



The Effect of Educational Intervention On Knowledge Regarding Care Of Neonatal Jaundice Among Mothers Of Preterm Babies In Selected Hospitals.

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ABSTRACT

Neonatal jaundice is very common and is present in 60% of term babies and up to 80% of premature babies. The jaundice usually appears between 24 and 72 hours of age and increases to its peak value after the baby has been discharged. Thus, early discharge of a new-born after delivery places the responsibility of detecting jaundice usually on the parents when follow-up in hospital is not feasible due to limited access to health care or infrequent home visits by a health-care worker. However, the ability of mothers to correctly detect jaundice in their new-borns is largely unknown. Therefore, to ascertain the ability of mothers to correctly detect significant jaundice in new-born is very necessary.

Nurses are the healthcare professionals who have the most contact with new mothers. Improving mothers' knowledge will help with early recognition of Neonatal jaundice, prompt and appropriate intervention. This study highlights effects of educational intervention on knowledge regarding care of neonatal jaundice among postnatal mothers admitted in hospitals.

Objectives of the Study

1. To identify the knowledge regarding care of neonatal jaundice among mothers of preterm babies.
2. To assess the effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies.
3. To find out association between the level of knowledge with demographic variables.

Materials and method

An evaluative study with Pre- experimental one-group pre-test post-test design was used to assess the effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies admitted in selected hospitals. 60 samples were taken using Non Probability Convenient Sampling from selected hospitals. The data was collected using self-structured demographic data and self-structured knowledge questioner.

Results: Descriptive and inferential statistics are used for analysis of the data. Researcher applied paired t-test for the effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies. Average knowledge score in pre-test was 4.6 which increased to 16.1 in post-test. T-value for this test was 32.7 with 59 degrees of freedom. Corresponding p-value was small (less than 0.05), null hypothesis is rejected. It is evident that the knowledge among the mothers of preterm babies improved significantly after educational intervention.

Conclusion: Neonatal jaundice is the most common condition requiring medical attention in the 1st week of life and almost 60% of term neonates and almost 80% of preterm neonates develop jaundice. Since p-value was small (less than 0.05), null hypothesis is rejected. It is evident that the knowledge among the mothers of preterm babies improved significantly after educational intervention.

Keyword: Assess Effect, educational intervention, Neonatal Jaundice and preterm babies.

INTRODUCTION

Increased bilirubin level in the blood is known as Neonatal jaundice. It is very common and is present in 60% of term babies and up to 80% of premature babies. The new born have the extra uterine life for first 4 weeks. The first month of a baby's life is the most cardinal. The mother knowledge is play an important role in protects from harm and enhancing the new-born's adaptation to the new environment. Health professionals can promote mother to prepare mentally for particular situation with adequate information.¹

The jaundice usually appears between 24 and 72 hours of age and increases to its peak value after the baby has been discharged. Hence, early discharge of a new-born after delivery makes the responsibility of identifying jaundice usually on the parents when follow-up in hospital is not feasible

due to limited access to health care or infrequent home visits by a health-care worker. Therefore, to learn the ability of mothers to correctly identify significant jaundice in new-born is very important.⁴

Poor care-seeking behaviour of families may be responsible for the high prevalence of complications of new-born jaundice in the developing world. Nurses are the healthcare professionals who have the most contact with new mothers. Improving mothers' knowledge will help with early recognition of Neonatal jaundice, prompt and appropriate intervention. This study highlights effects of educational intervention on knowledge regarding care of neonatal jaundice among postnatal mothers admitted in hospitals.⁵

METHODS AND MATERIALS

Study objectives

1. To identify the knowledge regarding care of neonatal jaundice among mothers of preterm babies.
2. To assess the effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies.
3. To find out association between the level of knowledge with demographic variables.

Study design

An evaluative study with Pre- experimental one-group pre-test post-test design was used to assess the effect of educational intervention on knowledge regarding care of neonatal jaundice among cataract patients. 60 samples were taken using Non Probability Convenient Sampling from selected hospitals. The data was collected using self-structured demographic data and self-structured knowledge interview questioner

FINDINGS-

SECTION I

Table 1: Description of samples according to Demographic characteristics by frequency and percentage

N=60

Sr. no.	Demographic variable	Category	Frequency	%
1	Age of the mother	< 20 years	3	5.0
		21 -30 years	51	85.0
		31 - 40 years	6	10.0
2	Educational status	Primary	15	25.0
		Secondary	24	40.0
		High School	15	25.0
		Graduation & above	6	10.0
3	Occupation of the mother	Homemaker	60	100.0
4	Religion	Hindu	26	43.3
		Muslim	21	35.0

		Christian	13	21.7
5	Type of Family	Nuclear	19	31.7
		Joint	41	68.3
6	Monthly income of the family	Rs. 10,000 – 20,000	9	15.0
		Rs. 20,001 – 30,000	25	41.7
		Rs. 30,001 – 40,000	26	43.3
7	Number of children	One	33	55.0
		Two	23	38.3
		Three	4	6.7
8	Birth weight of the baby	Less than 2499g	3	5.0
		2500g- 3000g	39	65.0
		3001g- 4000g	18	30.0
9	Previous history of any child suffered from neonatal jaundice.	Yes	20	33.3
		No	40	66.7
10	If yes what is the treatment given.	Expose to sunlight	11	18.3
		Phototherapy	6	10.0
		No treatment given	3	5.0

Table no 1 show that majority 85% of the mothers of preterm babies had age 21-30 years ,5% of them had age less than 20 years and 10% of them had age 31-40 years. The majority 40% of them had secondary education, 25% of them had primary education and high school education and 10% of them had graduation and above. All of them were homemakers. The majority 43.3% of them were Hindu, 35% of them were Muslim and 21.7% of them were Christian.31.7% of them had nuclear family and 68.3% of them had joint family.15% of them had monthly family income Rs.10000-20000, 41.7% of them had family income Rs.20001-30000 and 43.3% of them had family income Rs.30001-40000.55% of them had one child, 38.3% of them had two children and 6.7% of them had three children.5% of the babies had birth weight less than 2500 gm, 65% of them had birth weight 2500-3000gm and 30% of them had birth weight 3001-4000 gm.33.3% of them had previous history of any child suffered from neonatal jaundice.18.3% of them were given Expose to sunlight as treatment, 10% of them were given phototherapy and 5% of them did not had treatment.

Section III

Analysis of data related to the effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies.

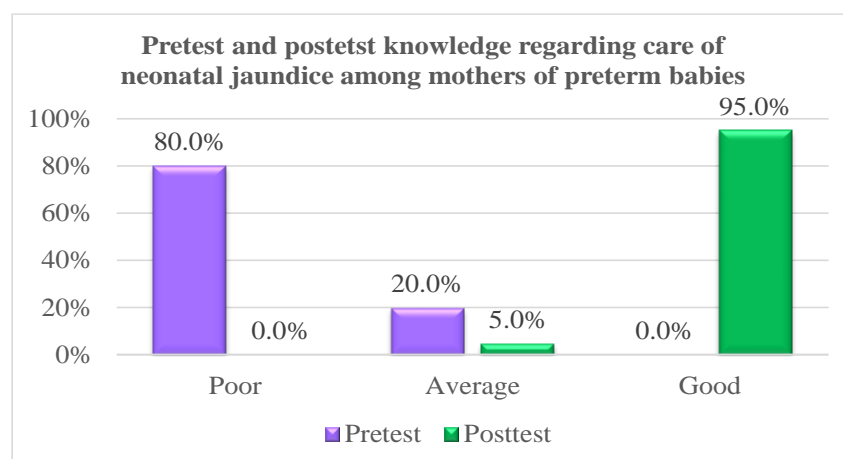


Figure no 1: Effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies

Figure no 1 Bar graph shows that in pre-test, 80% of the mothers of preterm babies had poor knowledge (score 0-6) and 20% of them had average knowledge (score 7-13) regarding care of neonatal jaundice. In post-test, 5% of the mothers of preterm babies had average knowledge (score 7-13) and 95% of them had good knowledge (score 14-20) regarding care of neonatal jaundice. This indicates that the knowledge among the mothers of preterm babies improved remarkably after educational intervention.

Section II

Analysis of data related to the knowledge regarding care of neonatal jaundice among mothers of preterm babies.

Table 2: Knowledge regarding care of neonatal jaundice among mothers of preterm babies

N=60

Knowledge	Pre-test	
	Frequency	%
Poor (Score 0-6)	48	80.0
Average (Score 7-13)	12	20.0
Good (Score 14-20)	0	0.0

Table No 2 shows that 80% of the mothers of preterm babies had poor knowledge (score 0-6) and 20% of them had average knowledge (score 7-13) regarding care of neonatal jaundice.

Section III

Analysis of data related to the effect of educational intervention on knowledge regarding post-operative care of eye surgery among cataract patients

Table 2: Effect of educational intervention on knowledge regarding post- operative care of eye surgery among cataract patients

N=60

Knowledge	Pre-test		Post-test	
	Frequency	%	Frequency	%
Poor (score 0-5)	58	96.7	0	0.0
Average (Score 6-10)	2	3.3	1	1.7
Good (score 11-15)	0	0.0	59	98.3

Table no 2 shows, in pre-test, 96.7% of the cataract patients had poor knowledge (Score 0-5) and 3.3% of them had average knowledge (6-10) regarding post-operative care of eye surgery. In post-test, 1.7% of the cataract patients had average knowledge (Score 6-10) and 98.3% of them had good knowledge (11-15) regarding post-operative care of eye surgery. This indicates that the knowledge among the cataract patients regarding post-operative care of eye surgery improved remarkably after education intervention

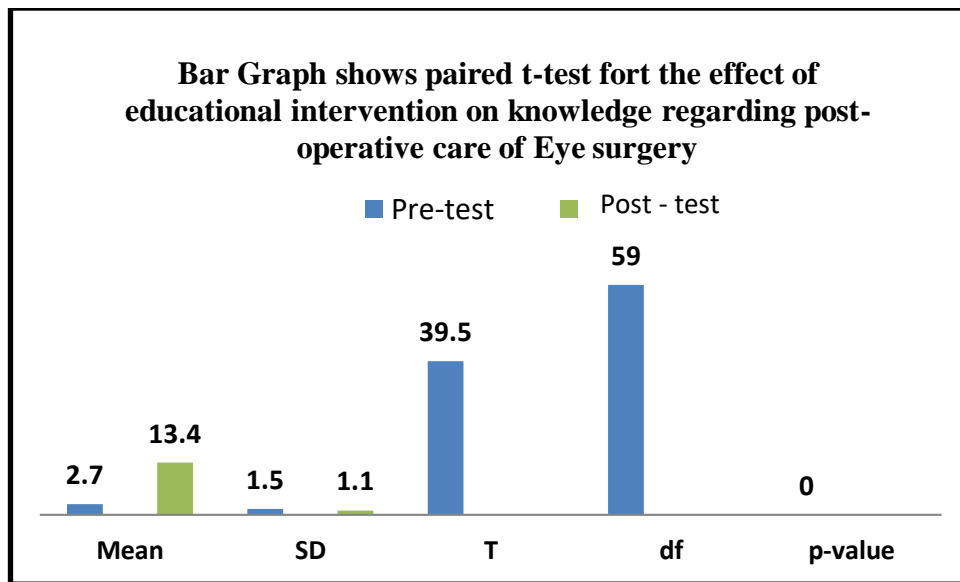


Figure no 2: Paired t-test for the effect of educational intervention on knowledge regarding post-operative care of eye surgery among cataract patients

Figure no 2, bar graph shows, researcher applied paired t-test for the effect of educational intervention on knowledge regarding post-operative care of eye surgery among cataract patients. Average knowledge score in pre-test was 2.7 which increased to 13.4 in post-test. T-value for this test was 39.5 with 59 degrees of freedom. Corresponding p-value was small (less than 0.05), the null hypothesis is rejected. It is evident that the knowledge among cataract patients improved significantly after educational intervention regarding knowledge on post-operative care of eye surgery.

Section IV

Analysis of data related to association between the levels of knowledge with demographic variables.

Table 3: Fisher's exact test for association between the levels of knowledge with demographic variables

N=60

Sr. No	Demographic variable		Knowledge		p-value
			Average	Poor	
1	Age of the mother	< 20 years	1	2	0.279
		21 -30 years	9	42	
		31 - 40 years	2	4	
2	Educational status	Primary	4	11	0.962
		Secondary	4	20	
		High School	3	12	
		Graduation & above	1	5	
3	Religion	Hindu	10	16	0.446
		Muslim	5	10	
		Christian	5	14	
4	Type of Family	Nuclear	5	14	0.493
		Joint	7	34	
5	Monthly income of the family	Rs. 10,000 – 20,000	4	5	0.057
		Rs. 20,001 – 30,000	2	23	
		Rs. 30,001 – 40,000	6	20	
6	Number of children	One	8	25	0.683
		Two	4	19	
		Three	0	4	
7	Birth weight of the baby	Less than 2499g	1	2	0.439
		2500g- 3000g	9	30	
		3001g- 4000g	2	16	
8	Previous history of any child suffered from neonatal jaundice.	Yes	5	15	0.511
		No	7	33	

Table no 3 shows, since all the p-values are large (greater than 0.05), none of the demographic variables was found to have significant association with the knowledge regarding care of neonatal jaundice among mothers of preterm babies.

CONCLUSION

The overall experience of conducting this study was satisfying one, as there was good co-operation from mothers and authorities in selected setting for the study. The study was a new learning experience for the investigator. The purpose of the study was to assess the effect of educational intervention on knowledge regarding care of neonatal jaundice among mothers of preterm babies. The research was a learning experience for the investigator which gave her better exposure. In this study since the ($p < 0.05$) H_0 (null hypothesis) was rejected. It is evident that the educational intervention improved the knowledge regarding care of neonatal jaundice among mothers

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