EFFECTIVENESS OF KMC FOCUS PROGRAMME ON UNDERSTANDING CONCERNING KANGAROO MOTHER CARE ON POSTNATAL MOM

Kuldeep Jain[1*], Payal T Vaghela[2], N. Siva Subramanian[3], Mr. Prakash D[4], Mr. Modi Manav N.[5], Miss. Joshi Neha[6], Miss. Dodiya Tanvi[7], Miss. Katara Mittal[8], Miss. Gameti Prameshwari[9], Miss. Hany[10]

Abstract:

Introduction: Preterm delivery, intra uterine boom retardation, and occasional beginning weight are the primary causes of neonatal morbidity and mortality. a particular low delivery weight is responsible for sixteen% of new born mortality

Objective: The aim of the research was to assess the effect of Kangaroo Mother Care Awareness Program on Post natal Mother.

Methodology: The research design selected for the study was (Quasi-Experimental Design). Sampling Techniques (Non Probability Purposive Sampling) was used to obtain sample of 30 Postnatal Mother who satisfied the inclusion criteria.

Conclusion: Chi square analysis was done to investigate if there was any correlation between postpartum moms' demographic data and knowledge assessments. The knowledge ratings of postpartum mothers regarding caring for kangaroo mothers are significantly correlated (p 0.05) with demographic factors like information source.There was no statistically significant correlation between postpartum mothers' knowledge levels and factors including age, religion, education, family income, or delivery method. A significant relationship between postpartum mothers' knowledge of kangaroo mother care and elements including occupation, family type, number of kids, preterm baby's weight, and health services was discovered at p 0.05.

Keywords: Post natal Mother ,KMC, Preterm baby,

[1,2,3,4,5,6,7,8,9,10]Department of Obstetrical and gynecological, Nursing, Nootan College of Nursing, Sankalchand Patel University, Visnagar, Gujarat-384315,India.

*Corresponding Author: Mr. Kuldeep jain

Assistant Professor, Department of Obstetrical and gynecological, Nursing, Nootan College of Nursing, Sankalchand Patel University, Visnagar, Gujarat– 384315, India, Mobile No-7976768296, Official Email: kuldeep2487@gmail.com

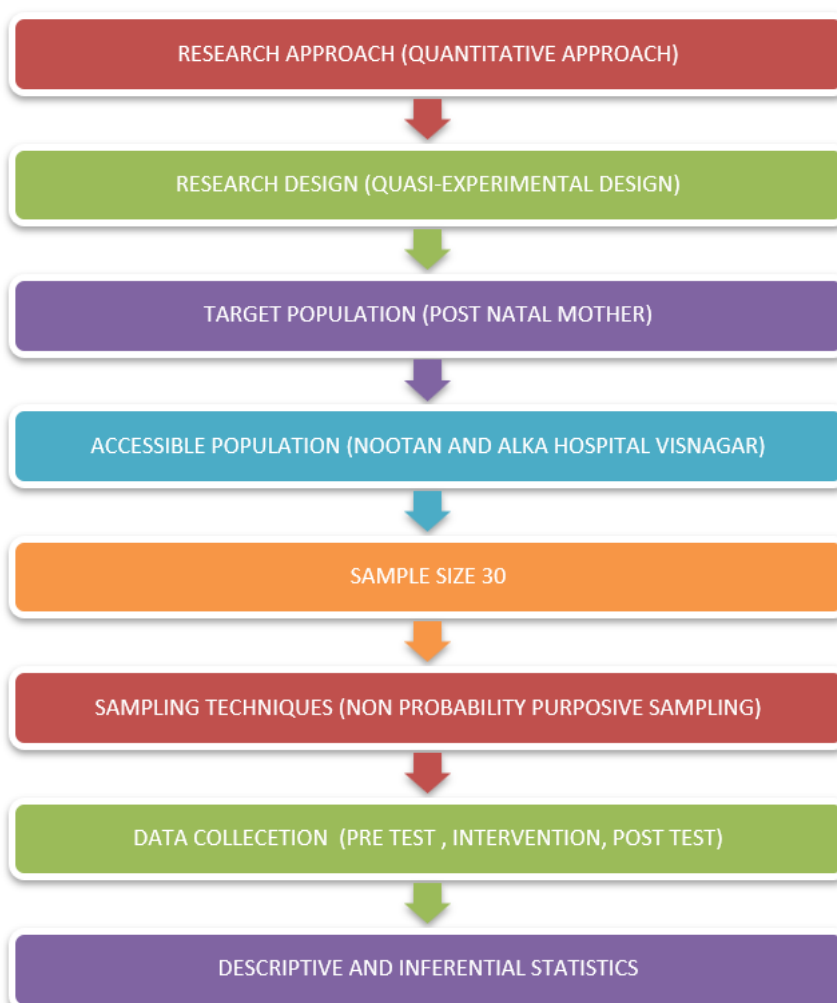*Eur. Chem. Bull. 2023, 12(Special Issue 10), 4436 – 4443*

4436

Introduction:

The main factors contributing to newborn morbidity and mortality are preterm delivery, intrauterine growth retardation, and sporadic low birth weight. According to WHO (2001), a specific low delivery weight is to blame for 16% of newborn death (109.5% per 1000 live births). In India, there are forty neonatal fatalities for every 1,000 live births, with Tamil Nadu having a rate of forty-four for every 1,000 stillbirths. & Karnataka charges 40 rupees for every 1,000 live births. In India, there are 60 toddler deaths for every 1000 live births. Information point to an unsettling circumstance. to achieve the fitness for All goal.Building a cheap, effective method is essential to providing treatment for low birth weight babies in light of the 2010 goals of 20 fewer infant deaths.2@The baby must maintain a body temperature of 37 degrees Celsius. Inadequate thermoregulation in young children causes the valuable frightened machine to develop prematurely, as well as initiate hypoxia, cerebral hemorrhage, and a failure to maintain a temperature-neutral neuronal environment. due to their large surface area, thin subcutaneous tissue,

low levels of brown fats, and few glycogen stores. Babies who are preterm or small for gestational age lose more heat. In low birth weight infants, hypothermia causes an increase in surfactant synthesis and effectiveness, a decrease in PH, a lower partial oxygen tension (PO2), hypoglycemia, a reduction in oxygen consumption, a shift in cardiac output to brown fats, a greater use of caloric reserves, a decrease in infant weight gain, and a decrease in blood coagulability. As a result, there will be an increase in infant mortality.

METHODOLOGY

The primary phase of research is methodology, during which the researcher decides on a variety of materials to be used to explore the research problem, primarily through the gathering of data. The methodology describes the research approach, research design, location and environment, sampling strategy, department of the instrument, validation of the instrument and its reliability, data collection techniques, pilot study, and plan for statistical analysis.

RESEARCH APPROACH (QUANTITATIVE APPROACH)

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RESEARCH DESIGN (QUASI-EXPERIMENTAL DESIGN)

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TARGET POPULATION (POST NATAL MOTHER)

↓

ACCESSIBLE POPULATION (NOOTAN AND ALKA HOSPITAL VISNAGAR)

↓

SAMPLE SIZE 30

↓

SAMPLING TECHNIQUES (NON PROBABILITY PURPOSIVE SAMPLING)

↓

DATA COLLECETION (PRE TEST , INTERVENTION, POST TEST)

↓

DESCRIPTIVE AND INFERENTIAL STATISTICS

RESULT
DESCRIPTION OF SAMPLE CHARACTERISTICS
TABLE NO 4.1 :- FREQUENCY AND PERCENTAGE DITRIBUTION OF POSTNATAL MOTHERS ACCORDING TO THE DEMOGRAPHIC VARIABLES.
Table 1 : SHOWS THE DISTRIBUTION OF DEMOGRAPHIC VARIABLES ACCORDING TO THEIR AGE, SEX, EDUCATIONAL QUALIFICATION AND WORKING EXPERIENCE.

Demographic variables		Frequency	Percentage (%)
Age	Below 25	18	60
	26 – 30	10	33
	30 – 40	2	7
	Above 40	0	0
Religion	Hindu	25	83
	Muslim	2	7
	Christian	3	10
	Any others	0	0
Educa Educational Status Of Mothers	Illiteracy	3	10
	Primary School	6	20
	Middle School	4	13
Educa Educational Status Of Mothers	Illiteracy	3	10
	Primary School	6	20
	Middle School	4	13
	Secondary School	6	20
	Higher Secondary School	4	13
	Degree	7	23
Job of the Mothers	House Wife	18	60
	Coolie	6	20
	Private Job	4	13
	Government Job	2	7
	Business / Company	0	0
Type of family	Nuclear Family	17	57
	Joint Family	9	30
	Extended Family	3	10
	Others	1	3
F Family income per month	Below, 1000	11	37
	1500, – 2000	7	23
	2000, – 2500	4	13
	Above, 2500	8	27
No. oNo. of Children in Family	1, Child	14	47
	2, Children	12	40
	3, Children	4	13
	4, and above children's	0	0
waight of Pre term Baby	1 Kg,	4	13
	1.5 Kg,	7	23
	2 Kg,	15	50
	< 2 Kg,	4	13
Health Service Availed from	P.H.C	11	37
	Sub centre	1	3
	Nursing Home	5	17
	Hospital	13	43
Type of Delivery	Normal Delivery	19	63
	Lower segmental Cesarean Section	4	13
	Forceps Delivery	4	13
	Normal Delivery with Episiotomy	3	10

Regarding age, 33% (10 respondents) are between the ages of 26 and 30 years, 7% (2) are between the ages of 30 and 40 years, and 60% (18 respondents) are under the age of 25. According to the interviewees' religion, 83% (25) are Hindu. 7%(2) of respondents identify as Muslim, and

10%(3) as Christian. 10% (3) of the mother's offspring, according to their educational status, are illiterate. 13% (four) middle school, 20%(6) secondary school, 13% (four) higher secondary school, 20%(6) primary school. 23% (7) are graduates.

His her proportion 16%(18) mothers were housewives, his her percentage 20%(6) mothers were coolis, his her percentage 13%(4) mothers were employed by the private sector, and his her percentage 7%(2) mothers were employed by the government, according to the mothers' vocations.30% (9) of women are in joint families, compared to 57% (17) of mothers who live in nuclear households.10%(3) of mothers are blood relatives, while 3%(1) of mothers are connected in some other way. 37%(11) of the postnatal moms belonged to the 23%(7) two thousand mothers, while 27%(8) of them were postnatal mothers who earned less than Rs. 2500/-.

According to the number of children in the family, moms were having 47%(14)one children, 40%(12)two children, and 13%(4)three children.

Preterm baby weight statistics show that 13%(4) of women had babies weighing more than 2kg, 23%(7)1.5kg of mothers had babies weighing more than 2kg, 50%(15)2kg of mothers had babies weighing more than 2kg, and 23%(7)1.5kg of

mothers had babies weighing more than 2kg. 3%(1) of the mothers were affiliated with subcenters, 17%(5) of the women were associated with nursing homes, and the remaining 43%(13) of the mothers were associated with hospitals, according to the health services request form. PHCs were related with 37%(11) of the mothers.

The kind of delivery the women had falls within the category of usual deliveries, which account for 63%(19) of all deliveries.LSCS was the birth method chosen by the women 13%(4), forceps was the method chosen by the mothers 13%(4), and normal delivery with an episotomy was the method chosen by the mothers 10%(3).

SECTION II
Assessment of pre-test and post test knowledge and practice of post natal mothers regarding Kangaroo mother care.
It has been attempted to study how po@stpartum mothers comprehend and use kangaroo mother care. After converting the qualitative knowledge and practice information into a quantitative one, the average score was obtained from the post-natal mothers on various dimensions, including the meaning of kangaroo mother care, importance of kangaroo mother care, benefits of kangaroo mother care, position of kangaroo mother care, procedure for kangaroo mother care, and meaning of pre-term baby.

PART A: LEVEL OF KNOWLEDGE:
Table 2: Knowledge score on basic Kangaroo mother care among post natal mothers
SECTION II :- KNOWLEDGE OF POSTNATAL MOTHERS REGORDING KANGAROO MOTHER CARE PRIOR TO IMPLEMENTATION OF STP.
TABLE 4.2: Area wise comparison of mean , standard deviation and mean percentage of pre test knowledge scores of postnatal mothers regarding kangaroo mother care.

AREAS	MAXIMUM OBTAINABLE SCORES	SCORES		
		MEAN	SD	MEAN PERCENTAGE
Pre term baby	4	2.2	1.22	66
Low birth weight babies	5	1.8	2.93	54.6
Kangaroo mother care	21	1.7	1.88	51.95
Over all	**30**	**1.9**	**2.01**	**57.52**

distribution based on geography For the topic "Pre term baby," which had about comparable mean scores (1.8+2.93) and 66%, respectively, the highest mean score (2.2 + 1.22) and greatest mean

percentage of the postnatal mothers' pretest knowledge scores relating kangaroo mother care were obtained

Eur. Chem. Bull. **2023**, *12(Special Issue 10), 4436 – 4443*

4439

TABLE NO 4.3 : LEVEL OF KNOWLEDGE OF POSTNATAL MOTHERS ON KANGAROO MOTHER CARE.

Level of Knowledge	Min – Max obtainable score	Frequency		Percentage %	
		Pre test	Post test	Pre test	Post test
Very poor	0 – 9,	1	-	3	-
Poor	10 – 18	8	-	26	-
Average	19 – 27	9	2	31	6
Good	28 – 36	9	11	31	36
Very good	37 – 45	3	17	10	56

The postnatal moms' overall pretest knowledge level is shown in Table 3. 31% of new mothers had average knowledge, 26% had poor knowledge, and 6% had knowledge from after the test. Post-test general knowledge of postpartum mothers 36% of moms had good knowledge, compared to 56% of postpartum mothers who had very good knowledge. 6% was obtained for the "Low birth weight babies" category. The subject "Kangaroo mother care" had the lowest percentage (51.95%) and mean score (1.7 + 1.88), indicating a lack of understanding. On the other hand, the mean proportion for all other locations was 57.52.

SECTION III :- COMPARISION OF PRETEST AND POSTTEST KNOWLEDGE SCORES OF THE POSTNATAL MOTHERS REGARDING KANGAROO MOTHER CARE

TABLE NO : 4.4 Comparing the pre- and post-test knowledge scores' overall means, standard deviations, and mean percent@tages makes it evident that the post-test mean score was 2.8 2.0, or 83.85%, as opposed to the pre-test mean score of 1.9 2.0, or 57.52. The difference of 70.60% demonstrates the efficacy of STP.

Area	Maximum Scores	Pretest Score			Posttest Score			Difference in Mean %
		Mean	SD	Mean %	Mean	SD	Mean %	
Preterm Baby	4	2.2	1.22	66	3.0	1.2	90.25	78
Low Birth Weight Babies	5	1.8	2.93	54.6	2.7	2.9	81.4	68
Kangaroo Mother Care	21	1.7	1.88	51.95	2.6	1.9	79.9	66
Overall	**30**	**1.9**	**2.01**	**57.52**	**2.8**	**2.0**	**83.85**	**70.60**

The post-test mean score was 2.8 2.0, which is 83.85%, but the pre-test mean score was 1.9 2.0, which is 57.52, when the total mean, standard deviation, and mean percentage of the pre- and post-test knowledge scores are compared. The 70.60% difference demonstrates the efficacy of STP.

TABLE NO : 4.5 :- Comparison between difference of Pre and Post knowledge of postnatal mothers regarding Kangaroo Mother Care.

Sl.No	Area	't' value	Level of significant
1.	Pre term Baby	6.91	Low Significant
2.	Low Birth Weight Babies	14.99	Low Significant
3.	Kangaroo Mother Care	6.24	Low Significant

P=3.18,p<0.05=Significant>0.05=Not significant

Before and after the test, postpartum moms' knowledge of kangaroo mother care was evaluated using a paired 't' test. The results demonstrate that there is little variability in any one region. The discrepancy in mean score values for the aforementioned categories can therefore be viewed as a real difference rather than a coincidence. As a result, the research hypothesis is supported and the null hypothesis is refuted (p>0.05).

SECTION IV : TABLE NO 4.6 : ASSOCATION BETWEEN THE SELECTED DEMOGRAPHIC VARIABLES WITH THE LEVELS OF KNOWLEDGE AMOUNG POSTNATAL MOTHERS

Demographic variables		LEVEL OF KNOWLEDGE					CHI SQUARE VALUE
		Very Poor	**Poor**	**Average**	**Good**	**Very Good**	
	Below 25	0	4	5	7	2	
							X² = 13.88
	26 – 30	1	3	4	2	0	DF=12 (21.03)
Age							p > 0.05 (NS)
	30 – 40	0	1	0	0	1	
	Above 40	0	0	0	0	0	
	Hindu	1	6	6	9	3	X² = 14.58
							DF= 12(21.03)
	Muslim	0	1	1	0	0	p > 0.05 (NS)
Religion							
	Christian	0	1	2	0	0	
	Any others	0	0	0	0	0	
	Illiteracy	0	0	0	3	0	
Educational Status Of	Primary School	0	1	4	1	0	X² = 27.25
Mothers							DF= 20(31.41)
	Middle School	0	1	2	1	0	p > 0.05 (NS)
	Secondary School	0	2	0	2	2	
	Higher Secondary School	0	1	1	1	1	
	Degree	1	3	3	0	0	
	House Wife	0	1	5	9	3	
	Coolie	0	2	3	1	0	
Occupati on Of the	Private Job	1	2	1	0	0	X² = 37.49 DF= 16(26.30)
Mothers							p > 0.05 (S)
	Governmen t Job	0	2	0	0	0	
	Business/ Company	0	0	0	0	0	
	Nuclear Family	1	2	4	8	2	
	Joint Family	0	3	4	2	0	X² = 23.51 DF= 12(21.51) p > 0.05 (S)
Type of							
family	Extended Family	0	2	0	1	0	
	Others	0	1	0	0	0	
	Below 1000	0	2	4	5	0	X² = 18.2
							DF= 12(21.03)
Family income per	1500-2000	0	3	1	2	1	p > 0.05 (NS)
Month (Rupee)	2000-2500	0	1	2	1	0	
	Above 2500	0	3	2	1	2	
	1 Child	0	2	3	7	2	
	2 Children	1	4	4	2	1	
No.of							X² = 24.5

Eur. Chem. Bull. **2023**, *12(Special Issue 10), 4436 – 4443*

4441

Children in Family	3 Children	0	2	2	0	0	DF=12 (21.03) p > 0.05 (S)
	4 and Above children's	0	0	0	0	0	
Weight of Pre term Baby	1 Kg	0	1	0	3	0	
	1.5 Kg	1	2	1	2	1	X² = 21.67 DF=12 (21.03)
	2 Kg	0	3	6	4	2	p > 0.05 (S)
	< 2 Kg	0	2	2	0	0	
Health Service Availed from	P.H.C	0	2	4	5	0	X² = 22.59 DF=12 (21.03) p > 0.05 (S)
	Subcentre	0	1	0	0	0	
	Nursing Home	0	3	2	0	0	
	Hospital	1	2	3	4	3	
Type of Delivery	Normal Delivery	2	3	5	7	2	
	Lower segmental Cesarean Section	0	0	1	2	1	X² = 17.51 DF=12 (21.03) p > 0.05 (NS)
	Forceps Delivery	0	2	2	0	0	
	Normal Delivery With Episiotomy	0	2	1	0	0	

Discussion:
The postnatal mothers had a good knowledge after structured teaching programme about . The structured teaching programme was effective, to improve the level of knowledge.

Conclusion:
KMC is more successful than other treatments of Preterm and LBW babies. The postnatal mothers had a good knowledge after structured teaching programme about . The structured
teaching programme was effective, to improve the level of knowledge.

Future work and challenges:
- The study can be conducted by using Small population to generalize the findings.
- A longitudinal study can be conducted to assess the effectiveness of KMC awareness Program on Knowledge regarding Kangaroo Mother Care on Post natal Mother
- This study can be done in multiple settings.
- A follow up study can be done to find out whether the clients are practicing KMC techniques regularly.
- Mother are not aware of the benefits of KMC and social workers seek to change that.

Author's contribution statement:
Kuldeep jain & Payal T Veghela , N.SivaSubramanian , Joshi Neha conceptualized, designed , gathers, analyzed these data and inputs were given by **Miss. Katara Mittal**, **Miss. Gameti Prameshwari**, **Miss. Dodiya Tanvi , Miss.Hany** and **Mr.Modi Manav N** discussed the methodology, results and contributed to the final manuscript.

Conflict of interest:
Conflict of interest declared none.

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