2) Mean pretest score was 15.46(36.8%), which significantly improved to 32.89(78.3%) ( $P<0.0001$ ). Among five components of KMC, improvement was significant for all except for other details which include LBW baby, BF methods, Danger signs etc. (Table-1).

Mean difference in pre-post scores of GNM students (18.53) had higher improvement as compared to BSc students (15.48). KMC was part of their curriculum and 205(84.4%) already had learnt it. However this prior knowledge had no significant improvement in pretest score.

### Conclusion:

There is statistically significant improvement in knowledge for all students. GNM students showed significantly higher improvement. The study showed improvement, irrespective of their past knowledge. Being a core component of the curriculum, KMC still needs emphasis in the nursing curriculum.

**Table-1: Total Pretest-posttest score of five KMC component of questionnaire.**

Group	Components of KMC	Pre-test score (%)	Post-test score (%)	t-value	P-value
A	Basic details of KMC	57.3	81.8	2.7	0.043
B	Position in	24.2	74.4	4.73	0.018
C	Temperature regulation in KMC	26.9	79.2	4.75	0.005
D	Place, Discharge & follow up criteria	21.7	72.5	4.39	0.048
E	Other details	46.9	81.8	1.91	0.19

**Table-2: Pretest-posttest score of individual question of KMC questionnaire.**

Question Group	Marks per question	Total marks	Pretest score	Post test score	Chi-square	P value
E	1	243	160	207	24.58	<0.0001
A	2	486	222.5	365.5	88.11	<0.0001
A	1	243	220	237	10.6	0.001
B	3	729	233.5	519.5	224.6	<0.0001
A	3	729	258.5	526	196.7	<0.0001
A	3	729	421.5	582.5	83.01	<0.0001
C	1	243	88	208	124.1	<0.0001
B	2	486	135	365	217.8	<0.0001
C	2	486	82.5	354.5	307.5	<0.0001
B	1	243	30	138.5	107.8	<0.0001
C	1	243	149	216	49.4	<0.0001

A	1	243	219	240	15.69	<0.0001
B	2	486	72.5	424	507.3	<0.0001
C	1	243	104	227	143.3	<0.0001
C	2	486	9	307	416.4	<0.0001
C	2	486	156	421	299.5	<0.0001
A	1	243	190	236	40.2	<0.0001
E	2	486	189.5	339.5	93.35	<0.0001

D	3	729	182	537	345.8	<0.0001
D	3	729	129	481.5	351.06	<0.0001
D	1	243	58	215	206.01	<0.0001
E	4	972	448.5	845	362.4	<0.0001
Gross total	42	10206	3758	7992.5	-	-
Mean	-	-	15.46/42	32.89/42	-	-
Percentage	-	100%	36.8%	78.35	-	-

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