

INVESTIGATION OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE AND PRACTICE REGARDING KANGAROO MOTHER CARE AMONG POST NATAL MOTHERS HAVING LOW BIRTH WEIGHT BABIES ADMITTED IN GOVERNMENT HOSPITAL AT JHUNJHUNU [RAJASTHAN]

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ABSTRACT:

Introduction:

A baby's weight at birth is a strong indicator of maternal and newborn health and nutrition. Being undernourished in the womb increases the risk of death in the early months and years of a child's life. 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. Kangaroo mother care does not need a sophisticated equipment, can be applied almost anywhere, could contribute to the humanization of neonatal care contains no cost.

Methods:

A pre-experimental study was adopted for the present study. A structured Knowledge questionnaire and practice checklist on 'Kangaroo Mother Care among postnatal mothers having low birth babies' was developed to collect the data. Pilot study was conducted from 1 January 2017 to 30 December 2017 to find out the feasibility of the study among postnatal mothers. The main study was conducted from Jhunjhunu at selected hospitals. One eighty postnatal mothers were selected by using purposive sampling technique. Collected data was analyzed and interpreted with help descriptive statistics and inferential analysis.

Result:

The mean difference between pretest and posttest knowledge was 30 and the 't' value was 48.36 and it was found to be highly significant at the level of $p < 0.05$, whereas the mean difference between pretest and posttest practice was 27 and the 't' value was 47.0 and it was found to be highly significant at the level of $p < 0.05$. Significant relation was found between pretest knowledge and practice scores with r value of 0.09 at $p < 0.05$.

Conclusion:

The present study was taken up in an effort to evaluate the effectiveness of structured teaching

programme on knowledge and practice of kangaroo mother care among postnatal mothers having low birth babies. STP was effective as denoted by t -value of 48.36 in knowledge scores and 47.0 in practice scores at $P < 0.05$.

Keywords: Kangaroo mother care, Preterm and low birth weight.

INTRODUCTION

Worldwide 25 million low birth weight infants are born each year, the great majority and 96% of them in developing countries (WHO 1998). About 2/3 of all infant deaths in developed countries occur in this group of infants (Guyer 1998).

Kangaroo mother care is defined as early, continuous and prolonged skin- to skin contact between a mother and her low birth weight baby, both in hospital and after discharge, until at least the 40th week of postnatal gestational age. Kangaroo mother care does not need a sophisticated equipment, can be applied almost anywhere, could contribute to the humanization of neonatal care contains no cost. For these reasons kangaroo mother care is attractive to neonatal units in both low and high income countries. Just as a mother kangaroo who cradles her baby joy in a pouch, parents of low birth weight infant can create a skin to skin connection that promotes healing and attachment. It is likely to provide useful electromagnetic vibration of healing, love and compassion from mother to her infant.

Background of the Study:

The care of the preterm and low birth weight infants in developing countries is a heavy

burden within limited resources of health care. Kangaroo mother care is an effective way to meet the baby's basic needs of warmth, breastfeeding, protection from infection, stimulation, safety and love within limited resources.

Most of the worldwide neonatal deaths occur in low income countries including India, with low birth weight being the underlying cause of most of deaths. Quality care of low birth weight infants could reduce neonatal mortality in these countries. Infant mortality rate is 60 per 1000 live births and neonatal mortality rate is 40 per 1000 live births in India and 44 per 1000 live births in Tamil Nadu and 40 per 1000 live births in Karnataka. Data indicates an alarming situation. The Health for All by 2010 aims for 20 Infant Mortality Rate makes it imperative to develop and low cost effective modality while for caring preterm babies.

Need for the study:

Successful kangaroo mother care is highly dependent on the support parents receive, and the role of health professionals is crucial. Caring a premature baby can be very stressful. Staff in the neonatal unit can actively support parents by making them feel welcome, and establishing appropriate procedures and setting which allow parents 24-hour access to their babies. They can also help by performing some components of the baby's care (for example tube and cup feeding, especially during the night), so that parents can get sufficient rest.

Health professionals can provide timely information to parents (both orally and in writing) about the practicalities of kangaroo mother care, including the possibility of sharing the task with others members of their support network, to provide parents with opportunities to rest. In India, most of the population below poverty line, thus restraining them' from sophisticated care for their Low birth weight infants. Thus,

Kangaroo Care ensures people from all economic standards to give the needed care for their preterm babies. The preterm babies gain 6 temperature slowly and prevent hypothermia. Therefore, the preterm baby becomes calm and relaxed. It also helps the baby to conserve energy and bring the organs to normal functioning.

Studies related to Kangaroo Mother Care:-

A randomized control trial was conducted to determine the effect of Kangaroo Mother Care (KMC) on breast feeding rates, weight gain and length of hospitalization of very low birth neonates and to assess the acceptability of Kangaroo Mother Care by nurses and mothers. Babies whose birth weight was less than 1500 Grams were included in the study once they were stable. Results of the study revealed that the neonates in the KMC group demonstrated better weight gain after the first week of life (15.9 ± 4.5 gm/day vs. 10.6 ± 4.5 gm/day in the KMC group and control group respectively) and earlier hospital discharge (27.2 ± 7 vs. 34.6 ± 7 days in KMC and control group respectively). Kangaroo Mother Care given babies will have better weight gain, earlier hospital discharge so Kangaroo Mother Care is an excellent adjunct to the low birth weight baby care.

Solomon N, Rosant C (2012) conducted a study on Knowledge and attitudes of nursing staff and mothers towards kangaroo mother care in the eastern sub-district of Cape Town, R.S.A. A multi-stage sample of 30 kangaroo care mothers admitted to the Helderberg District Hospital (HDH); six nurses from the HDH; and nine nurses from the seven antenatal clinics that the mothers attended. The respondents were interviewed using a pretested questionnaire. The result shown that, Most of the mothers lacked prior knowledge of KMC, and were only informed about it when they were admitted to the KMC ward. All of the nursing staff

who were engaged in KMC (n = 15) had a positive attitude towards Kangaroo mother care.

OBJECTIVES OF THE STUDY:-

- A. To assess knowledge of postnatal mothers having low birth weight babies before and after implementation of structured teaching programme on kangaroo mother care.
- B. To observe practice of postnatal mothers having low birth weight babies before and after implementation of structured teaching programme on kangaroo mother care.
- C. To find out association between pretest knowledge scores regarding kangaroo mother care with selected socio demographic variables
- D. To evaluate the relationship between knowledge and practice pretest scores.
- E. To evaluate the effectiveness of structured teaching programme on knowledge regarding kangaroo mother care among postnatal mothers having low birth weight babies.
- F. To evaluate the effectiveness of structured teaching programme on practice regarding kangaroo mother care among postnatal mothers having low birth weight babies.

Materials and Methods:

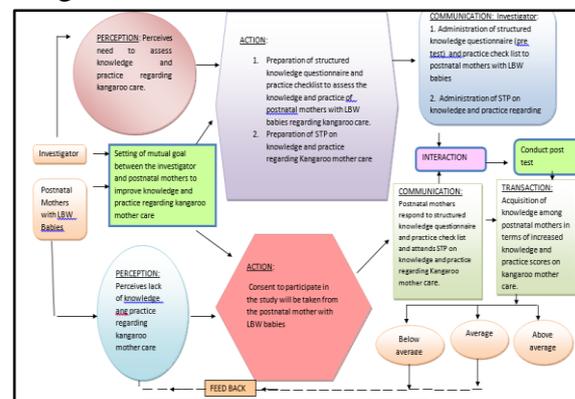
Pre-experimental research design was used to conduct the study. The study was conducted at govt hospital, at Jhunjhunu [Rajasthan]. The population for the study was postnatal mothers having low birth weight babies who are willing to participate in the study at the time of data collection. Purposive sampling has been used to select 180 samples.

A structured knowledge questionnaire was prepared by the investigator to assess the knowledge of postnatal mothers regarding kangaroo mother care , which included of two parts Part-A: consists of selected background variables .Part-B: consists of 25

knowledge items related to Kangaroo mother care. The questionnaire is prepared to assess knowledge of postnatal mothers having low birth weight babies in selected Hospitals, Hyderabad.To assess the practice regarding kangaroo mother care a practice check list was prepared , the tool consists of 15 items the deals with statements related to practices regarding rehabilitation .

Conceptual Framework:

The conceptual framework developed by the investigator is based on IMOGENE KING'S GOAL ATTAINMENT THEORY. This theory focuses on the interpersonal relationship between the Investigator and the Post natal mothers having low birth weight babies.



Data Analysis and Interpretation

Table No.1 Distribution of postnatal mothers according to their demographic variables (n=180)

Socio Demographic Variables	Number	Percentage
Age		
20-30 Years	23	13%
31-40 years	137	76%
Less than 20years	16	9%
More than 40	4	2%
Religion		
Hindu	111	62%
Christian	10	6%
Muslim	47	26%

Variables	Mean	SD	r Value
Knowledge	48	8.6	0.09
Practice	47	8.3	
Others	12		7%
Education			
Illiterate	103		57%
10thclass	29		16%
Intermediate	48		27%
Occupation			
House Wife	108		150%
Pvt Employee	18		25%
Business	13		18%
Others	41		57%
Monthly income			
Below Rs. 5000/-	80		44%
Rs. 5000 to 10000	71		39%
Rs. 11001Rs-15000	29		16%
Above 15000	0		0%
No of children			
One	29		16%
Two	48		27%
Three	63		35%
More than Three	40		22%
Previous knowledge about kangaroo mother care			
Yes	162		90%
No	18		10%
Source of Information			
News paper	60		33%
Television	22		12%
Health education in hospital	43		24%
Others	55		31%

Table.2 Relationship between Pretest Knowledge and Practice Scores Regarding KMC among Postnatal Clients Having Low Birth Babies

Table 3: Comparison of pre test and post test knowledge and practice scores among postnatal mothers.

(n=180)

	Pretest Mean	Posttest Mean	Mean Difference	t-value
Knowledge Scores	48	78	30	48.36
Practice Scores	47	74	37	47.0

Implications

Nursing Practice:

- ✓ The content of Structured teaching programme (STP) will help the mothers of newborn for reinforcing their knowledge on prevention of Neonatal hypothermia.
- ✓ The mothers of newborn can utilize this STP in their work field.
- ✓ Nurses play a very important role in providing care kangaroo care. So She should adhere to the standards of practice and strictly follow them.
- ✓ Nurses should be involved in monitoring the practices of kangaroo mother care and improve the quality care with better nursing practices.
- ✓ The nursing professionals can conduct health education programmes in the wards,outpatient departments and in the community regarding care of the newborn .

Nursing Education

- ✓ While planning student learning experiences more emphasis should be laid on practice of kangaroo mother care.

- ✓ Nursing educators should emphasize and motivate the nursing students to give planned health teaching debates regarding kangaroo mother care.
- ✓ Nursing Education should prepare nurses with the potential for managing the low birth weight babies.

Nursing Administration

- ✓ With technological advances and ever growing challenges of nursing, the nurse administrators have responsibility to provide the nurses with substantive educational opportunities.
- ✓ Nursing administrator should provide necessary facilities and opportunities for mothers to equip themselves with knowledge and skill to prevention of Neonatal Hypothermia.
- ✓ Administration of Health services should organize inservice education programme, provide supervision and guidance to the Staff Nurses on kangaroo mother care.
- ✓ Administration of private and government health agency can organize health education programmes, camps and puppet show in the community and in the hospital setup to create awareness to the public on newborn care.

Nursing Research

- ✓ This study will be a valuable reference for further references.
- ✓ This study will help the nurse researches to develop indepth into the development of teaching module and set information on newborn care among mothers of Newborn.

Limitations

The study has the following limitations:

- The study was limited to postnatal having low birth weight babies at selected hospitals.

- Sample size was limited to 180 only.

Recommendations

- The same study can be replicated on larger sample for better generalization.
- A descriptive study on knowledge, attitude and practices of postnatal mothers regarding kangaroo mother care can be conducted.
- As the 21st century is in the threshold of challenging preventive healthy interventions, the evidence based practice of newborn care must be efficiently adopted for applying in the operational milieu of rural care facilities and the awareness on kangaroo mother care should be taught , among the expected mothers in all country wide, perinatal-neonatal care units.

Conclusion

This study will provide Postnatal mothersthe creditability to influence decision making and policies to meet the needs of the low birth weight babies

Bibliography:

1. Dutta D (2010) "Text Book of obstetrics", New central Book agency publications.
2. Kangaroo Mother Care: A Practical Guide (April 2003), 1st Edition World Health Organization publications by Dept of Reproductive Health and Research (Editor)
3. David Wilson, Marilyn J. Hockenberry (2010), "Wong's Essentials of Pediatric Nursing", 9th edition, Mosby publications.
4. Gloria Leifer(2015) "Introduction to maternity & pediatric nursing" 7th edition, Elsevier publications,
5. Jane W. Ball (2015), Principles of Pediatric Nursing: Caring for Children, 6th Edition, Pearson publications.
6. Mary E. Muscari (2015), "Lippincott Review: Pediatric Nursing", 5th edition, Lippincott publications.
7. Basavanthappa BT, MN, PhD, (2nd edition), "Nursing Research", Jaypee Brothers, New Delhi, India.
8. Brunner and Siddarth, (2004), "Textbook of medical and surgical nursing". (10th edition),

- New Delhi, India: Lippincott Williams and Wilkins Publications.
9. Chintamani MR, FRCS, Mrinalin Mani, MBPS, FIMSA,(2011), Lewis Medical and Surgical Nursing, (7th edition), Elsevier, Noida, U.P., India, (Pg 750- 762).
 10. Mike Walsh (Ph.D.), "Watson's Clinical Nursing and Related Sciences", (6th edition), Bailliere Tindall, Edinburgh (Pg 247- 332).
 11. Polit, F., Denise, and Beck Cherly Toronto (2008), "Nursing research generating and assessing evidence for nursing practice".(8th edition), New Delhi.
 12. Kumar , V. (2006) . introduction of community based skin-to skincare in rural uttarpradesh, India , journal of perinatology. 26(10) P.no:- 597-604.
 13. Gardener , S., and Goldson (2002) the mother as incubator after delivery. Journal of obstetrics , Gynaecologic and neonatology nursing P. No:174-176.
 14. Daga S.G. (1989). Reduction in neonatology mortality with simple interventions . Journal of tropical pediatrics 35 P. No: 191-194.
 15. Arora S.(2013) "Kangaroo mother care (KANGAROO MOTHER CAREI),"as an alternative to conventional neonatal care for low birthweight infants.ActaPaediatr.Epub 2013 Jan 27.
 16. Cleary, et al J (2012) "kangaroo care mothers an alternative." American Osteopathic Assoc", volume 97 (8): page no 457-460)
 17. Ibe OE et al(2010) "kangaroo care and preterm" pediatrics today "volume 22 Page no 22-24
 18. Patricia Messmer, et al kangaroo care and prevention of illness"journal of Pediatric Nursing"(2011),23 (4):Page no 408-414
 19. Tessier R (2010)Kangaroo Mother Care, home environment and father involvement in the first year of life, pediatric nursing68(4) 67-6
 20. Balaji, A., Balaji, T.M., Rao, S.R., "Angiotensin II levels in gingival tissues from healthy individuals, patients with Nifedipine induced gingival overgrowth and non responders on Nifedipine", Journal of Clinical and Diagnostic Research, v-9, i-8, pp:92-94, 2015.
 21. Behura, S.S., Masthan, M.K., Narayanasamy, A.B., "Oral mucosal lesions associated with smokers and chewers â€" A case-control study in chennai population", Journal of Clinical and Diagnostic Research, v-9, i-7, pp:17-22, 2015.
 22. <https://world.nursingconference.com/abstract/2016/a-study-to-determine-the-knowledge-and-practice-regarding-kangaroo-mother-care-among-postnatal-mothers-of-preterm-babies-at-rural-centres-in-india>
 23. https://www.researchgate.net/publication/237089339_Knowledge_and_Awareness_about_Benefits_of_Kangaroo_Mother_Care
 24. <http://ijanm.com/HTMLPaper.aspx?Journal=International%20Journal%20of%20Advances%20in%20Nursing%20Management;PID=2016-4-2-11>