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Effectiveness Of Health Education Package On Practice Regarding Care Of Preterm Baby Among Preterm Mothers At Selected Hospitals

Ms. Nidhi[1], Dr. Prashant Modi[2]

[1]Ph.D Scholar Parul University, Limda, Vadodara, Gujarat

[2]Ph.D Supervisor, Parul University, Limda, Vadodara, Gujarat

***Corresponding Author:**

Ms. Nidhi Ph.D scholar Parul University, Limda, Vadodara, Gujarat

Email ID: nidhisharma951987@gmail.com

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ABSTRACT

Background: it is clearly stated that most of the preterm babies are born yearly and they are exposed to number of neonatal problems. It is essential that antenatal period education is important and precaution. They need special care to improve the health status of preterm babies.

Material and methods: A pre-experimental research design was used one group pretest and posttest research design. A total of 50 preterm mothers were selected by convenience sampling technique, practice checklist was used for data collection. Descripotive statistics, mean, SD and t test,chisquare test were used for analysis.

Result: The pretest and posttest level of practice regarding care of preterm baby among mothers in pretest 38(76%) were poor practice,12(24%) were good practice. In posttest level 36(72%) were good practice and 14(28%) were poor practice regarding care of preterm baby among mothers. that the pretest means score practice regarding care of preterm baby mean and SD 1.941±0.6214 and posttest mean score of practice regarding care of preterm baby among mothers 1.461±0.9731.The calculated paired t value of t= 18.041 was found to be statistically significant at $p<0.05$ level this clearly indicated that health education programme found to be effective in management of care of preterm baby among women. The association between pretest level of practice regarding care of preterm baby among women with their selected demographic variables. Education status of mothers had significant association with pretest level of practice $p<0.05$ level. Demographic variables like Age, religion, occupation, family monthly income, type of family and source of information no significant association with pretest level of practice. This indicated that health education was significantly effective with increase practice regarding care of preterm baby among women.

Conclusion: In this study shows that health education was found to be effective in improving the practice on care of preterm baby and improve the practice of antenatal mothers.

Keywords: *Effectiveness, Practice, Preterm baby, Health education*

1. INTRODUCTION

An infant's birth weight is the most important determinant determining its survival, growth, and development. A newborn is considered to have an optimal birth weight if it weighs at least 2500 grammes. According to the World Health Organization (WHO), a low birth weight (LBW) baby is one whose birth weight is less than 2500 grammes as measured within the first few hours of birth, before any significant postnatal weight loss occurs[1].

India has the most significant infant health challenge of any country. The country accounts for 20% of the world's newborns each year, with over 26 million births. Currently, three neonates die per minute in India, and one out of every four babies is born underweight. The neonatal mortality rate (NMR) is 43 per 1,000 live births, accounting for almost two-thirds of all newborn deaths and half of under-five child mortality. More than one-third of neonatal deaths occur on the first day, almost half in the first three days, and roughly three-quarters in the first week of life[2].

Reducing low birth weight is a critical step towards reaching the Millennium Development Goal (MDG) of reduced infant mortality. Efforts to achieve these goals must focus on providing a healthy start for children by assisting women in starting their pregnancies in excellent health and nutrition, as well as ensuring safe pregnancy and childbirth. Low birth weight is an important indication for assessing progress towards these global goals[3].

In underdeveloped nations, maternal malnutrition and anaemia are the most common reasons of low birth weight. Other risk factors include early maternal age at conception, numerous pregnancies, pregnancy-induced hypertension, infections, substance abuse, and genetic influences. A premature baby does not have enough time to fully develop vital organs such the brain, lungs, heart, kidneys, and liver. As a result of the immaturity of these important organs, the infant is at risk for a variety of health issues [4].

According to WHO (2009), effective care for low-birth-weight (LBW) newborns is critical in lowering mortality. Appropriate feeding, kangaroo mother care, cleanliness maintenance, correct umbilical cord and skin care, and early diagnosis and treatment of infections and problems are all important components of care. In India, more than 30% of infants are born underweight. Low- birth-weight babies account for roughly 75% of neonatal mortality and 50% of all baby deaths.In panipath harayana currently neonatal mortality rate 28 in 1000 live births and decreased remarkably[5].

Low birth weight (LBW) is a complex condition with both recognised and unknown causes. Its causes include demographic, dietary, reproductive, and socioeconomic variables. Maternal haemoglobin levels, severe manual labour during pregnancy, maternal nutrition, financial position, antenatal care, parental education, tobacco usage, maternal age, and previous pregnancies are all significant contributors [6].

Nursery workers must be taught to recognize and support moms' efforts, while also giving practical guidance, pertinent information, and lactation aid. Lactation support for moms of very low birth weight (VLBW) infants can be helpful with the right knowledge, attitude, and abilities[7].

In addition to teaching healthcare professionals such as nurses, traditional birth attendants (TBAs), and anganwadi workers, it is commonly acknowledged that improving the survival rates of low birth-weight infants necessitates educating and training mothers and family members about home- based care. The government of India (GOI) emphasises the need of incorporating mothers and families in crucial infant care through programs such as Child Survival and Safe Motherhood (CSSM) and Reproductive Child Health (RCH). These activities prioritise critical areas such as correct feeding, keeping warmth, recognizing danger indications, immunization, birth spacing, follow-ups, and screenings [8].

2. MATERIALS AND METHODS

Study area and period

Study was conducted different hospitals at Dr.Prem Multi-speciality, super specialty hospital Panipat,Dr.Ravindra Hospital and Cygnus hospital Panipat, super specialty hospital Panipat- harayana.300 bedded super speciality hospital ,100 bedded , 80 bedded hospitals having all the facilities neonatal care centers ,health care staff and laboratory facilities in this health facilities. The study period was two months.

Research design:

Pre-experimental research design, one group pretest and posttest research design was used for study.

Population

Source and study population

Source of population was all mothers attending selected hospitals and study population was selected antenatal mothers.

Sampling technique and sample size

Convenience sampling technique and sample size was 50

Inclusive criteria

Prenatal mothers giving birth at first time

Prenatal mothers are interested to participate in this study

Exclusive criteria

Prenatal mothers not interested to participate in this study Prenatal mothers not able to read and write Hindi or English

Variables

Dependent variable

Practice of preterm baby mothers

Independent variables Practice of preterm baby **Sociodemographic variables**

Age,Religion,monthly income, education status, occupation status, Type of family, source of information

Operational definition:

Practice: In this study practice refers to the care of the preterm baby about breast feeding, maintenance of temperature and prevention of infection

Preterm baby: It refers to care of the baby and baby born before their term of gestation

Antenatal mothers: In this study antenatal mothers refers to Care of mothers during pregnancy

Hospital: It is the place providing care and promotion of health and prevention of diseases and care of antenatal mothers.

3. RESULT

Table:1 frequency and percentage distribution of demographic variables

Variables		**Frequency**	**Percentage**
Age groups	18-20	16	32
	21-30	20	40
	31-40	14	28
Religion	Hindu	28	56
	Muslim	10	20
	Christian	12	24
Education	No formal education	12	24
	Primary education	14	28
	Secondary education	8	16
	Higher secondary	12	24
	Graduation and above	4	8
Occupation	House wife	14	28
	Agriculture	6	12
	private	26	52
	Government	4	8
Family monthly income	<10,000	15	30
	11,000-20,000	12	24
	21,000-30,000	16	32

	>31,000	7	14
Type of family	Joint	24	48
	Nuclear	20	40
	Extended	6	12
Source of information	Friend	5	10
	Mass media	7	14
	Family member	16	32
	Health person	22	44
Total		**50**	**100**

Table 1: shows that frequency and percentage distribution of primipara mothers in age group 20(40%) were age group between 21-30 years,16(32%) were 18-20 years and 14(28%) were age group between 31-40 years.In regards to religion 28(56%) were hindu,12(24%) Christian and 10(20%) were muslim religion.

In educational status of mothers 14(28%) were primary education,12(24%) were no formal education and higher secondary and 4(8%) were graduation and above. Regarding occupational status 26(52%) were private,14(28%) were housewife,6(12%) were agriculture and 4(8%) were government.

Regarding family monthly income 16(32%) were monthly income 21,00-30,000,15(30%) were less than 10,000, 12(24%) were 11,000 to 20,000 and7(14%) were monthly income more than 31,000. Regarding type of family 24(48%) were joint family,20(40%) were nuclear and 6(12%) were extended family.

Regarding source of information majority of mothers 22(44%) were health person,16(32%) were family member,7(14%) were mass media and 5(10%) were friends.

Table 2: Pretest and Posttest level of practice regarding care of preterm baby

Practice level	**Pretest**		**Posttest**	
	n	**%**	**n**	**%**
Poor practice	38	76	14	28
Good practice	12	24	36	72
Total	50	100	50	100

Table 2 shows that pretest and posttest level of practice regarding care of preterm baby among mothers in pretest 38(76%) were poor practice,12(24%) were good practice. In posttest level 36(72%) were good practice and 14(28%) were poor practice regarding care of preterm baby among mothers.

Table:3 Effectiveness of health education on practice regarding care of preterm baby among mothers.

	MEAN	SD	Mean Diff	SD Diff	t-value	df	p-value
Pretest	**1.942**	**0.6214**	**0.481**	**0.3517**	**18.041**	**42**	**0.05,S**
Posttest	**1.461**	**0.9731**					

P<0.05

Table 3 revealed that the pretest means score practice regarding care of preterm baby mean and SD 1.941±0.6214 and posttest mean score of practice regarding care of preterm baby among mothers 1.461±0.9731.The calculated paired t value of t= 18.041 was found to be statistically significant at p<0.05 level this clearly indicated that health education programme found to be effective in management of care of preterm baby among women.

Table:4-Association between pretest level of practice regarding care of preterm baby among women with their selected demographic variables.

variables		Practice level		Total	Chi-square df	p-value
		Poor practice	Good practice			
Age	**18-20**	10	6	16	**1.352**	**0.289 NS**
	21-30	20	4	24	**2**	
	31-40	8	2	10		
Religion	**Hindu**	21	8	29	**0.755**	**0.951 NS**
	Muslim	8	2	10	**1**	
	Christian	9	2	11		
Education	**No formal education**	**4**	**3**	**7**	**0.083**	**0.003 S**
	Primary education	**10**	**6**	**16**	**1**	
	Secondary education	**12**	**2**	**14**		
	Higher	8	1	9		

	secondary					
	Graduation and above	4	0	4		
Occupation	**House wife**	15	5	20	**2.641**	**0.472 NS**
	Agriculture	11	2	13	**4**	
	Private	11	4	15		
	Government	1	1	2		
Family monthly income	**<10,000**	8	4	12	**1.084**	**0.621 NS**
	11,000-20,000	12	3	15	**2**	
	21,000-30,000	15	2	17		
	>31,000	3	3	6		
Type of family	**Joint**	10	2	12	**0.573**	**0.939 NS**
	Nuclear	15	8	23	**1**	
	Extended	13	2	15		
Source of information	**Friend**	2	2	4	**1.981**	**0.153 NS**
	Mass media	4	1	5	**2**	
	Family member	6	3	9		
	Health person	26	6	32		

NS-non significant S-Significant p<0.05

Table 4 shows that association between pretest level of practice regarding care of preterm baby among women with their selected demographic variables. Education status of mothers had significant association with pretest level of practice p<0.05 level. Demographic variables like

Age, religion, occupation, family monthly income, type of family and source of information no significant association with pretest level of practice.

This indicated that health education was significantly effective with increase practice regarding care of preterm baby among women.

4. DISCUSSION

Most of the mothers had in pretest level of practice 38(76%) were poor practice and 12(24%) were good practice. In posttest 36(72%) were good practice and 14(28%) were poor practice regarding care of preterm baby.

Conducted study to assess the practice regarding care of preterm babies.Preexperimental research design was used.Total of

47 mothers of pretem babies were enrolled with purposive sampling technique.Data were collected using purposive sampling technique.Each assessment was followed by re-education on preterm baby care.Result shows that most ogf the mothers 48.9% were between the age group of 25-30 years and education up to graduation and above 51.1%.87.23% of mothers had average practice,which improved to good level 100% by the final posttest.study concluded that teach mothers about care of preterm babies to improve take care of their babies independently.Regular education of mothers significanytly improves their practice in preterm baby care[9].

Similar study was conducted to assess the effectiveness of structured teaching programme care of pretem babies among preterm mothers.Result showed that in pretest, majority of mothers with pretermbabies 41(68%) had poor practice 19(31.75) were good practice. study concluded that structured teaching programme was effective in improves the practice among mothers with preterm babies [10].

5. CONCLUSION

It is very significant to teach mothers about care of preterm babies to empower them to take care of their babies independently. Regular education of mothers important to improve their practice in preterm baby care.

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