"THE EFFECTIVENESS OF LEARNING PACKAGE ON KNOWLEDGE AND PRACTICE IN CARE OF PRETERM BABIES AMONG POSTNATAL MOTHERS"

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ABSTRACT

To evaluate the effectiveness of learning package on knowledge and practice in care of preterm babies among postnatal mothers. **Methodology:** One group pretest and posttest Pre-experimental design was used. 30 samples were selected using non-probability convenient sampling. A self administered questionnaire and observational check list was used to evaluate the knowledge and practice. Descriptive and inferential statistics were used to analyze the data. **Results:** The study findings revealed that the learning package was effective on knowledge and practice of postnatal mothers on care of their premature babies.In the pretest, among 30 postnatal mothers regarding level of knowledge16(53.7%) had inadequate knowledge, 10(33.3%) had moderate knowledge and 4(13.3%) had adequate knowledge in pretest. The level of knowledge was improved after intervention, in the post test 0(0%) had inadequate knowledge and 22(73.3%) had moderate knowledge and 8(26.7%) had adequate knowledge.In the pretest, among 30 postnatal mothers in terms of level of practice 14(46.7%) had inadequate practice, 11(36.7%) had moderate practice and5(16.6%) had adequate practice in pre test. The level of practice was improvedafter intervention, in the posttest 0(0%) had inadequate practice and 10(33.3%)had moderate practice and 20(66.7%) had adequate practice Among 30 postnatal mothers on care of their preterm babies, the pre test mean knowledge score was 12.6 and the post test mean was 18.1. The mean difference 5.5 was a true difference. The standard deviation of pre test was 4.6 and post test was 3.6. The calculated paired 't' value 9.3 was highly significantthe table value (2.6) at 0.05 level. Hence the hypothesis was accepted. It was inferred that learning packages was effective in improving the knowledge of the post natal mothers.

Key Words: H: Hypothesis, M.P. : Madhyapradesh

BACKGROUND OF THE STUDY

Growth and development are important aspects of child's health. Child's growth and development starts soon after the conception, inside the mother's womb.Postnatal health of an infant largely depends on the gestational age at the time of birth. The duration of a pregnancy is measured by gestational age (or the amount oftime elapsed since the first day of the last menstrual period). A normal gestation lasts40 weeks or 280 days. If delivery occurs before 37 weeks gestation, the baby isconsidered prematurely born. The period of gestation is one of the most importantpredictors of an infant's subsequent health and survival. In humans, preterm birthrefers to the birth of a baby at less than 37 weeks of gestational age. The cause forpreterm birth is in many situations elusive and unknown; many factors appear to be

associated with the occurrence of preterm birth.

NEED FOR THE STUDY:

Each year 15 million babies are born preterm and their survival chances vary dramatically around the world. Worldwide, almost half of preterm babies are born at home, and even for those born in facilities, essential newborn care is often lacking. Animportant but under-resource countries are far from the target cause of neonatal deaths are complications of prematurity(35%), neonatal infection 23%, intra partumcomplication 24%and diarrhoea among other causes of neonatal deaths.

The knowledge of mothers about special aspects of care of preterm babies are very effective to prevent complications. As these aspects influence with long term outcome, along with the medical and paramedical personals, the mother can play a main important role in preventing these disabilities among her own baby. This task will also improve the emotional bond between mother and baby. Mother can experience the great feeling of doing something for her baby which will also give a feeling of satisfaction to mother. So educating the mothers regarding special home care aspects for their preterm babies will play a major role in reducing neonatal mortality as well as morbidity rate by nurses. These aspects made the investigator to select this study.

STATEMENT OF THE PROBLEM

To evaluate the effectiveness of learning package on knowledge and practicein care of preterm babies among postnatal mothers in selected Neonatal Intensive Care Unit.

OBJECTIVES

❖ To assess the existing level of knowledge on care of their preterm babiesamong postnatal mothers.

❖ To assess the existing level of practice on care of their preterm babies amongpostnatal mothers.

❖ To evaluate the effectiveness of learning package in improving the knowledgeon care of their preterm among postnatal mothers.

❖ To evaluate the effectiveness of learning package in improving the practiceon care of their preterm among postnatal mothers.

❖ To find out the association between pretest knowledge level with their selecteddemographic variables of postnatal mothers.

❖ To find out the association between pretest practice level with their selecteddemographic variables of postnatal mothers.

HYPOTHESIS

H_1- There will be a significant difference between pretest and posttestknowledge score on care of their preterm babies.

H_2- The mean post test practice score will be significantly higher than the meanPretest practice score.

H_3- There will be a significant association between the pre test scores ofknowledge and selected demographic variables.

H_4- There will be a significant association between the pre test scores ofpractice and selected demographic variables.

ASSUMPTIONS

This study assumes that,

➢ Postnatal mothers may have inadequate knowledge and practice regardingcare of their preterm babies

➢ Education may help to improve the knowledge and practice of post natalmothers regarding care of their preterm babies.

➢ The selected group will co-operate in the data collection.

DELIMITATIONS

1. The study is limited to the postnatal mothers in the selected hospital.

2. The study period is limited to 4-6 weeks of duration.

3. The sample size is limited to 30 postnatal mothers.

METHODOLOGY

Research Approach : In the present study quantitative research approach was used

Research Design: Pre experimental one group pretest and post test design

Study Population

In this study, population is postnatal mothers who delivered the preterm baby.

Sample

. In this study the sample consists of 30 post natal mothers whoare delivered the premature babies

Sample Size

Based on the set of criteria 30 postnatal mother who delivered pre term babieswere selected as samples.

Sampling Technique

In this study, convenient sampling technique is used tothis study

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA

Primi gravida Postnatal mothers who

❖ have delivered a preterm baby

❖ have delivered a preterm baby with birth weight of 1000 grams -2500grams.

❖ are willing to participate in the study.

❖ are able to participate in the care of their babies.

EXCLUSION CRITERIA

Mothers who

❖ are having past history of preterm delivery

❖ are not present at the time of data collection

❖ have undergone previous teaching on home care management of pretermbabies Mothers who are health care

professionals

❖ had delivered Pre term babies and they are on Ventilatory support withmajor complications.

❖ are having postnatal complication

DESCRIPTION OF SOCIAL DEMOGRAPHIC VARIABLESOF SAMPLES

Table 4.1 Frequency and percentage distribution of samples with their selecteddemographic variables.

n = 30

S.NO	DEMOGRAPHICVARIABLES	TOTAL	
		FREQUENCY(F)	PERCENTAGE(%)
1.	**Age of the mother**		
	a) 18-22 years	7	23.3
	b) 22-26 years	8	26.7
	c) 26-30 years	8	26.7
	d) > 30 years	7	23.3
2.	**Educational status**		
	a) Primary level	6	20
	b) Higher secondary level	8	26.7
	c) Graduate	12	40
	d) illiterate	4	13.3
3.	**Locality**		
	a) Urban	10	33.3
	b) Rural	20	66.7
4.	**Religion**		
	a) Hindu	17	56.7
	b) Christian	6	20
	c) Muslim	6	20
	d) Others	1	3.3
5.	**Marital status**		
	a) Married	28	93.3
	b) Separated	2	6.7
	c) Widow	0	0
6.	**Occupation**	5	16.6

No.	Item	Frequency	Percentage
	a) Housewife	14	46.7
	b) Private sector	8	26.7
	c) Government sector	3	10
	d) Coolie		
7.	**Maternal illness during antenatalperiod**		
	a) Diabetic mellitus		
	b) Hypertension	9	30
	c) Other disease	6	20
		15	50
8.	**Reason for pre term labour**		
	a) Maternal risk factors	8	26.7
	b) Assisted reproductivetechniques	20	66.7
	c) Both (a) and (b)	2	6.6
	d) Others	0	0
9.	**Type of delivery**		
	a) Spontaneous vaginal delivery	8	26.7
	b) Caesarean section	22	73.3
	c) Forceps delivery/ Vaccum	0	0
10.	**Gestational age**		
	a) < 28 weeks	3	10
	b) 28-31 weeks	7	23.3
	c) 31-33 weeks	5	16.7
	d) 34-36 weeks	15	50
11.	**Sex of the baby**		
	a) Male	17	56.7
	b) Female	13	43.3
12.	**Birth weight**		
	a) 1000 – 1500 gms	3	10
	b) 1500 _ 2000 gms	13	43.3
	c) 2000 _ 2500 gms	14	46.7
13	**Apgar score during birth**		
	a) 0-3 / minutes	0	0
	b) 4-6 / minutes	10	33.3
	c) 7-10/minutes	20	66.7

14.	Baby had respiratory distress soonafter birth		
	a) Yes	24	80
	b) No	6	20

DATA ON DISTRIBUTION OF THE SAMPLES ACCORDINGTO THEIR LEVEL OF KNOWLEDGE IN PRETEST AND POST TEST

Table:4:2 Distribution of samples according to their level of knowledge in pre testand post test

n=30

LEVEL OF KNOWLEDGE	Pre test		Post test	
	Frequency(f)	Percentage(%)	Frequency(f)	Percentage(%)
Inadequate(0-10)	16	53.7	0	0
Moderate (11-20)	10	33.3	22	73.3
Adequate(21-30)	4	13.3	8	26.7
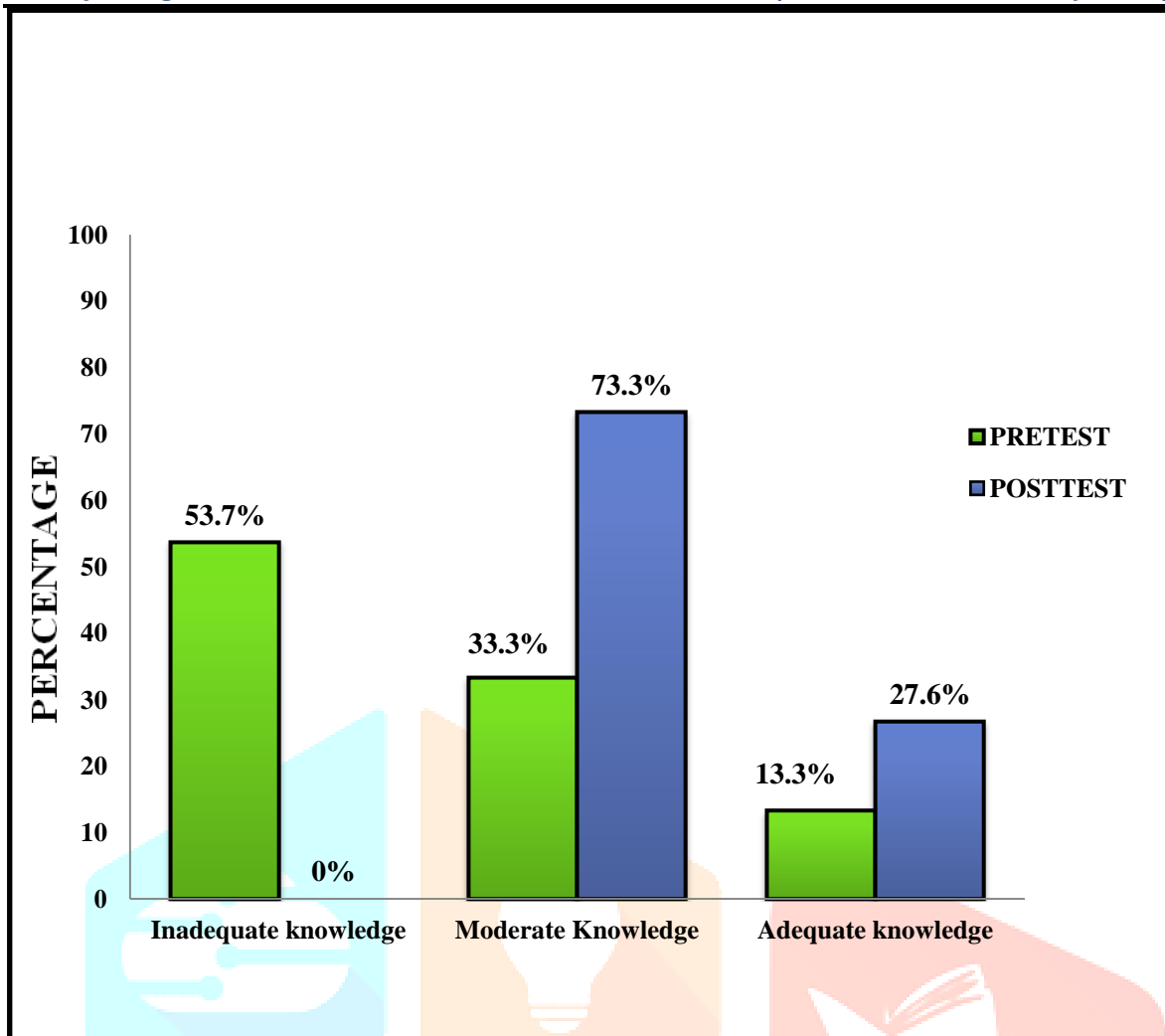
A bar diagram showing the percentage distribution of samples interms of their pre test and post test level of knowledge score

DATA ON DISTRIBUTION OF THE SAMPLES ACCORDINGTO THEIR LEVEL OF PRACTICE IN

PRETEST AND POST TEST

Table : 4:3 Distribution of samples according to their level of practice in pre test andpost test

n=30

LEVEL OFPRACTICE	Pre test		Post test	
	Frequency(f)	Percentage(%)	Frequency(f)	Percentage(%)
Inadequate(0-14)	14	46.7	0	0
Moderate (15-29)	11	36.7	10	33.3
Adequate(30-44)	5	16.6	20	66.7

DATA ON EFFECTIVENESS OF LEARNING PACKAGE ONKNOWLEDGE REGARDING CARE OF THEIR PRETERM AMONG POSTNATAL MOTHERS

Mean, Mean difference, Standard deviation and 't' value of pre test andpost test level of knowledge among samples

n = 30

S. No	Variables	Mean	Mean Difference	Standard Deviation	Paired 't' test
1.	Pre test	12.6		4.6	
			5.5		9.3
2.	Post test	18.1		3.6	

DATA ON EFFECTIVENESS OF LEARNING PACKAGE ON PRACTICE AMONG POSTNATAL MOTHERS IN TERMS OFPRETERM CARE

Mean, Mean difference, Standard deviation and 't' value of pre testpost test level of practice among samples

n = 30

S. No	Variables	Mean	Mean Difference	Standard Deviation	Paired 't' test
1.	Pre test	17.5		10.10	
			12.7		11.6
2.	Post test	30.2		7.62	

DATA ON ASSOCIATION OF THE PRETEST KNOWLEDGE LEVEL OF CARE OF THEIR PRETERM AMONG POSTNATALMOTHERS WITH SELECTED DEMOGRAPHIC VARIABLES.

Association of the pre test knowledge score with their selecteddemographic variables.

n=30

S. NO	DEMOGRAPHICVARIABLES	LEVEL OF KNOWLEDGE		CHI SQUARE	TABLE VALUE
		Above mean	**Below mean**		
1.	**Age of the mother** a) 18-22 years b) 22-26 years c) 26-30 years d) > 30 years	3 5 2 4	4 3 6 3	3.1#	7.8 df = 3
2	**Educational status** a) Primary level b) Higher secondary level c) Graduate d) illiterate	2 3 8 1	3 0.3# 9 2	2	3.8 df = 3
3.	**Maternal illness duringantenatal period** a) Diabetic mellitus b) Hypertension c) Other disease	4 4 6	5 1.5# 9	2	3.8 df = 2
4.	**Gestational age** a) < 28 weeks b) 28-31 weeks c) 31-33 weeks d) 34-36 weeks	1 3 2 8	2 1.1# 3 7	4	3.8 df = 2
5.	**Birth weight** a) 1000 – 1500 gms b) 1500 _ 2000 gms c) 2000 _ 2500 gms	1 6 7	2 0.39# 7	7	3.8 df= 2

S. NO	DEMOGRAPHICVARIABLES	LEVEL OF PRACTICE	CHI	TABLE

		Above mean	Below Mean	SQUARE	VALUE
1.	**Age of the mother**				3.8
	e) 18-22 years	2	5		
	f) 22-26 years	4	4	1.44#	
	g) 26-30 years	3	5		df= 3
	h) > 30 years	4	3		
2.	**Educational status**				3.8
	e) Primary level	3	3		
	f) Higher secondary level	2	6	3.11#	df= 3
	g) Graduate	6	6		
	h) illiterate	2	2		
3.	**Maternal illness duringantenatal period**				7.8
	d) Diabetic mellitus	4	5		
	e) Hypertension	3	3	3.11#	df= 2
	f) Other disease	6	9		
4.	**Gestational age**				3.8
	e) < 28 weeks	1	2		
	f) 28-31 weeks	3	4		
	g) 31-33 weeks	2	30.18#		df= 3
	h) 34-36 weeks	7	8		
5.	**Birth weight**				3.8
	d) 1000 – 1500 gms	2	1		
	e) 1500 _ 2000 gms	6	70.65#		
	f) 2000 _ 2500 gms	5	9		df=2

NOTE: # Not significant of 0.05 level   * significant at 0.5 level

CONCLUSION

The following conclusion was drawn from the study. The study proved that learning package were effective in improving the knowledge and practice of postnatal mothers on care of their pre term. The study findings revealed that knowledge and practice was significantly improved by learning package.

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