



THE EFFECT OF SELECTED NURSING MEASURES OF NEONATES WITH LOW BIRTH WEIGHT BABIES.

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ABSTRACT

Birth weight is the single most important factor determining the survival chances of the newborn. Many of the newborn die during their first year of life. In India over 30 percentages of the infants are born with low birth weight. Nearly 75% of the neonatal deaths and 50% of infant's death occurs among low birth weight baby.

Demographic variables were analyzed by using descriptive statistics like mean, standard deviation were analyzed by using inferential statistics like chi-square, paired 't' test. The result showed that the effectiveness of selected nursing measures of neonates with low birth weight babies was among 30 neonates on initial assessment day was in mild health deterioration 16(53.3%) and severe health deterioration fourteen(46.7%) and 26(86.7%) had normal health condition and four (13.3%) at mild health deterioration on the final evaluation day. The significant result was $P < 0.05$. This shows the net benefit of this study. Selected Nursing measures was effective for the low birth weight babies and thus reduces the risk for severity condition of babies and improve the health status of babies.

Keywords: H: Hypothesis, DF: Degree of freedom

INTRODUCTION

Ensuring Child Health, an investment for the future. Newborn is the heritage of the family and newborns health of the nation. The arrival of human life into this world and its subsequent struggle for independent existence has tested the time of all those who take care of the newborn.

Birth weight is the single most important factor determining the survival chances of the newborn. Many of the newborn die during their first year of life. The infant mortality rate is higher for all low birth weight babies than other babies. The lower the birth weight, the lower is the survival chance of the newborn.

There were 1.8 million infant deaths in the world in 2006. Most of them occurred in developing countries and approximately one half took place during their neonatal period.

Low birth weight babies can be managed at the time of antenatal period. Many mothers go on to enjoy near normal life if their babies were properly managed. Early intervention is important, especially for the management of feeding, handling, cleanliness, prevention from the infection. Mother's knowledge about care of baby reflects the health and nutritional status of the baby. Nurses play the significant role in empowering the mother of low birth weight with reliable method to get relieved of their worries and to join hands with the nurses in care of low birth weight babies.

NEED FOR THE STUDY:

The prevalence of low birth weight exists universally in all population. Low birth weight with high mortality and morbidity continuous to be a major public health problem in India. Low birth weight is one of the most serious challenges in maternal and child health in both developed and developing countries. Low birth weight newborn forms a pediatric priority because they have less chance of survival than babies weighing 2500gm. Half of the prenatal and one third of infant mortality are due to the low birth weight. Low birth weight may lead to serious physical and mental handicap in those who survive. In India, over 30% of the infants are born with low birth weight. Nearly 75% of the neonatal deaths and 50% of infant deaths occur among low birth weight. Further, the investigator during the clinical experience found more number of low birth weight babies born and admitted in neonatal intensive care unit. Low birth weight newborn faces problems like hypothermia, unable to suckle at the breast and hypoglycemia. Due to lack of immunity and low birth weight newborn are at high risk of having problem with increased chance to acquire infection which later on can lead to death. Low birth weight babies are immature, they need special nursing care. Nurses are front line care providers they are key persons involved with the care of the low birth weight neonates round the clock.

OBJECTIVES

1. To assess the health condition of neonate with low birth weight.
2. To evaluate the effectiveness of nursing measures of neonate with low birth weight.
3. To associate the findings with the demographic variables of neonate with low birth weight and the effectiveness of nursing measures.

ASSUMPTION

1. Daily assessment of the neonate enables a nurse to gain thorough knowledge about progress, neonates health condition and will provide guidelines for the nurse to implement a need based care.
2. Nursing measures effectively given will enhance the neonate weight.

METHODOLOGY

RESEARCH DESIGN

Descriptive evaluative research design was adopted to evaluate the nursing care of neonate with low birth weight.

SETTING

The setting of the study was Pediatric Hospital at Jhobot.

VARIABLES**Independent variable :**

Independent variable of the study is selected nursing measures.

Dependent Variable :

Dependent variables of the study were neonates with low birth weight.

SAMPLING TECHNIQUE

Convenient sampling method was adopted for selection.

SAMPLE SIZE

The total number of sample was 30 neonates with low birth weight.

INSTRUMENT

Details of the tool used in this study are given below

Section-1: Demographic variables

Questionnaire used for collecting data about the demographic variables

Section-2: Ongoing assessment tool

Rating scale was used to monitor the health condition of the low birth weight neonates.

Section-3: Observational checklist

Part A - General checklist

Part B - Nursing care of neonates with low birth weight.

Frequency and percentage distribution of demographic variables among neonate with low birth weight

n= 30

SI No.	Demographic variables	frequency	percentage
1.	Age of the baby		
	a. upto 2 days	11	36.7
	b. 2 days – 5 days	11	36.7
	c. 5 days and above	8	26.6
2.	Gender		
	a. Male	16	53.3
	b. Female	14	46.7
3.	Birth order of the neonate		
	a. First born	9	30.0
	b. Second born	10	33.4
	c. Third born	7	23.3

	d. Fourth born	4	13.3
4	Birth weight(kg)		
	a. 1.2	2	6.6
	b. 1.5	3	10.0
	c. 1.6	2	6.7
	d. 1.7	3	10.0
	e. 1.8	4	13.3
	f. 1.9	5	16.7
	g. 2.0	5	16.7
	h. 2.1	2	6.7
	i. 2.2	4	13.3
5.	Type of birth		
	a. Vaginal delivery	24	80.0
	b. Cesarean delivery	6	20.0
6.	Education status of the father		
	a. Illiterate	15	50.0
	b. Primary school level	9	30.0
	c. High school level	4	13.4
	d. Graduate	1	3.3
	e. Professionally qualified	1	3.3
7.	Education status of the mother		
	a. Illiterate	16	53.3
	b. Primary school level	10	33.3
	c. High school level	2	6.7
	d. Graduation	2	6.7
8.	Occupation of the father		
	a. Private or bussiness	3	10.0
	b. Coolie	27	90.0
	c. Unemployed	-	-
9.	Occupation of the mother		
	a. Private or bussiness	-	-
	b. Coolie	6	20.0
	c. Unemployed	24	80.0
10.	Type of family		
	a. Nuclear family	25	83.3
	b. Joint family	5	16.7
11.	Family income		
	a. 1000 per month	20	66.7
	b. 1001 – 3000 per month	7	23.3
	c. 3001 – 5000 per month	3	10.0
12	Marital status of parents		

	a. Consanguineous marriage	19	63.3
	b. Non consanguineous marriage	11	36.7
13	Health information through		
	a. Media (radio, TV, movie)	14	46.7
	b. Health personnel		23.3
	c. Friends & neighbours	7	30.0
		9	

Association between demographic variables of mothers and effectiveness of selected nursing measures of neonate with Low Birth Weight

n=30

Demographic variable	Initial Assessment score				□ 2	Final Evaluation score				□ 2
	Severe health deterioration		Mild health deterioration			Mild health deterioration		Normal health condition		
Age of the neonate	N	%	N	%		N	%	N	%	
Age of the baby										
Up to 2 days	5	16.7	6	20.0	0.551	1	3.3	10	33.3	1.285
2 days – 5 days	6	20.0	5	16.7		1	3.3	10	33.3	
5 days and above	3	10.0	5	16.7		2	6.7	6	20.0	
Gender										
Male	8	26.7	8	26.7	0.153	2	6.7	14	46.7	0.021
Female	6	20.0	8	26.7		2	6.7	12	40.0	
Birth weight (Kg) neonate										
First born	4	13.3	5	16.7	0.523	1	3.3	8	26.7	0.611
Second born	4	13.3	6	20.0		1	3.3	9	30.0	
Third born	4	13.3	3	10.0		1	3.3	6	20.0	
Fourth born	2	6.7	2	6.7		1	3.3	3	10.0	
Birth weight (Kg)										
1.2	2	6.7	-	-	30.000			2	6.7	7.500
1.5	3	10.0	-	-	p>0.05			3	10.0	p>0.0
1.6	2	6						2	6.7	5
1.7	3	7						3	10.0	
1.8	4	10.0						4	13.3	
1.9		13.3	5	16.7		1	3.3	4	13.3	
2.0			5	16.7		1	3.3	4	13.3	
2.1			2	6.7		-	-	2	6.7	
2.2			4	13.3		2	6.7	2	6.7	
Type of birth										
Vaginal delivery	12	40.0	12	40.0	0.536	4	13.3	20	66.7	1.154

Cesarean delivery	2	6.7	4	13.3		-	-	6	20.0	
Educational status of the father										
Illiterate	8	26.7	7	23.3	2.054	3	10.0	12	40.0	1.538
Primary school level	4	13.3	5	16.7		1	3.3	8	26.7	
High school level	2	6.7	2	6.7		-	-	4	13.3	
Graduate			1	3.3		-	-	1	3.3	
Professionally qualified			1	3.3		-	-	1	3.3	



Demographic variable	Initial Assessment score				Final Evaluation score					
	Severe health deterioration		Mild health deterioration		□ ₂	Mild health deterioration		Normal health condition		□ ₂
Education status of the mother										
Illiterate	9	30.0	7	23.3	2.528	3	10.0	13	43.3	1.118
Primary school level	4	13.3	6	20.0		1	3.3	9	30.0	
High school level			1	3.3		-	-	2	6.7	
Graduate	1	3.3	2	6.7		-	-	2	6.7	
Occupation of the father										
Private of business	1	3.3	2	6.7	0.238	-	-	3	10.0	0.513
Collie	13	43.3	14	46.7		4	13.3	23	76.7	
Unemployed										
Occupation of the mother										
Private of business					0.429					0.231
Collie	11	36.7	14	46.7		3	10.0	22	73.3	
Unemployed	3	10.0	2	6.7		1	3.3	4	13.3	
Type of family										
Nuclear family	11	36.7	14	46.7	0.429	3	10.0	22	73.3	0.231
Joint family	3	10.0	2	6.7		1	3.3	3.3	13.3	
Family income										
Rs.1000 per month	10	33.3	10	33.3	0.344	1	3.3	19	63.3	6.944 > 0.05
Rs.1001 – 3000 per month	3	10.0	4	13.3		3	10.0	4	13.3	
Rs.3001 – 5000 per month										
Rs.5001 & above	1	3.3	2	6.7				3	10.0	
Marital status of parents										
Consanguineous Marriage	11	36.7	8	26.7	2.625	2	6.7	17	56.7	0.353
Non consanguineous Marriage	3	10.0	8	26.7		2	6.7	9	30.0	
Health information through										
Media (Radio, TV, Movie)	9	30.0	5	16.7	3.948	3	10.0	11	36.7	2.184
Health personnel	3	10.0	4	13.3		1	3.3	6	20.0	

Friends & Neighbours	2	6.7	7	23.3		-	-	9	30.0	
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SUMMARY

Descriptive evaluative research design was adopted to evaluate the effectiveness on selected nursing measures of neonate with low birth weight. Individualized nursing measures was provided to neonates those who met the inclusion criteria. The convenient sampling technique was administered and sample size determined as thirty. Ongoing assessment was done with the rating scale prepared to analyze the health condition of the neonate with low birth weight and the standard nursing care was prepared to render care as changing the position every two hours, maintenance of breathing, maintenance of thermoregulation, nutrition and hydration, vaccination, and follow up care.

CONCLUSION :

This study helps to assessed the effectiveness of selected nursing measures of neonates with low birth weight babies. The results revealed that selected nursing measures had significant effect in reducing the severe health deterioration of low birth weight babies and improve the physiological health status of the babies.

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