



KNOWLEDGE AND PRACTICE OF KANGAROO MOTHER CARE AMONG POSTNATAL MOTHERS

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Abstract: - Low birth weight baby is a baby whose birth weight is less than 2.5 kg (2500 g), regardless of gestational age. Hypothermia is a common complain reported in low-birth-weight babies. Kangaroo Mother Care is a special way of caring for low-birth-weight babies. It improves their health and well-being by promoting effective thermal control, breastfeeding, infection prevention and bonding. In Kangaroo mother care, the baby is continuously kept in skin-to-skin contact with the mother and is breastfeed exclusively. The aim of the present study was to assess the Knowledge and Practice of Kangaroo Mother Care among Postnatal Mothers in selected Community Health Centre, Dehradun, Uttarakhand. Total 60 samples were selected through the purposive sampling technique. A Purposive sampling technique was conducted to assess the knowledge and practice of kangaroo mother care among postnatal mothers in selected Community Health Centre, Dehradun, Uttarakhand. Result shows that the maximum possible range of knowledge score was 23, range obtained score was between 3-23 and the obtained mean \pm SD were (17.86 \pm 3.65), median was 18 and maximum possible range of knowledge score was 10, range obtained score was between 2-10 and the obtained mean \pm SD were (7.4 \pm 1.54), median was 8. In present study result shows that 77% postnatal mothers had good knowledge regarding KMC and 55% postnatal mothers had good practice of KMC. Majority of the mothers had previous knowledge about kangaroo mother care (53%). Majority of the mothers were not giving kangaroo mother care to the baby (67%).

Keywords: Knowledge, Practice, Postnatal mother and Kangaroo Mother Care.

INTRODUCTION

Kangaroo Mother Care is very useful and a low-cost way that prevents neonate from hypothermia. It requires mother using her body temperature so that infant gets proper warmth and the condition of hypothermia reduces¹. It's a special way of caring babies with low birth weight to improve their health by providing exclusive breastfeeding and thermal protection.²

Kangaroo Mother Care (KMC) is a special way in which the baby is continuously kept in skin-to-skin contact by the mother for promoting effective thermal control, breastfeeding, infection prevention and bonding in low birth weight.³ Some important components are there through which a mother can provide a kangaroo mother care. These components are skin to skin contact and exclusive breastfeeding. KMC is an alternative and useful method that stabilizes low birth weight and preterm babies.³ KMC reduces mortality and morbidity as studies have shown and also reducing infections, protecting baby from hypothermia with having number of advantages for mother, baby, family and nation.²

RESEARCH METHODOLOGY

A non-experimental descriptive study was done to assess the knowledge and practice of kangaroo mother care among postnatal mothers and 60 mothers were selected through purposive sampling technique and data was collected by using self-structured knowledge questionnaire and self-structured practice checklist in Community Health Centre, Doiwala, Dehradun, 2022.

The tool included sociodemographic profile of sample and self-structured questions related to knowledge and practice regarding kangaroo mother care. Validity of the tools was established by experts in the field of Nursing and Medical sciences. Reliability of the tool was established by split half method and r value obtained was 0.79. For the knowledge of postnatal mothers, the minimum score was 0 and maximum score was 28. The score 7-13 shows poor knowledge, score 14- 20 shows average level of knowledge and score 21-28 shows good level of knowledge of postnatal mothers regarding Kangaroo mother care. For the Practice of postnatal mothers, the minimum score was 0 and maximum score was 10. The score 3-5 shows poor practice, score 6- 8 shows average level of practice and score 9-10 shows good level of practice of postnatal mothers regarding Kangaroo mother care.

RESULT AND DISCUSSION**SECTION I Socio-demographic profile of postnatal mothers regarding Kangaroo Mother Care.****Table No.1 Socio demographic profile of postnatal mothers**

			N=60
S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY(f)	PERCENTAGE (%)
1	Age in years		
	(a) 15- 25 years	14	23%
	(b) 26-35 years	46	76%
2	Educational Status		
	(a) No formal education	7	12%
	(b) Primary education	4	6%
	(c) Higher secondary	9	15%
	(d) Intermediate	9	15%
	(e) Graduate and above	31	52%
3	Occupation		
	(a) Self employed	4	6%
	(b) Home maker	52	87%
	(c) Employed	4	7%
4	Religion		
	(a) Hindu	51	85%
	(b) Muslim	9	15%
5	family Income per month		
	(a) 10,000 – 25,000	32	54%
	(b) 26,000 – 40,000	17	28%
	(c) 41,000 – 55,000	11	18%
6	Residential area		
	(a) Rural	41	68%
	(b) Urban	19	32%
7	Parity of mother		
	(a) Primi	34	57%
	(b) Multi	26	43%

8	Order of present child	34	57%
	(a) 1	26	43%
	(b) 2		
9	Type of Family		
	(a) Nuclear	24	40%
	(b) Joint	36	60%
10	Dietary Pattern		
	(a) Vegetarian	36	60%
	(b) Non- vegetarian	24	40%
11	Mode of present delivery		
	(a) Normal vaginal delivery	38	63%
	(b) LSCS	22	34%
12	Gestational age at the time of delivery		
	(a) 8 months	23	38%
	(b) 9 months	37	62%
13	Antenatal visit book case		
	(a) No	9	15%
	(b) Yes	51	85%
14	Birth weight of newborn		
	(a) 1.5 – 2.5 kg	38	64%
	(b) 2.6 – 3.6 kg	22	37%
13	Any complication occurred during pregnancy		
	(a) No	51	85%
	(b) Yes	9	15%
14	Complete course of folic acid supplement		
	(a) No	3	5%
	(b) Yes	57	95%
15	Completed course of iron supplement		
	(a) No	3	5%
	(b) Yes	57	95%

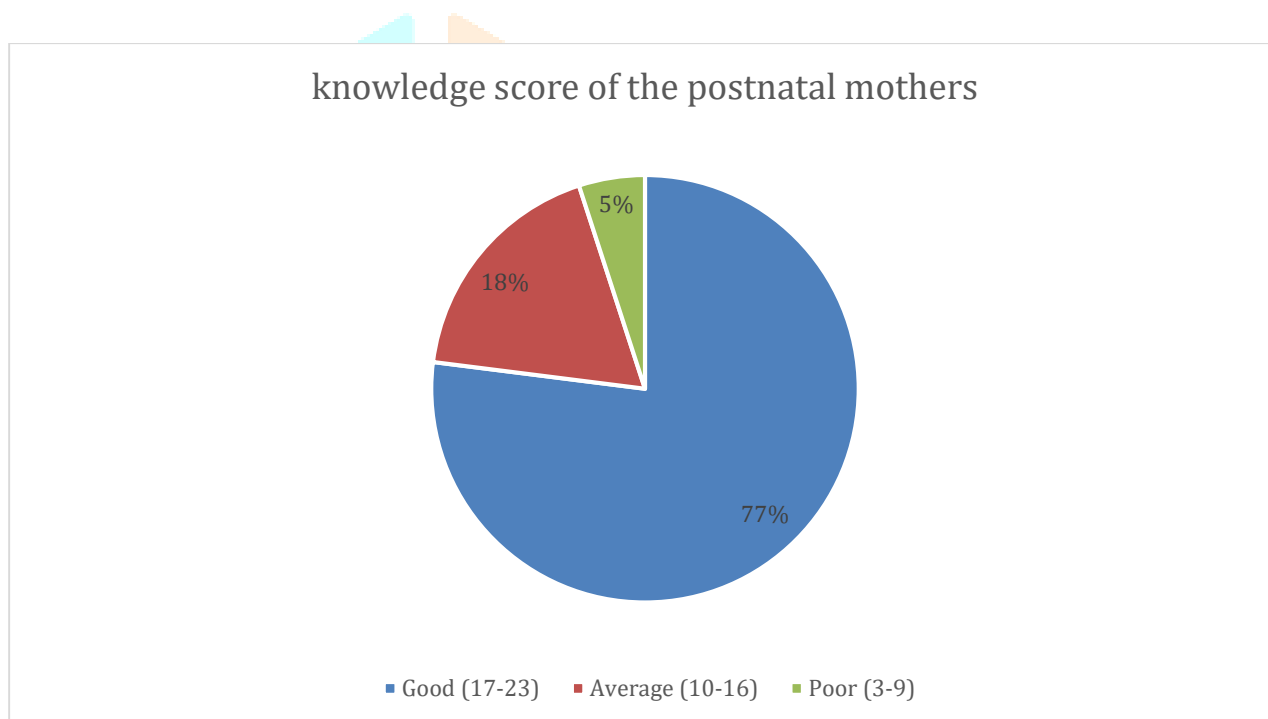
16	Complete course of calcium supplement		
	(a) No	2	3%
	(b) Yes	58	97%
17	Have you ever heard about kangaroo mother care		
	(a) No	28	
	(b) Yes	32	47%
			53%
18	Are you giving kangaroo mother care to baby		
	(a) Yes	20	33%
	(b) No	40	67%

Table No. 1; depicts that the frequency and percentage of characteristic which shows that most of the participants 46(77%) were in age group of 26-35 years. Last educational status of majority i.e. 31 (52%) of the study participants were graduate and above. Regarding the occupation majority 52(87%) were homemaker, majority of study participants 51(85%) were Hindu. Most of the study participants 32 (54%) were having Rs 10,000 – 25,000 per month Regarding the residential area 41 (68%) were from rural area, most of the postnatal mothers 34(57%) were primipara, More than half of mothers 34(57%) were having their first baby, More than half mothers 36 (60%) belong from joint family and nonvegetarian. The mode of present delivery 38(63%) postnatal mother having normal vaginal delivery, the gestational age at the time of delivery, 37(62%) were have gestational age of 9 month, and 51(85%) were booked case. Regarding the birth weight of newborn in kg/gm 38(64%) were between 1.5- 2.5 kg. Regarding the any complication occurred during pregnancy 51(85%) have answered No. equal no. of postnatal mothers 57(95%) had completed the course of folic acid, iron and calcium supplement. Nearly half of the mothers 40(67%) were not giving Kangaroo mother care.

SECTION II Pretest knowledge score of postnatal mothers regarding kangaroo mother care.**Table No. 2 – Mean, Standard Deviation and Median of Postnatal mothers regarding Kangaroo Mother Care.**

Variables	Maximum Possible Score	Range Obtained Score	Mean \pm SD	Median
Knowledge score	28	3- 23	17.86 \pm 3.65	18

Table No. 2 Shows that maximum possible range of knowledge score was 23, range obtained score was between 3-23 and the obtained mean \pm SD were (17.86 \pm 3.65), median was 18.

SECTION III Percentage of knowledge score of the postnatal mother regarding Kangaroo Mother Care.**Figure No.1 Graphical representation of analysis of knowledge score of the postnatal mothers regarding Kangaroo Mother Care.****SECTION IV Practice score of postnatal mothers regarding kangaroo Mother Care****Table No. 3 – Mean, Standard Deviation and Median of Postnatal mothers regarding Kangaroo Mother Care**

Variables	Maximum Possible Score	Range obtained score	Mean +_SD	Median
Practice Checklist score	10	3-10	7.4 \pm 1.54	8

Table No.3 shows that maximum possible range of knowledge score was 10, range obtained score was between 2-10 and the obtained mean \pm SD were (7.4 \pm 1.54), median was 8.

SECTION V Percentage of practice checklist score of the postnatal mother regarding Kangaroo Mother Care

	Frequency	Percentage
Good (9-10)	14	23
Average (6-8)	39	65
Poor (3-5)	7	12

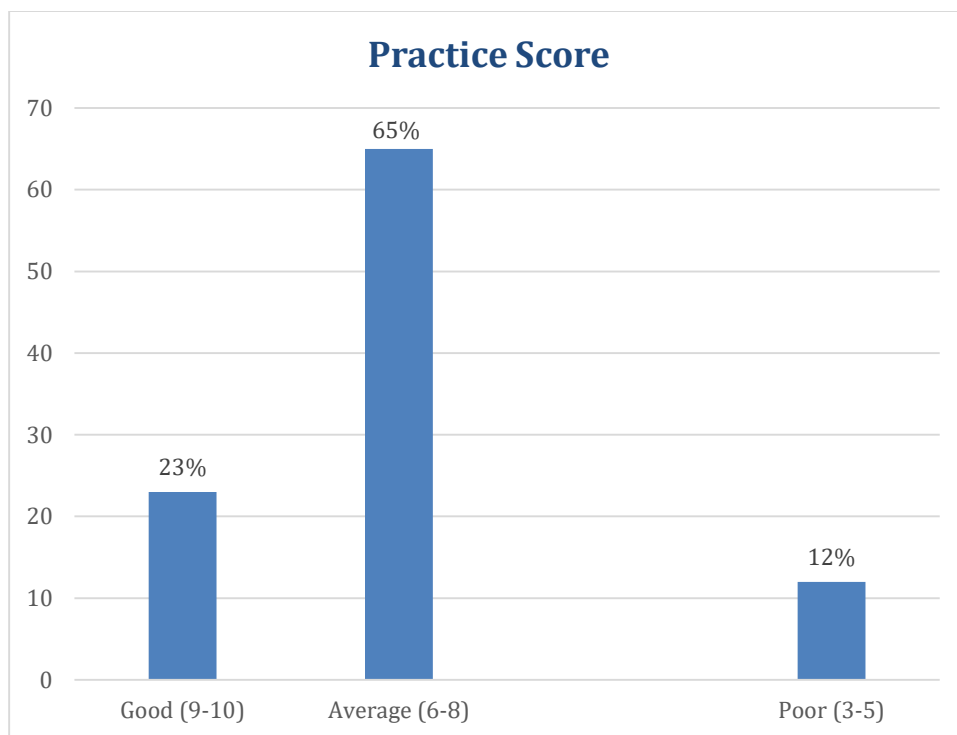


Figure No.2 Graphical representation of analysis of Practice score of the postnatal mothers.

SECTION VI Association between selected demographic variables with level of knowledge score of the Postnatal Mothers.

S.N.	Demographic Variables	At & Above Median	Below Median	X Value	P Value
N=60					
1.	Age in years				
	(a) 15- 25 years	8	06	0.30*	0.59
	(b) 26-35 years	30	16		
2.	Educational status				
	(a) No formal education	3	04	0.22#	0.63
		36	17		

(b) Educated

3. Occupation

(a) Working	4	04	0.44 [#]	0.50
(b) Non-working	34	18		

4. Religion

(a) Hindu	30	21	0.46 [#]	0.49
(b) Muslim	7	02		

5. Family Income Per Month

(a) 10,000 – 30,000	26	14	0.14*	0.70
(b) 31,000 – 60,000	12	08		

6. Residential Area

(A)Rural	27	14	0.35*	0.55
(B)Urban	11	08		

7. Parity of Mother

(a) Primi	20	14	0.04*	0.83
(b) Multi	16	10		

8. Order of Present Child

(c) 1	20	14	7.66*	0.005
(d) 2	6	20		

9. Type of Family

(a) Nuclear	15	09	0.01*	0.91
(b) Joint	22	14		

10. Dietary Pattern

(a) Vegetarian	23	13	0.56*	0.45
(b) Non- vegetarian	13	11		

11. Mode Delivery

(a) Normal vaginal delivery	25	13	0.74*	0.39
(b) LSCS	12	10		

12	Gestational Age at the time of Delivery				
	(a) 8 months	12	11		
	(b) 9 months	25	12	1.42*	0.23
13	Antenatal visit booked case				
	(a) No	4	05	1.33 [#]	0.25
	(b) Yes	33	18		
14	Birth weight of Newborn in Kg				
	(a) 1.5 – 2.5 kg	23	15	0.35*	0.55
	(b) 2.6 – 3.6 kg	15	07		
15	Complication occurred during Pregnancy				
	(a) No	31	20	0.46 [#]	0.45
	(b) Yes	7	02		
16	Complete course of folic acid supplement				
	(a) No	0	03	2.96	0.08 [°]
	(b) Yes	38	19		
17	Completed course of iron supplement				
	(a) No	1	02	0.28 [#]	0.59
	(b) Yes	38	19		
18	Complete Course of Calcium Supplement				
	(a) No	1	01	0.11 [#]	0.73
	(b) Yes	36	22		
19	Have You ever heard about Kangaroo mother Care				
	(a) No	15	13	2.15*	0.14
	(b) Yes	23	9		

20	Are you giving kangaroo mother care to baby	11	9	0.56*	0.45
	(a) Yes	26	14		
	(b) No				

Df =1 p<0.05 chi square(*), Fisher's Exact test (#), Yates correction test(∞)

Table No. 4 shows Selected demographical variable order of present child is having statistically significant association with level of knowledge score of the postnatal mothers at the level of p<0.05.

SECTION VII Association between selected demographic variables with practice score of the Postnatal Mothers.

N=60

S.NO	Demographic Variables	At & above Median	Below Median	χ Value	P Value
1.	Age in years				
	(a)15- 25 years	6	8	1.08*	0.29
	(b)26-35 years	27	19		
2.	Educational Status				
	(a) No formal education	3	4	0.69#	0.40
	(b) Educated	30	23		
3.	Occupation				
	(a) Working	30	22	0.13#	0.72
	(b) Non- working	2	6		
4.	Religion				
	(a) Hindu	28	23	1#	0.32
	(b) Muslim	5	4		
5.	Family Income Per Month				
	(a) 10,000 – 30,000	22	18	0.13*	0.71
	(b) 31,000 – 60,000	12	8		
6.	Residential Area				
	(a)Rural	22	19	0.09*	0.75
	(b)Urban	11	8		

7.	Parity of Mother				
	(a) Primi	22	13	0.70*	0.40
	(b) Multi	13	12		
8.	Order of Present Child				
	(a)1	20	14	0.46*	0.49
	(b)2	13	13		
9.	Type of Family				
	(a) Nuclear	15	9	0.91*	0.34
	(b) Joint	18	18		
10	Dietary Pattern				
	(a) Vegetarian	19	17	0.18*	0.67
	(b) Non- vegetarian	14	10		
11	Mode of Present Delivery				
	(a) Normal vaginal delivery	22	16	0.35*	0.55
	(b) LSCS	11	11		
12	Gestational Age at The Time of Delivery				
	(a)8 months	12	7	0.47*	0.49
	(b)9 months	22	19		
13	Antenatal visit booked case				
	(a)No	4	5	0.71 [#]	0.39
	(b)Yes	29	22		
14	Birth Weight of Newborn In Kg				
	(a)1.5 – 2.5 kg	21	17	0.15*	0.69
	(b)2.6 – 3.6 kg	11	11		
15	Any complication occurred during pregnancy				
	(a)No	27	24	0.49 [#]	0.48
	(b)Yes	6	3		

16	Complete course of folic acid supplement				
	(a)No	1	2	0.58 [#]	0.44
	(b)Yes	32	25		
17	Completed Course of Iron Supplement				
	(a)No	0	3	0.08 [∞]	0.17
	(b)Yes	33	24		
18	Complete Course of Calcium Supplement				
	(a)No	0	2	0.66 [∞]	0.41
	(b)Yes	32	26		
19	Have you ever heard about kangaroo mother care				
	(a)No	13	15	1.56 [*]	0.21
	(b)Yes	20	12		
20	Are you giving kangaroo mother care to baby				
	(a)Yes	22	18	0 [#]	1
	(b)No	11	9		

Df =1 p<0.05 chi square(*), Fisher's Exact test (#), Yates correction test(∞)

Table No. 5 Shows that none selected demographical variables are having statistically significant association with the level of practice score of postnatal mothers.

SECTION VIII Correlation between knowledge and practice score regarding kangaroo mother care.

Score	Mean \pm SD	r value	p value
Knowledge	17.86 \pm 3.65		
Practice	7.4 \pm 1.54	0.20	0.13

Table No. 6 shows that the correlation between knowledge and practice score of postnatal mothers regarding kangaroo mother care was 0.20. Hence it can be concluded that there was weak positive correlation between the knowledge and the practice score of postnatal mothers regarding kangaroo mother care which is not significant at the level of 0.005.

CONCLUSION

Kangaroo mother care is early, continuous and prolonged skin-to skin contact between a mother and her newborn, frequent or exclusive breast feeding, and early discharge from the hospital has been effective in reducing the risk of mortality among preterm and low birth infants. It improves their health and well-being by promoting effective thermal control, breastfeeding, infection prevention and bonding.

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