



TO ASSESS KNOWLEDGE REGARDING KANGAROO MOTHER CARE AMONG MOTHERS OF LOW BIRTH WEIGHT BABIES.

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ABSTRACT **Objectives:** To assess knowledge regarding kangaroo mother care among mothers of low birth weight babies and to assess the effectiveness of planned health teaching on knowledge regarding kangaroo mother care.
Methods: An evaluative approach is used to assess the knowledge regarding kangaroo mother care of mothers of low birth weight babies. The sample was studied using one group pretest/post test research design. In this study design, the investigator was introduced a base measure before and after planned exposure. In the present study the base measure was the knowledge score and experimental variable was the planned health teaching. The analysis of data is done by using descriptive and inferential statistics.
Results: Average Mean Knowledge Score of mothers about Kangaroo mother Care was 2.1% before the test, which significantly increased to 8.1% after planned health teaching.

KEYWORDS : Kangaroo mother care, low birth weight, knowledge.

INTRODUCTION

Kangaroo mother care is a simple and feasible intervention, acceptable to most mothers. The research findings suggest that up to half a million newborn deaths due to preterm birth complication could be prevented each year if kangaroo mother care were available for all pre term babies, particularly where newborn mortality rates are highest.

It was first presented by Rey and Martinez, in Bogotá, Colombia, where it was developed as an alternative to inadequate and insufficient incubator care for those preterm newborn infants who had overcome initial problems and required only to feed and grow.[1] It has been shown to be effective for thermal control, breastfeeding and bonding in all newborn infants, irrespective of setting, weight, gestational age, and clinical conditions.[2] Kangaroo mother care creates a climate in the family whereby parents become prone to sensitive care giving 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. KMC contributes to the humanization of neonatal care and to better bonding between mother and baby in both low and high-income countries.[3] In newborns with mild respiratory distress very early skin-to-skin contact might have a beneficial effect.[4] KMC increases the prevalence and duration of breastfeeding.[5][6] Prolonged skin-to-skin contact between the mother and her preterm/LBW infant, as in KMC, provides effective thermal control and may be associated with a reduced risk of hypothermia.[7]

Therefore the mothers of stable low birth weight infants need to know about the effects of low birth weight and importance and advantages of kangaroo care. The mothers also need to be educated regarding the preparation, procedure; discharge criteria and the post discharge follow up about kangaroo mother care. This study assesses knowledge regarding kangaroo mother care and effectiveness of planned health teaching on knowledge regarding kangaroo mother care among mothers of low birth weight babies admitted in Dr. Vasanttrao Pawar Medical College Hospital and Research Centre, Adgaon, Nashik."

RESEARCH METHODOLOGY

The present study aims to the effect of planned health teaching on knowledge regarding kangaroo mother care among mother of low birth

weight admitted in Dr. Vasanttrao Pawar Medical College, Hospital and Research Center, Adgaon, Nashik. The present study aims at developing and determining the effectiveness of planned health teaching on kangaroo mother care.

RESEARCH DESIGN

An evaluative approach is used to assess the knowledge regarding kangaroo mother care of mothers of low birth weight babies. Keeping in view the objectives of the study the sample was studied using one group pretest/post test research design In this study design, the investigator was introduced a base measure before and after planned exposure.

VARIABLES:

INDEPENDENT VARIABLE:

In this study the independent variable is health teaching on kangaroo mother care.

DEPENDENT VARIABLE:

In this study the dependent variable is knowledge gained.

SAMPLE AND SAMPLING TECHNIQUE

The sample selected for present study comprised of mothers of low birth weight babies weighing less than 2500gms admitted in Dr. Vasanttrao Pawar Medical College, Hospital and Research Center, Adgaon, Nashik.

In present study, samples were selected by selected sampling technique by the investigator. Sample size selected for this study was 30, only those who fulfilled the inclusion criteria.

INCLUSION CRITERIA:

Mothers of physiologically stable low birth weight babies (wt=<2.5kg), those who are willing to participate ,mothers who are able to read and write Marathi were included in study.

EXCLUSION CRITERIA:

Mothers of physiologically unstable low birth weight babies ,mother of babies weighing above 2.5 Kg, mothers of babies admitted out of

Dr.Vasantrao Pawar, Hospital, Adgaon, Nashik were excluded from the study.

DATA COLLECTION TECHNIQUE AND TOOL:

A structured questionnaire was developed for assessing the knowledge regarding kangaroo Mother care. Initially interview was taken and then they were explained about the questionnaires.

For the Selection of the item and preparation of the tool, review of literature was done in the area related to kangaroo mother care. Opinion and valid suggestion was taken from experts, which helped in determining the important areas to be included.

DESCRIPTION OF TOOL

The researchers prepared a structured questionnaire as the tool for study. The structured questionnaire included 3 sections:

Section I includes 7 items seeking information on demographic profile of sample. Section II includes 7 items seeking information on health variable of sample. Section III includes items to assess the knowledge of mothers regarding kangaroo mother care. There were total 24 questions in section III

Structure of total questionnaire is developed in to 3 broader sections to assess the knowledge of mothers regarding kangaroo mother care. Section III of total questionnaire deals with the objective type (Multiple choice Question) items. The score of section III are measured based on the worth of correct answers, where correct response are given a score of 1 and incorrect 0 The analysis of data is done by using descriptive and inferential statistics.

ANALYSIS AND INTERPRETATION OF DATA

Distribution of the sample according to age showed that majority of the sample 19 (63.33%) belongs to the age group of 19-24 years. 11 (36.66%) belongs to the age group of 25-30 years.

Regarding qualification of sample 12 (40%) of the sample were studied up to secondary, 9 (30%) were up to Higher secondary, 6 (20%) were up to primary and 3 (10%) is having education up to Pre-Primary. Study finding showed that 18 (60%) of the sample are house wives and 12 (40%) are laborer. This study revealed that most 17 (56.66%) of the sample visited 4 and above times, 8 (26.66%) came for ANC visit 3 times, and 5 (16.66%) came for ANC visit 2 times. Study finding showed that 30 (100%) of sample doesn't have any knowledge about kangaroo mother care comparable with a study in Malawi in which mothers had high level of knowledge about the significant benefits of Kangaroo Mother Care even if 84% were not aware of the services prior to their hospitalization [8]. Study finding showed that 26 (86.66%) of sample have babies weighing between 1.5-2.5 kg and 4 (13.33%) of sample have babies weighing between 1-1.5 kg.

Study showed that (100%) of the mothers were having the knowledge regarding meaning of kangaroo mother care in their posttest knowledge score and (60%) of the mothers were having knowledge regarding components of kangaroo mother care in posttest. (Table 1)

(Table 1): Knowledge about meaning & contents of Kangaroo Mother Care

Response	Pre test		Post test	
	F	%	F	%
A) Meaning of KMC				
a) Caring of Healthy infants	1	3.3	0	0
b) Caring of toddler	1	3.3	0	0
c) Caring of Mother	24	80	0	0
d) Caring of low birth weight or preteen infants	4	13.3	30	100
B) Components :				
a) Skin to skin contact	3	10	3	10
b) Exclusive breastfeeding	10	33.3	3	10
c) Emotional bonding	7	23.3	6	20
d) Skin to Skin contact exclusive breast feeding emotional bonding	10	33.3	18	60

From this study (70%) of the mothers understood about the position of baby's abdomen while giving kangaroo mother care. (73.33%) of mothers had knowledge regarding the position of baby's neck, (86.66%) of mothers had understood about the position of mother during kangaroo mother care. (73.33%) of mothers had understood the

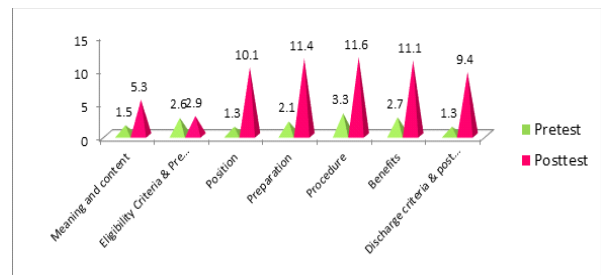
effectiveness of proper positions used during kangaroo mother careThe study explained that (76.66%) of mothers had knowledge regarding the mothers clothing required for kangaroo mother care. (96.66%) of mothers gained knowledge regarding baby's clothing for kangaroo mother care. (86.66%) of mothers understood about the placement of baby while giving kangaroo mother care.

The study explained that (90%) of the mothers gained knowledge regarding initiation of kangaroo mother care. (83.33%) of mothers gained knowledge regarding the duration of kangaroo mother care. (96.66%) of mothers understood that other family members can also participate in kangaroo mother care. (80%) of mothers gained knowledge regarding monitoring of the baby and accepted KMC. The finding was lower than 96% acceptance of KMC by Indian mothers [9], 87.1% mothers who had favorable opinion towards the practice of KMC in Ghana; and 96.6% of mothers feel positive in Cape Town.[10] This study showed that (83.33%) of mothers understood the benefits for mothers, (73.33%) mothers understood about the benefits related to children, (93.33%) of mothers gained knowledge regarding benefits of prolonged skin-to-skin contact. (83.33%) of mothers understood that kangaroo mother care protects against nosocomial infection (Table 2).

(Table 2) Knowledge about Benefits of Kangaroo Mother Care.

Response	Pre test		Post test	
	F	%	F	%
BENEFITS				
For Mothers				
a) Emotional bonding with child	10	33.33	2	6.66
b) Decreased Milk Secretion	0	-	0	-
c) Increased Milk Secretion	14	46.66	2	6.66
d)Emotional bonding with child & Increased Milk Secretion	6	20	25	83.33
For Baby				
a)Breast Feeding	10	33.33	2	6.66
b) Temperature control	5	16.66	4	13.33
c) Infection control	10	33.33	2	6.66
d)Breast Feeding Temperature control & infection control & Emotional bonding	5	16.66	22	73.33
Prolonged skin to skin contact provides				
a) Reduced risk of Pneumonia	9	30	0	-
b) Reduced risk of Infection	8	26.66	1	3.33
Benefits	F	%	F	%
c) Effective thermal control	3	10	28	93.33
d)Increase risk of aspiration kangaroo mother care parolees against	10	33.33	1	3.33
Protects against				
a)Aspiration	3	10	2	6.66
b) Respiratory distress	3	10	2	6.66
c) Nosocomial infection	11	36.66	25	83.33
d) Regurgitation	13	43.33	1	3.33

The study showed that pretest mean knowledge score as sample about meaning and contents was 1.5, about eligibility criteria and pre requisite was 2.6, about position was 1.3, about preparation was 2.1, about benefits was 2.7, and about discharge criteria and post discharge follow up was 1.3, which was significantly increased in post test, this gain in knowledge score of sample is increase to 5.3, 2.9, 10.1, 11.4, 11.6, 11.1, 9.4 respectively in same above mentioned areas showed significant improvement in post test knowledge (Figure 1).



(Figure 1) Comparison Of Pretest And Post test Knowledge Score Of The Sample.

Regarding knowledge score of eligibility criteria and pre-requisites, pre test mean score is 2.6. The mean score of this is 0.3, so the findings

suggest that it is not significant. About position, knowledge score in pre test is 1.3 and in post test the knowledge score increased to 10.1. The mean score is 8.8. The study finding suggests that there is significant. Knowledge score in pre test about preparation for kangaroo mother care which is 2.1. Most of the samples don't know about the preposition of kangaroo mother care. Post test it is significantly increased to 11.4. Knowledge score about procedure in pre test is 3.3, most of the sample doesn't know about the procedure of kangaroo mother care. So in post test it is significantly increase to 11.6. About benefits of kangaroo mother care, the pre test knowledge score is 2.7 and the post test score is 11.1, it is significant according to the findings. Knowledge score about discharge criteria and follow up the post test score is 1.3. All samples in pre test said that it is necessary to come for follow up, but reason explained by (80%) of sample for follow up and (20%) said for health check up of child. This knowledge score of follow up was significantly increased 9.4 in post test.

CONCLUSION:-

On conducting this research and analyzing this collected data, it can be concluded that mothers did have significant basic knowledge related to the meaning, contents, eligibility criteria, prerequisites, position, preparation, procedure, benefits, discharge criteria and post discharge follow-up of kangaroo mother which significantly increased after planned health teaching of these mothers. When considering the selected demographic variables and health variables having compared with knowledge score, there was no significance.

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