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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE OF KANGAROO MOTHER CARE AMONG MOTHERS WITH PRETERM BABIES IN A SELECTED HOSPITALS AT TIRUPATI, CHITTOOR (DT), ANDHRA PRADESH

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Abstract

Background of the Study: Pregnancy is a wonderful event in a women's life, however, various cultures holds different opinions. While some see as a holy act to bring a new life on earth. Kangaroo mother care (KMC) is one way to care for preterm infants who are clinically stable to help reduce the mortality rates of this group of infants. KMC is care of preterm infant carried skin-to-skin with the mother. Engaging in KMC stabilizes the infant's temperature and enhances the production of maternal prolactin. Furthermore, KMC could become a standard preterm care internationally, including South Korea. **Aim:** To assess the knowledge and practice on Kangaroo Mother Care **Methodology:** The research design is a blueprint for the whole study before stepping into the real research various methodological approaches to be adopted for the study. The methodology of research activities indicates the general pattern of organizing the procedure of gathering valid and reliable data for the problem under investigation this chapter deals with the methodology for

the study. **Results:** The above table shows that availability of health services had statistically significant association at 0.01 level ($p < 0.01$), demographic variables like educational status of mother was statistically significant at 0.05 level ($p < 0.05$) and demographic variables like age, religion, occupation, type of family, family income, no or children in the family, weight of the preterm baby and type of delivery were not significant. **Conclusion:** The study demonstrates that a structured teaching program significantly improves Kangaroo mother care knowledge and practice among mothers with preterm babies. By empowering mothers with essential knowledge and skills, healthcare providers can promote Kangaroo mother care adoption, enhance mother- infant bonding, and improve preterm care outcomes. The findings support the integration of structured teaching programs into nursing practice, education and policy, ultimately contributing to better health outcomes for preterm babies.

Keywords: Kangaroo Mother Care, Preterm infants, Maternal knowledge, Nursing education, Neonatal care.



INTRODUCTION

Kangaroo care is a technique of direct skin to skin contact between mothers (or fathers) and their pre mature infants. It has shown to improve the mother's psychological state, strengthen mother and infant bonding and stimulate maternal lactation. In the past few years neonatal care had been rapidly advanced in terms of technology and treatment along with the advancement of knowledge¹.

One such advanced mode is the implementation of kangaroo care. For infants born too soon, being premature on top of being immature: continuing the gestation on mothers skin to skin contact and with breast milk is even more important than for full term infants. Kangaroo Mother Care satisfies all five senses of the baby.³

Objectives

- To assess the knowledge and practice on Kangaroo Mother Care among mothers with preterm babies in a selected hospital.
- To evaluate the effectiveness of structured teaching program on Kangaroo mother care on knowledge and practice among mothers with preterm babies.
 - To find the correlation between pre test and post test knowledge and practice scores on Kangaroo Mother Care among mothers with preterm babies.

- To determine the association between post-test Kangaroo mother care knowledge and practice scores among mothers with preterm babies with their selected demographic variables.

METHODOLOGY

The research design is a blueprint for the whole study before stepping into the real research various methodological approaches to be adopted for the study. The methodology of research activities indicates the general pattern of organizing the procedure of gathering valid and reliable data for the problem under investigation this chapter deals with the methodology for the study. It includes the research approach, research design, variables, setting, population, sample, sample size, sampling technique, inclusion and exclusion criteria, development and description of the tool, content validity, reliability, pilot study, procedure for data collection and data analysis. A quantitative research approach was adopted to assess the knowledge and practice of kangaroo mother care among mothers of preterm babies.

The research design adopted for the study was pre experimental one group pre- test and post- test design.

Group	Pre test	Intervention	Post test
Pre experimental one group pre-test post-test design	01	X (structured teaching programme)	02

Criteria For Sample Selection

Inclusive criteria

- ✓ Mothers who have given birth to preterm babies (less than 37 weeks gestation) and are willing to participate in the study.
- ✓ Mothers who are admitted to the selected hospital in Tirupathi, AP, for the care of their preterm babies.
- ✓ Mothers will be compromised in their absence as father or care taker who are willing to participate in the study.
- ✓ Mothers of low birth weight and high risk of new born stable condition only with physician or neonatologist order for KMC with is included.
- ✓ Mothers who are able to understand read and write in Telugu.

Exclusion Criteria:

- ✓ Mothers who have given birth to multiple babies.
- ✓ New Borns who are unstable and continuously require intensive care
- ✓ Mothers with severe psychological conditions.
- ✓ Mothers who have previously practiced KMC.

Description of the study

The tool was developed with the help of extensive reviews from various Textbooks, Journals and Internet

sources. The tool was developed to assess the knowledge and practice of kangaroo mother care among mothers of preterm babies.

The tool consists of 3 parts:

Part – A: It deals with socio-demographic data which includes Age, religion, occupation, education status, type of family, family income per month, no.of children in the family, weight of the preterm availability of health service centers and type of delivery.

Part – B: It consist of 30 multiple choice questions to assess the knowledge on kangaroo mother care among mothers of preterm babies.

Scoring Key:

Correct response: 1 mark

Wrong response: 0 mark

Score Interpretation for Knowledge:

0-50% - Inadequate knowledge. 51-75% - Moderate knowledge.

75% - 100%- Adequate knowledge.

Part –C It consist of observational checklist with 10 questions to assess the practice on kangaroo mother care



among mothers with preterm babies.

Data collection procedure

The data collection procedure was carried out after obtaining approval from the Institutional Ethical Committee, Sri Venkateswara College of Nursing, Chittoor. Investigator introduced herself and explained the nature and purpose of the study. Confidentiality of the information was assured by taking informed consent form from the participants. The data was collected for 4 weeks from 02/09/2024 to 28/09/24. Non probability convenience sampling technique was used to select 50 participants who met the inclusion criteria. The investigator distributed the tool for filling the Socio demographic data and the structured questionnaire which consists of various items related kangaroo mother care. It took about 15-20 minutes for each participant to fill the questionnaire. Practice was assessed by observational checklist on kangaroo mother care. On the same day structured teaching programme was conducted on kangaroo mother care. And on 7th day, post test was carried out using the same tool. Approximately per day 6-7 mothers with preterm babies participated in the study 9am-1pm.

Then the collected data were coded, tabulated and organized for statistical analysis by using descriptive and inferential statistics based on the objectives of the study.

RESULTS AND INTERPRETATION

SECTION-I

Distribution of Demographic Variables Among Mothers of Preterm Babies

Table 1: Percentage Distribution of Mothers According to Their Age (N-50)

SL.NO	AGE IN YEARS	FREQUENCY (F)	PERCENTAGE (%)
1	15-25 years	20	40%
2	26-30 years	11	22%
3	31-35 years	15	30%
4	>36 years	4	8%
	Total	50	100 %

The above table shows that out of 50 samples, majority 20 (40%) of the mothers were between 15-25 years of age group, 11 (22%) of the mothers were between 26-30 years of age group, 15 (30%) of the mothers were between 31-35 years of age group and only 4 (8%) were between the age group of >36 years

Table 2: Percentage Distribution of Mothers According to Their Religion. (n=50)

SL.NO	RELIGION	FREQUENCY (F)	PERCENTAGE (%)
1	Hindu	41	82%
2	Muslim	7	14%
3	Christian	2	4%
	Total	50	100%

The above table shows that out of 50 samples, majority 41 (82%) were Hindus 7 (14%) of the mothers were Muslims, 2 (4%) of the mothers were Christians.

Table 3: Percentage Distribution of Mothers According to their Educational Status (N-50)

SL.NO	EDUCATIONAL STATUS	FREQUENCY (F)	PERCENTAGE (%)
1	Illiteracy	13	26%

Data analysis

This chapter deals with the analysis and interpretation of data collected for the present study. Data was obtained regarding the knowledge and practice of kangaroo mother care among mothers of preterm babies.

The demographic variables were coded and analyzed. Analysis and interpretation were done with the help of structured teaching programme and inferential statistics to meet the objectives of the study.

The data thus collected was tabulated, analyzed and interpreted based on the explored results from the data analysis; it is broadly categorized under the following headings.

Section I: Distribution of demographic variables among mothers with preterm babies

Section II: Distribution of knowledge and practice scores on kangaroo mother care among mothers with preterm babies.

Section III: Distribution of mean and standard deviation of level of knowledge and practice on kangaroo mother care among mothers with preterm babies.

Section IV: Distribution of correlation between knowledge and practice score of mothers with preterm babies

Section V: Association between selected demographic variables and the level of knowledge and practice on kangaroo mother care among mothers with preterm babies



2	Primary school	5	10%
3	Secondary school	21	42%
4	Degree	11	22%
	Total	50	100%

The above table shows that out of 50 samples, 13 (26%) we are illiterate 5 (10%) had their primary school, 21(42%) had their secondary school, 11 (22%) were graduates.

Table 4: Percentage Distribution of the Mothers According to their Occupation (N-50)

SL.NO	OCCUPATION OF THE MOTHER	FREQUENCY (F)	PERCENTAGE (%)
1	Housewife	27	54%
2	Labour	7	14%
3	Private Job	7	14%
4	Government	6	12%
5	Business/Company	3	6%
	Total	50	100%

The above table shows that out of 50 samples majority 27 (54%) of the mother were House wife, 7 (14%) of the mother were private job, 7(14%) of the mother Labour, 6 (12%) of the mother Government and 3 (6%) of the mother Business / Company.

Table 5: Percentage Distribution of the Mothers According to their Type of Family (N-50)

SL.NO	TYPE OF FAMILY	FREQUENCY (F)	PERCENTAGE (%)
1	Nuclear family	28	56%
2	Joint family	20	40%
3	Extended family	2	4%
	Total	50	100%

The above table shows that out of 50 samples, majority 28 (56%) of the mothers belongs to nuclear family, 20 (40%) belongs to joint family, 2(4%) belongs to extended family.

DISCUSSION

Objective-I: To assess the knowledge and practice of Kangaroo Mother Care among mothers with preterm babies in a selected hospital.

The study findings revealed that majority 84 (84%) of mothers had Moderate knowledge, 13 (13 %) had Inadequate knowledge and only 3 (3%) had adequate knowledge. Pretest practice majority 26 (52%) had low practice, 18 (36%) had moderate and 6 (12%)

The above findings were similar to the findings of the descriptive sectional study conducted by Shyamsingh (2023) on knowledge and practice regarding Kangaroo Mother Care among post-natal mothers attending at a tertiary level hospital of bihar. The sample size was 80 postnatal mothers. Non- probability convenience sampling technique was used. Data was collected by Semi-structured

questionnaire. The results revealed that 42% had adequate knowledge, 90% had positive attitude and 72% had good practice regarding Kangaroo Mother Care.

CONCLUSION

The study demonstrates that a structured teaching program significantly improves Kangaroo mother care knowledge and practice among mothers with preterm babies. By empowering mothers with essential knowledge and skills, healthcare providers can promote Kangaroo mother care adoption, enhance mother- infant bonding, and improve preterm care outcomes. The findings support the integration of structured teaching programs into nursing practice, education and policy, ultimately contributing to better health outcomes for preterm babies.

REFERENCES

1. Padmaja, A. (2008, April). An overview of kangaroo care. *Nightingale Nursing Times*, 33.
2. Charpak, N., & Ruiz-Peláez, J. (2006, May). Resistance to implementing kangaroo mother care in developing countries and proposed solutions. *Acta Paediatrica*, 95(5), 529–534.
3. Mettler, L. (n.d.). *Premature births: Kangaroo care premise*. BabiesToday.
4. Jebajothi Priya. (2004). Kangaroo care for low birth weight babies. *Nursing Journal of India*, XCV(9), 209–212.
5. McKee, M. (2004). Mothers urged to emulate kangaroo care. *BMJ*, 329(7473), 1179–1182.
6. Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed., pp. 105–135). Lippincott Williams & Wilkins.



7. Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed., pp. 8, 18–19). New Age International (P) Limited.
8. Polit, D. F., & Hungler, B. P. (1999). *Nursing research: Principles and methods* (7th ed.). J. B. Lippincott.
9. Basavanthappa, B. T. (2007). *Nursing theories* (1st ed., pp. 384–387). Jaypee Brothers Medical Publishers.
10. Boswell, C., & Cannon, S. (2007). *An introduction to nursing research: Incorporating evidence-based practice*. Jones & Bartlett Publishers.
11. Mahajan, B. K. (1997). *Methods in biostatistics for medical students and research workers* (6th ed.). Jaypee Brothers.
12. Talbot, L. A. (1995). *Principles and practice of nursing research*. Mosby.
13. Dance, F. C. (1990). *Research methods*. Books Publishing Company.
14. Pattinson, R. C., Arsalo, I., Bergh, A. M., Malan, A. F., Patrick, M., & Phillips, N. (n.d.). Implementation of kangaroo mother care: A randomized control trial of two.
15. Chow, M. J., Anderson, G. C., Good, M., Dowling, D. A., Shiao, S. H., & Chu, D. M. (2002). A randomized controlled trial of early kangaroo care for preterm infants: Effects on temperature, weight, behavior, and acuity. *Nursing Research, 10*(2), 129.
16. Johnson, C. C., Stevens, B., Pinelli, J., Gibbins, S., Filion, F., & Jack, A. (2003). Kangaroo care is effective in diminishing pain response in preterm neonates. *Archives of Pediatrics & Adolescent Medicine, 157*(11), 1084–1088.
17. Bathily, C., Nadiya, O., Sylla, A., Sall, M. G., Moreau, J., & Kuakuvi, N. (2006). Efficiency of kangaroo care on thermoregulation and weight gain of a preterm newborn cohort. *Dhakar Medicine, 51*(3), 155–160.
18. Closa-Monasterolo, R., Moraliyó-Beneitez, J., Ravéz-Olivé, M. M., Martinez, M. J., & Gomez-Papi, A. (1998). Kangaroo method in the care of premature infants admitted to a neonatal care unit. *Anales Españoles de Pediatría, 49*(15), 495–498.
19. Suman, R. P., Udani, R., & Nanavati, R. (2008). Kangaroo mother care for low birth weight infants: A randomized controlled trial. *Indian Pediatrics, 45*(1), 17–23.
20. Kumar, A., Parmar, V. R., Kaur, R., Jain, S., & Narula, S. (2009). Experience with kangaroo mother care in a neonatal intensive care unit in Chandigarh, India. *Indian Journal of Pediatrics, 76*(1), 25–28.
21. Shetty, A. P. (2007). Kangaroo mother care. *Nursing Journal of India, CVIII*(11), 249–250.
22. Sachdev, H. P. S. (2001). Low birth weight in South Asia. *International Journal of Diabetes in Developing Countries, 21*, 13–31.
23. World Health Organization. (2003). *Kangaroo mother care: A practical guide*. World Health Organization.
24. Brett, J., Staniszewska, S., Newburn, M., Jones, N., & Taylor, L. (2011). A systematic mapping review of effective interventions for communicating with parents of preterm infants. *BMJ Open, 1*(1), e000023.
25. Ludington-Hoe, S. M. (2011). Evidence-based review of physiologic effects of kangaroo care. *Current Women's Health Reviews, 7*, 243–253.
26. <http://jgate-helinet.informindia.co.in>
27. <http://www.ncbi.nlm.nih.gov/pubmed/>
28. www.incredibleindia.org
29. www.slideshare.net
30. www.wikipedia.org/wiki
31. www.user.guides.co.uk
32. www.Kangaroomothercare.com
 - a. www.kmc.com
 - b. www.pediatrics.india.org.com
 - c. pmc.ncbi.nlm.nih.gov
 - d. www.who.int
 - e. nhm.gov.in
 - f. aap.org

