

Research article**A study to assess the knowledge of staff nurses regarding kangaroo mother care in Bombay hospital Indore (M.P)****Ms. Princy koshy**

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Abstract

The main causes of newborn deaths are prematurity and low-birth-weight (WHO May 2012). KMC is a technique of skin-to-skin contact between mothers (or fathers) and their pre-mature infants. Kangaroo mother care restores to mothers their true ownership of their newborns and it restores to newborn their birth right- their right to the best start in life. **Aim:** The objectives of the study was to assess the level of knowledge regarding kangaroo mother care among staff nurse and find out association between knowledge score and selected demographic variables. **Materials and Methods:** Explorative research approach was adopted for the study. Convenience sampling was used as sampling technique and 30 female staff nurses working in Bombay Hospital Indore were selected for the study. Data collection was done with help of demographic Performa and structured knowledge questionnaires. **Result:** Mean value of knowledge level on KMC among staff nurses was 19.6 this value indicates the staff nurses are having moderate knowledge regarding KMC and the value of standard deviation was 2.32. Result shows that there was significant association of knowledge scores with selected demographic variables. **Conclusion:** The study shows that majority of staff nurses, working in Bombay Hospital, Indore have good knowledge about Kangaroo mother care.

Key words: Staff nurses, kangaroo mother care.

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1. Introduction

Newborn care has generally benefited from major technical advance in the last four decades showing substantial improvements in the mortality and morbidity of high-risk neonates. But every year nearly 40% of all under-five child deaths are among newborn infants, babies in their first 28 days of life or the neonatal period. Three quarters of all newborn deaths occur in the first week of life. The majority of all neonatal deaths (75%) occurs during the first week of life, and between 25% to 45% occurs within the first 24 hours. In developing countries nearly half of all mothers and newborns do not receive skilled care during and immediately after birth. Up to two thirds of newborn deaths can be prevented if known, effective health measures are provided at birth and during the first week of life. The main causes of newborn deaths are prematurity and low-birth-weight (WHO May 2012) [1].

Newborn care techniques are advancing in day-to-day life. In spite of that advancement in newborn care, a simple, low cost and effective method, i.e., Kangaroo Mother Care has been evolved in last few decades. KMC

is a technique that involves mother as a warmer to keep the infant condition stable. Mother acts as a source of warmth, comfort and nourishment [4].

KMC is a technique of skin-to-skin contact between mothers (or fathers) and their pre-mature infants. Kangaroo mother care restores to mothers their true ownership of their newborns and it restores to newborn their birth right- their right to the best start in life. The method involves infants being carried, usually by the mother. It 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. The parent's stable body temperature helps to regulate the neonate's temperature more smoothly than an incubator, and allows for readily accessible breastfeeding [2].

Worldwide more than 20 million babies are born each year with low birth weight. Of these low birth weight babies, 95.6% are born in developing countries In India alone 6-8 million LBW infants are born annually. Over 70% of perinatal deaths and 55% of neonatal deaths and

50% infant deaths occur among LBW babies. Low socio-economic areas experience higher rates of neonatal mortality, caused in large part by low-birth weights, than do women of higher income. Hence cost-effective sustainable interventions are needed in order to reduce mortality rates [8].

Nurses play an important role in perinatal- neonatal care. As India is a developing country and Kangaroo Care is an important practice to reduce neonatal mortality and morbidity, staff nurses being the fore-runner of care providers play a vital role in the practice and implementation of Kangaroo Care. This made the investigator to conduct a study to assess the awareness of staff nurse regarding the KMC [7].

2. Methodology

The research approach used for the study is explorative survey approach. In this study non-experimental research design was adopted. The independent variable in this study was socio-demographic variables like age, sex, religion etc. And the dependent variable is the study knowledge level regarding KMC among nurses. This study is conducted at Bombay Hospital, Indore. In this study the population is staff nurses of Bombay Hospital, Indore and the sample are female staff nurses of Bombay Hospital Indore. The sample used for the study is 30 female staff nurses working in Bombay Hospital, Indore. Convenient sampling technique used to selected the sampling because the limited time and availability of the subject according to the sampling criteria. The sampling criteria were divided into inclusive and exclusive criteria.

The Inclusion criteria include:-

- Staff nurses who are willing to participate in the study.
- Staff nurses who are available in Bombay Hospital.

The Exclusion criteria include:

- Nurses who are working outside Bombay Hospital.
- Nurses who are not willing to participate not available at the time of study.

The tools used for the study was structured questionnaire:

Section A-Socio demographic variables. First section includes of 7 items which includes age, religion, marital status, educational qualification, area of exposure, years of experience, previous knowledge.

Section B- Structured knowledge questionnaire to assess the knowledge level regarding kangaroo mother care among staff nurses. It consists of 25 items. Each correct item is given a score of 1 and maximum score is 25.

The response are scored and graded as follows: Very poor, poor, average, good, very good

Tools were submitted to the experts for validation and as per the suggestion it had been modified. The reliability

of tools calculated by Spearman–Brown prophecy formula. The reliability of structured knowledge questionnaire was 0.9. It revealed that the tool is highly reliable. Data was collected confidently by the administration of tools. Data analysis was done by descriptive and inferential statistics

- Socio- demographic data would be analyzed by frequency and percentage.
- Association would be done by chi-square.

3. Result and Discussion

In the study the data was collected from 30 samples by using convenient sampling technique. Descriptive and inferential statistic was used to find out for analysis of data. Chi-square test to determine the association between the selected demographic variable.

Table No 1: Frequency and Percentage Distribution of Demographic Variables

SN	Demographic variables	Frequency <N>	%
1	Age in years		
	20- 25 yrs	30	100
	26- 30 yrs	0	0
	31- 35 yrs	0	0
	>35 yrs	0	0
2	Educational qualification		
	GNM	7	23.33
	B.Sc	23	76.66
3	Religion		
	Christian	25	83.33
	Hindu	5	16.66
	Muslim	0	0
	Others	0	0
4	Marital status		
	Single	30	100
	Married	0	0
5	Area of exposure		
	NICU	9	30
	MCU	0	0
	FGW	21	70
	PICU	0	0
6	Years of experience		
	< 1 yrs	14	46.66
	1-2 yrs	16	53.33
7	Previous knowledge regarding KMC		
	Mass media	0	0
	In service education	9	30
	Others	21	70

Majority of staff nurses were in the age group of 20-25 years. Majority of the staff nurses had B.Sc. 76.66% and others had (GNM23.33 %.). Majority of nurses (83.33%) were Christians and (16.66%) were Hindus .33%). Most of staff nurses had experience (53%) of 1- 2 yrs and

(46.66%) of <1 years. Majority of nurses were having previous knowledge regarding KMC from others is (70%) i.e. (30 %) from in service education. Majority of

staff nurses were working in FGW (70%) and others in NICU (30%).

Table No 2: Description of knowledge score:

Knowledge score	Grade	Assessment of knowledge score				
		Frequency	%	Mean score	Median	Standard deviation
0-5	Very poor	0	0	19.6	20	2.34
6-10	Poor	0	0			
11-15	Average	2	6.66			
16-20	Good	18	60			
21-25	Very good	10	33.33			

The data presented in table indicates that mean score of knowledge related to Kangaroo Mother Care among staff nurses was 19.6 this value indicates that nurses were having good knowledge regarding Kangaroo Mother Care on the basis of score of knowledge. The data also indicates that median value 20 shows that staff nurses were having good knowledge level.

Table No 3: Association between knowledge score with selected demographic variables

Demographic variables	Knowledge score					df	Chi-square value	
	Very poor (0-5)	Poor (6-10)	Average (11-15)	Good (16-20)	Very Good (21-25)			
1) Age in years						12	0 N.S	
20- 25 yrs	0	0	2	18	10			
26- 30 yrs	0	0	0	0	0			
31 – 35 yrs	0	0	0	0	0			
>35 yrs	0	0	0	0	0			
2) Education						4	1.13 N.S	
GNM	0	0	1	6	0			
B.Sc	0	0	1	12	10			
3) Religion						12		
Christian	0	0	2	14	9			
Hindu	0	0	0	4	1			
Muslim	0	0	0	0	0			
Others	0	0	0	0	0			
4) Marital status						4	0 N.S	
Single	0	0	2	18	10			
Married	0	0	0	0	0			
5) Area of exposure						12		
NICU	0	0	0	5	4			
MCU	0	0	0	0	0			
FGW	0	0	2	13	6			
PICU	0	0	0	0	0			
6)Years of experience						4	22.65 H.S	
<1 yrs	0	0	0	6	8			
1-2 yrs	0	0	2	12	2			
7) Previous knowledge regarding kmc						8	26.73 H.S	
Mass media	0	0	0	0	0			
In service education	0	0	0	5	4			
Others	0	0	2	13	6			

The association of staff nurses knowledge shows that there is no association between age, education, religion, marital status and area of exposure but variables like year of experience and previous knowledge is having high significance at $p < 0.05$ level.

Conclusion

The main aim of the study was to assess the knowledge level among staff nurses and find its association with selected demographic variables. After detailed analysis

and experience of the investigator, the finding revealed that majority of staff nurses, working in Bombay Hospital, Indore have good knowledge, Mean Score of Knowledge Level among Staff Nurses Were 19.6. There was significant association of knowledge scores with selected demographic variables. The overall experience of conducting the study was enjoyable. The response of the participant to the study was an encouraging hand for the investigators the study was a new learning experience for the investigators.

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