

Effectiveness of Planned Teaching Program on the Home Care Management of Preterm Babies among Postnatal Mothers of Hospitalized Preterm Babies in the Institute of Child Health, Egmore, Tamil Nadu

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ABSTRACT

Background and objectives: Premature infants (born before 32 weeks of gestation excluding extremely preterm babies) are at greater risk of short- and long-term complications, including disabilities and impediments in growth and mental development. Significant progress has been made in the care of premature infants, but still there is a need to give more attention at home to the special aspects of care of these babies. The study aimed to assess the effectiveness of planned teaching program on the home care management of preterm babies among postnatal mothers.

Materials and methods: A quantitative research approach is adopted with the pre-experimental (one group pretest–posttest only) research design and a purposive sampling technique was used to select the sample of 60 postnatal mothers who have hospitalized their preterm babies (born before 32 weeks of gestation excluding extremely preterm babies) in the Institute of Child Health, Egmore. The pretest was conducted by using a structured questionnaire, and the planned teaching program (power point) was implemented to postnatal mothers regarding the home care management of preterm babies. The posttest was conducted after 7 days of pretest.

Results: The results show the effectiveness of planned teaching program on the home care management of preterm babies among postnatal mothers between the pretest and posttest, and the p value was highly significant at the $p < 0.001$ level.

Conclusion: The planned teaching program on the home care management of preterm babies among postnatal mothers was implied to be effective.

Keywords: Care of preterm babies, Postnatal mothers, Planned teaching program.

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INTRODUCTION

Child's growth and development start after the conception, inside the mother's womb. Postnatal health of an infant largely depends on the gestational age at the time of birth.¹ The duration of a pregnancy is calculated by the gestational age. A normal gestation is 40 weeks/280 days. Neonates born before 37 completed weeks of pregnancy are called premature/preterm infants. The birth of premature infants is associated with several problems that lead to frequent hospital admissions for infections, inadequate weight gain, feeding problems, apnea, and so on.² Despite the comprehensive and advanced efforts to prevent the premature delivery and birth of premature infants, the birth rates of such infants are high due to certain problems such as maternal factors, environmental factors, social status, infertility treatment, and so on.^{3,4} The cause for preterm birth is sometimes unknown; many factors are associated with the occurrence of preterm birth. The health and survival of the preterm baby depend upon the health status of the mother and her awareness, education, and skills in mothercraft. Every year 15 million babies are born before the normal gestational age. This is more than 1 in 10 of all babies.⁵ Complications from preterm birth are the leading cause of child deaths under the age of 5 years every year, accounting for nearly 1 million deaths.⁶ Mother is the primary health worker. Mother always looks after the baby with complete love, affection, and sense of sacrifice. Early involvement of the mother in the home care management of her preterm baby is the best way to promote and encourage the well-being of the preterm

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babies. Mother is the person to identify minor developmental deviations and early evidence of disease process because the mother is constantly and closely watching her baby.⁷

All the premature babies require special care and attention after birth both in neonatal intensive care unit (NICU) and after discharge from the hospital to home, till they gain certain weight. After discharge from NICU, the mother has to take special care of the baby. Mother should need some basic knowledge and skills pertaining to preterm home care management and mothercraft such as nutrition (breastfeeding), immunization, skin home care management, personal hygiene, and management of common health problems of mothers.⁸ As the relationship between the baby

and the mother is well known, there is no better time to begin the home care management of the baby than while it is still a fetus. Various maternal factors such as maternal age, parity, spacing between mothers, her health and nutritional status, and home care management during pregnancy will have effect on growth and well-being of fetus.⁹

OBJECTIVES

The objectives of this study are as follows:

- To assess the knowledge on home care management of preterm babies among mothers,
- To evaluate the effectiveness of planned teaching program on the home care management of preterm babies among postnatal mothers, and
- To find the association between knowledge regarding home care management of preterm babies among postnatal mothers with selected demographic variables.

HYPOTHESES

H1: There will be difference between the level of knowledge before and after the planned teaching program regarding the home care management of preterm babies among postnatal mothers.

H2: There is a significant association between the level of knowledge regarding the home care management of preterm babies and selected demographic variables.

MATERIALS AND METHODS

Quantitative approach was used to assess the effectiveness of planned teaching program on the home care management of preterm babies among postnatal mothers. The research design used for this study is the one group pretest–posttest design, which belongs to the pre-experimental research design. The study was conducted in step-down NICU, Institute of Child Health, which is located at Egmore, Tamil Nadu. The population of this study comprises postnatal mothers who have hospitalized their preterm child (born before 32 weeks of gestation excluding extremely preterm babies) at Institute of Child Health, Egmore, Tamil Nadu. The sample for this study is 60 postnatal mothers. A purposive sampling technique was used to select the subjects from the population. The tool used in this study was organized in two sections.

Section A consists of demographic variables of postnatal mothers such as age, educational status, occupation, monthly income of family, religion, and type of the family and source of information of the postnatal mothers of hospitalized preterm babies. Section B of the 30 multiple choice questions (MCQ's) regarding care of preterm babies at home. It is categorized under seven parts.

Part I	Knowledge regarding the preterm	Two items
Part II	Knowledge regarding thermoregulation	Four items
Part III	Knowledge regarding breastfeeding	Eight items
Part IV	Knowledge regarding the skin care and baby bath	Three items
Part V	Knowledge regarding the cord care and eye care	Two items
Part VI	Knowledge regarding immunization	Four items
Part VII	Identification of danger signs and regular follow-up	Six items
Total	30	

The data were analyzed by both descriptive (mean, frequency, percentage, and standard deviation) and inferential statistics (paired *t* test for comparison of knowledge and Chi-square test to find the association between posttest knowledge postnatal mothers regarding the home care management of preterm babies and demographic variables).

RESULTS

Table 1 shows the distribution of level of knowledge regarding the home care management of preterm babies among postnatal mothers during pretest and posttest. In the pretest out of 60 samples, 38 (63.4%) had inadequate knowledge, 20 (33.3%) had moderately adequate knowledge, and 2 (3.3%) had adequate knowledge and in the posttest 56 (93.3%) had adequate knowledge and 4 (6.7%) had moderately adequate knowledge.

Table 2 represents the mean, median, standard deviation, and mean difference of pretest and posttest comparison value on the knowledge regarding the home care management of preterm babies among primi mothers. The table reveals that the mean pretest knowledge score was 8.45 and the posttest knowledge score was 16.42, which was higher than that of the pretest.

Table 1: Distribution of level of knowledge regarding home care management of preterm babies among postnatal mothers during pretest and posttest ($n = 60$)

Level of knowledge	Pretest		Posttest	
	Frequency	Frequency percentage	Frequency	Frequency percentage
Not adequate (<50%)	38	63.4	–	0
Moderate (50–<75%)	20	33.3	4	6.7
Adequate (>75%)	2	3.3	56	93.3

Table 2: Mean, median, standard deviation, and mean difference of pretest and posttest comparison value on the knowledge regarding home care management of preterm babies among postnatal mothers ($n = 60$)

Parameter	Mean	SD	Mean difference	Paired <i>t</i> test value	<i>p</i> value
Pretest	8.45	2.824	7.29	21.892	<0.001*
Posttest	16.42	1.425			

*Highly significant at $p < 0.001$ level

The standard deviation of the pretest knowledge score was 2.824 and the posttest knowledge score was 1.425. The obtained paired “*t*” value was 21.892, and it was highly significant at the $p < 0.001$ level.

- It was inferred that the planned teaching program on the home care management of preterm babies among postnatal mothers was highly effective. Hypothesis (H1) was accepted. Hence, there is a significant difference in pretest and posttest levels of knowledge regarding the home care management of preterm babies among postnatal mothers.

CONCLUSION

Mother should have some basic knowledge and skills pertaining to the home care management of preterm babies (born before 32 weeks of gestation excluding extremely preterm babies) and mothercraft such as nutrition (breastfeeding), immunization, skin home care management, personal hygiene, and management of common health problems in preterm babies. The conclusion of this study shows that the majority of mothers of preterm babies had inadequate knowledge during pretest, and after the planned teaching program regarding the home care management of preterm babies, the majority of the mothers have gained adequate knowledge that is evidenced in the posttest scores.

DECLARATION OF THE STUDY PARTICIPANTS

The author certifies that appropriate consent forms have to be obtained from all study participants. The study subjects were

informed that their names and initials will not be published and due efforts will be put to conceal their identity, but anonymity cannot be guaranteed.

REFERENCES

1. Wilson H. Wong's nursing home care management of infants and children. vol. 7, Missouri: Elsevier Publication; 2003. pp. 374–375.
2. Ahmadi SH, Kazemi F, Masoumi SZ, Parsa P, Roshanaei G. Intervention based on BASNEF model increases exclusive breastfeeding in preterm infants in Iran: a randomized controlled trial. *Int Breastfeed J* 2016;11:30.
3. Masumi Z, Parsa P. An epidemiologic survey on the causes of infertility in patients referred to infertility center in Fatemeh Hospital in Hamadan 2010–2011. *Irani J Rep Med* 2015;13(8):513–516.
4. Mirlashari J, Rassouli M. Andishehe Rafee. *Nursing home care management of infant and children*. 1st ed., Tehran 2007. pp. 70–71.
5. Preterm baby: relationship with gestational age [online]. Available from: URL: http://en.wikipedia.org/wiki/Preterm_birth.
6. Beevi A. *Textbook of pediatric nursing*. Noida: Elsevier's Publication; 2009. pp. 143–145.
7. Clinical issues in the management of late preterm infants [online]. 2010 Oct; available from: URL: <http://www.ncbi.nlm.nih.gov/pubmed/20875895>.
8. A premature birth study [online]. Available from: URL: <http://www.prematurity.org/research/prematurity-effects1d.html>.
9. Home care management of very low birth weight babies [online]. 1985 May 25; available from: URL: <http://www.ncbi.nlm.nih.gov/pubmed/2860400>.