



**Research Article**

**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING KANGAROO MOTHER CARE IN TERMS OF KNOWLEDGE AMONG THE PREGNANT WOMEN ATTENDING MAMTA CLINIC AT PHC, KARAMSAD**

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**ABSTRACT**

**Background:** The purpose of the study was to assess the effectiveness of structured teaching programme regarding Kangaroo Mother Care in terms of knowledge among the pregnant women attending Mamta clinic at PHC, Karamsad. The literature review revealed about the importance of KMC. **Method:** A quasi experimental study was performed on pregnant women using structured knowledge questionnaire interview. **Result:** The pre-test knowledge mean score and SD of samples was 11.6 (39%) & 3.9. The post-test knowledge mean score and SD was 22.18(80%) & 3.2. The data further indicates that the post-test mean percentage scores in content were higher than the pre-test mean percentage. The percentage gain was 41% so the investigator concluded that there was significance increases in the mean post-test knowledge score as compared to mean pre-test knowledge score. The Calculated value of chi square for education was 7.98 which was less than tabulated value of chi square (15.51) so it was not statistically significant at 0.05 level of significance. It shows that knowledge level of samples regarding Kangaroo Mother Care does not make any difference by their education. The calculated value of chi square for no. of children was 5.02 which was less than tabulated value of chi square was 9.49. So it was not statistically significant at 0.05 level of significance. It proved that knowledge level of samples regarding Kangaroo Mother Care does not make any difference by their No. of children. **Conclusion:** Investigator concluded that women attending Mamta Clinic gained significant increased in knowledge shows that the Structured Teaching Programme was effective. There was no significant association between various demographic variables, such as Education and No of children. Hence it is concluded that Structured Teaching Program was effective in improving the knowledge of the pregnant women attending Mamta clinic at PHC Karamsad.

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**INTRODUCTION**

In less developed countries high rates of LBW are due to pre-term birth and impaired intra-uterine growth and their prevalence is decreased slowly. The first 28 days of life the neonate period is most vulnerable time for a child survival. (WHO,2003) In India infant mortality rate per 1000 live birth, In 2000 it was 65, in 2001 it was 64, in 2002 it was 62, in 2003 it was 60, in 2004 it was 58, in 2005 it was 56, in 2006 it was 55, in 2007 it was 35, in 2008 it was 33, in 2009 it was 30, in 2010 it was 49, in 2011 it was 47, in 2012 it was 46, in 2013 it was 45, in 2014 it was 43, in 2015 it was 42, in 2016 it was 41. Since causes and determinants remain largely unknown, effective interventions are limited. Moreover, modern technology is either not available or cannot be used properly,

often due to shortage of skilled staff. Incubators, for instance, where available are often insufficient to meet local need or are not adequately cleaned. According to World Health Organization, nearly one in 10 babies worldwide is born preterm, with resulting birth complications the leading cause of death among children under five. (WHO) The skin to skin contact of the mother and child allows for a needed emotional closeness of both as well as allowing the production of essential bonding hormones. Dr. Rey and Martinez developed kangaroo mother care as a method of ambulatory care for low birth weight infants in their hospital where there had been high morbidity and mortality among these infants due to overcrowding and sepsis. Numerous studies have showed kangaroo mother care to be a safe and effective method of caring for their infants. Kangaroo Mother Care is the method of holding an infant with skin to skin contact, prone and upright on the chest of the parents. This method was described as human incubator low birth weight babies. Under the

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National Rural Health Mission [NRHM] programme, the government of India is committed to improve the new born care and bring down the neonatal and infant mortality to meet the millennium development Goals. It is therefore important to operationalize primary health for round the clock deliveries and upgrade the health facilities at the district hospital and referrals centers. It is also important to build up public private partnership at each level. KMC is humanization of high technology and is an alternative for minima neonatal care unit. In communities where majority of deliveries are at home and very limited resources for neonatal care are available, KMC is an alternative for all low birth weight and sick new born babies. Since large number of deliveries occur in hospital now –a-days we require that sufficient knowledge should be created enough to mothers regarding “quality mothering “ through natural and universally approved easily applicable way of Kangaroo Mother Care among staff nurses.

**Statement of problem**

“A study to assess the effectiveness of structured teaching programme regarding Kangaroo Mother Care in terms of knowledge among the pregnant women attending Mamta clinic at PHC, Karamsad.”

**Objectives of the present study**

1. To assess the knowledge among pregnant women attending Mamta clinic regarding Kangaroo Mother Care before and after administration of Structured Teaching Programme.
2. To find out the association between knowledge and selected demographic variable regarding Kangaroo Mother Care among pregnant women attending Mamta clinic at PHC, Karamsad.

**MATERIALS AND METHODS**

**Study design**

Non experimental - One group pre-test post-test design

**Setting**

The study was carried out at Mamta clinic at Karamsad PHC.

**Samples**

The participant consists of 40 pregnant women attending Mamta clinic at Karamsad PHC. The structured knowledge questionnaire interview was conducted for data collection. An informed consent was obtained from all the participants prior to data collection.

**Materials and methods of data collection**

The structured knowledge questionnaire consists two sections. **Section; 1-** Consists of the personal data of the respondents such as Age, Gender, Marital Status, Education, Occupation, Type of Family, Family monthly Income any Information Regarding KMC, if yes then source of information. **Section; 2-** Consist of item on knowledge regarding KMC. Tool Items was 30 and each items carried 1 Mark.

**Scoring system**

Maximum score of questionnaire was 30. Investigator gave “0” Mark for wrong answer and “1” Marks for Correct answer.

Perceived knowledge: The grading on the questionnaire was interpreted as: Score < 10 poor knowledge, score 11-20 average knowledge and score 21-30 good knowledge.

**Analysis**

Demographic variables were presented using descriptive statistics. The data from structured knowledge questionnaire before and after administrating of Structured Teaching Programme to be analyzed using mean, standard deviation (SD) and “t” test and presented in form of tables and graphs. Chi square test was used to find association between demographic variables and knowledge regarding Kangaroo Mother Care and between demographic variables of samples. P≤ 0.05 was considered statistically significant.

**RESULTS**

**Table 1** Frequency and percentage wise distribution of demographic data

Personal data	Frequency	Percentage (%)
<b>Age</b>		
18-25	31	62
26-30	16	32
31 and above	03	06
<b>Education</b>		
illiterate	05	10
Primary	18	36
secondary	19	38
higher secondary	07	14
Graduate and above	01	02
<b>Religion</b>		
Hindu	49	98
Muslim	00	00
Christian	01	02
Others	00	00
<b>Type of Family</b>		
Nuclear	11	22
Joint	39	78
<b>Occupation</b>		
Housewife	47	94
Employment	02	04
Labourer	01	02
<b>Age of marriage</b>		
Before 20 year	33	66
Between 20-30	17	34
30 year and above	00	00
<b>No. of children</b>		
No child	24	48
<2	20	40
>2	06	12
<b>Information</b>		
Yes	05	10
No	45	90
<b>If Yes, source</b>		
Friends	01	20
Health personnel	04	80
Mass media	00	00
Others	00	00

**Table: 1** shows that, Maximum participants were

As regard of age, 31(62%) belongs to age group of 18-25 years, As regard to education, 19 (38%) have secondary education, As regard to religion 49 (98%) were Hindu, As regard of type of family 39(78%) have joint family, As regard of occupation 47(94%) were housewife, As regard of age of marriage 33(66%) was married at the age before 20 years, As regard of number of children 24(48%) had no child, 20(40%) had less than two children, As regard of any information about Kangaroo Mother Care 45 (90%) does not have information about Kangaroo Mother Care. As regard of source of

information 01(20%) got information from their friends and 04(80%) got information from the health personnel.

**Table 2** Mean, Mean percentage, Percentage gain, Mean difference, Standard Deviation (SD) of pre-test and post-test knowledge scores of samples on Kangaroo Mother Care

Max. score	Pre-test knowledge score			Post-test knowledge score			Mean% Gain	Mean Difference
	Mean score	Mean%	S.D	Mean Score	Mean%	S.D		
30	11.6	39	3.9	22.18	80	3.2	41%	10.58

**Table: 2** shows the pre-test and post-test knowledge score of the sample. The pre-test knowledge mean score and SD of samples was 11.6(39%) & 3.9. The post-test knowledge mean score and SD was 22.18(80%) & 3.2. The data in table further indicates that the post-test mean percentage scores in content were higher than the pre-test mean percentage. The percentage gain was 41% so the investigator concluded that there was significance increases in the mean post-test knowledge score as compared to mean pre-test knowledge score in all areas after Structured Teaching Programme on Kangaroo Mother Care among pregnant women which is statistically proved.

**Table 3** Distribution of samples according to Grading of pre-test and post-test

Score	Grade	Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
< 10	Poor	28	56	00	00
11-20	Average	20	40	15	30
21-30	Good	02	4	35	70
Total		50	100	50	100

**Table: 3** Shows that 28 (56%) had poor knowledge in pre-test. And in the post-test 00(00%) had poor knowledge. 20 (40%) had average knowledge in the pre-test whereas 15 (30%) had average knowledge in the post-test. And only 02(4%) had good knowledge in the pre-test and 35 (70%) had good knowledge in post-test.

**Table 4** Association between pre-test knowledge score and education

Education	Pre-test knowledge Score				Calculated Value of X <sup>2</sup>	Tabulated value of X <sup>2</sup>
	Good	Average	Poor	Total		
Illiterate	1	2	2	5	7.98	15.51
Primary Education	0	11	7	18		
Secondary Education	0	12	7	19		
Higher Secondary Education	1	3	3	7		
Graduate And Above	0	1	0	1		

\*Significant at 0.05 level, df(8), X<sup>2</sup>=7.98

Table 4 shows chi square test was used to find out statistically significant relationship or not between knowledge regarding Kangaroo Mother Care and education. Here calculated value of chi square was 7.98 and tabulated value of chi square was 15.51. The above table depicts that Calculated value of chi square (7.98) was less than tabulated value of chi square (15.51) so it was not statistically significant at 0.05 level of significance. Hence, above table shows that knowledge level of samples regarding Kangaroo Mother Care does not make any difference by their education.

Table:5 shows chi square test was used to find out statistically significant relationship or not between knowledge regarding Kangaroo Mother Care and education. Here calculated value of chi square was 5.02 and tabulated value of chi square was 9.49. The above table depicts that Calculated value of chi square (5.02) was less than tabulated value of chi square (9.49) so it was not statistically significant at 0.05 level of significance.

**Table 5** Association between pre-test knowledge score and No. of children

NO of children	Poor	Average	Good	Total	Calculated value of X <sup>2</sup>	Tabulated value of x <sup>2</sup>
<2 children	11	9	0	20	5.02	9.49
>2 children	4	2	0	06		
No child	7	16	1	24		

\*Significant at 0.05 level, df(4), X<sup>2</sup>=5.02

Hence, above table shows that knowledge level of samples regarding Kangaroo Mother Care does not make any difference by their No. of children.

## DISCUSSION

The present study addressed to assess the effectiveness of structured planned teaching programme regarding Kangaroo Mother Care in terms of knowledge among the pregnant women attending Mamta clinic at PHC, Karamsad. In this study total 50 women were participated. In present study the respondent's knowledge was poor before taking pre-test and was good at post-test. But hence there is need requirement to recognize the importance of Kangaroo Mother Care by improving knowledge and for that investigator prepared Structured Teaching Programme on Kangaroo Mother Care for respondents. So, the present study the result was consistent with other studies. The present study was conducted to know the "Effectiveness of structured teaching programme regarding Kangaroo Mother Care in terms of knowledge among the pregnant women attending Mamta clinic, at PHC, Karamsad." The quasi experimental, one group pretest post-test design was adopted for the present study. Convenient sampling was used to select the samples. The data was collected from 50 women by use of structured knowledge questionnaire for knowledge. The findings of the study have been discussed with reference to objectives and hypothesis and with the findings of the studies. The mean post test knowledge score 22.18 was higher than mean pre-test knowledge score 11.6 with the difference of 10.58. This study was conducted to know the effectiveness of structured teaching programme regarding Kangaroo Mother Care in terms of knowledge among pregnant women and to find an association between pre and post test knowledge scores with their socio demographic variables. A one group pre-test post-test pre-experimental approach was adopted. This study was conducted among 50 pregnant women conveniently selected from Karamsad PHC. The content of validity of the tool and teaching plan was established. The reliability of tool was established by testing internal consistency by using Test-retest method. Result of the study indicate the total mean pre-test knowledge score was 39% while mean post-test knowledge score was 62% which shows increase post-test knowledge compare to the pre-test knowledge score of the participants. So from above results the investigator concludes that the structured teaching programme on Kangaroo Mother Care was effective in terms of knowledge was increased.

## Limitations

Although the results of our study are the increased knowledge after giving structured teaching programme. Only the second and third trimester pregnant women were included in the study so the results are not representative of all pregnant women. The participants were selected from only one PHC. So the findings cannot be generalized to all PHCs.

## Recommendations

Some areas of knowledge were poor so there is need for further education regarding Kangaroo mother care to participants. This kind of same study can be conducted for large population so we can assess the knowledge of population regarding Kangaroo mother care & also do planning for providing education regarding the same.

## CONCLUSION

This study has provided some useful information regarding pregnant women knowledge towards the Kangaroo mother care. The structured teaching programme was effective to increase the knowledge of pregnant women regarding Kangaroo mother care & also revealed that there is no any significant association between knowledge & selected demographic variables.

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