A QUASI EXPERIMENTAL STUDY TO EVALUATE THE IMPACT OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICES OF HEALTH CARE PROVIDERS REGARDING ESSENTIAL NEW BORN CARE AT THE SELECTED DISTRICT HOSPITALS OF HARYANA

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ABSTRACT

The present study was undertaken to assess the knowledge and practices of staff nurses regarding essential newborn care in selected government Hospitals of Haryana. Newborn health and survival depend on the care given to the newborn. Although newborn care is a very essential element in reducing child mortality, it often receives less than optimum attention. Various reasons can be attributed to poor health of the newborn. Health of the newborn has been neglected despite the huge mortality rates and most neonatal deaths are unseen and undocumented. Major causes of newborn deaths include birth asphyxia (21 percent), infections of tetanus, sepsis, meningitis, pneumonia and diarrhoea (42 percent). The birth process was the antecedent cause of 2⁄3rd of deaths as a result of infections; lack of hygiene at child birth and during newborn period and home deliveries without skilled birth attendants. Factors such as low income, poverty, illiteracy, home deliveries, i.e. lack of skilled care at birth, no health system at the grass roots, dysfunctional distant facilities, low demand for newborn care and harmful traditional practices can be associated with poor newborn health and survival.

Key Words: Essential new born care, Health care providers, World Health Organization, Planned teaching programme.

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INTRODUCTION

The birth of a baby is one of life's most wondrous moments. It is the awe-inspiring and emotional event that can occur in one's lifetime. After 9 months of anticipation and preparation, the neonate arrives amidst a of flurry of excitement. Immediately after birth, the newborn must make rapid adjustment to successfully adapt to life outside the womb.

Neonatal period is vulnerable, the first day of life (24 hours) is even more critical. 2.8 million babies die across the world during the first 27 days of birth, of which death during the first day of birth alone accounts for one million such deaths. In India, over 300,000 newborn deaths happen on the very first day of birth. Thus, India accounts for about one-third of all babies dying globally on the first day of birth.

According to New estimates in Levels and Trends in Child Mortality 2014 it showed that, in 2013, globally 6.3 million children under five years of age died from mostly preventable causes. Compared with 2012, the 2013 numbers show a reduction of 200,000 deaths. The reduction is only marginal as there are still 17,000 child deaths every day in the world. In 2013, 2.8 million babies across the world died during this period. The 2.8 million neonatal deaths account for 44 per cent of all under-five deaths in children.

The objectives of the study are:

1. To assess the knowledge and practices of health care providers regarding 'Essential New Born Care' in the selected district hospitals of Haryana before administration of planned teaching programme (PTP).
2. To assess the effectiveness of planned teaching programme in terms of gain in knowledge, and improvement in practices of health care providers regarding 'Essential Newborn Care'.
3. To find out the correlation between knowledge and practice scores of health care providers regarding 'Essential Newborn Care'.
4. To correlate the findings with the selected demographic variables of health care providers

HYPOTHESES

The hypothesis will be tested at 0.05 level of significance.

H1: The mean post-test knowledge score of health care providers who underwent PTP will be significantly higher than the mean pre-test knowledge score regarding essential new born care.

H2: The mean post-test practice score of health care providers who underwent PTP will be significantly higher than the mean pre-test practice score on ENC.

H3: There will be a significant relationship between knowledge and practice scores of health care providers on ENC.

The study was delimited to operational level nurses:

Sample is limited only to health care providers working in selected units of district hospitals of Haryana.

MATERIALS AND METHODS

The study aims at assessing the knowledge and practices of health care providers regarding essential new born care. Therefore a structured tool was prepared to assess the knowledge and practice of staff nurses, working in the M.C.H. Department of Government Hospital of Haryana. 100 samples were selected from Children Wards and Labour Room and 100 samples were selected from post natal wards of maternity department.

Preliminary drafting of the tool was prepared after extensive review of literature and after consulting with subject experts. An evaluative experimental research approach was adopted to accomplish the objectives of the study. A Pre-experimental design is used for study. This study was conducted in selected government Hospitals of Haryana. The study population consists of 200 staff nurses selected by Using multistage random sampling technique and convenient sampling technique that fulfil the criteria using knowledge questionnaires and check list. The staff nurses of both experimental and control group were matched in relation to sample characteristics i.e. age of staff nurse, martial status, monthly family income, professional qualification, years of experience and attendance of any service programme related to new born care. The researcher used 30 multiple choice questions to assess knowledge regarding essential

new born care and each question carried one mark. Maximum score was 30 and minimum score was 0. To assess practice of staff nurses, a checklist was used containing 50 items, Maximum score was 50 and minimum score was 0.

DISCUSSION

It deals with analysis, interpretation and discussion of data obtained from 200 staff nurses from selected government Hospitals of Haryana. Kerlinger defined analysis, as "The categorizing, ordering, manipulating and summarizing of data to obtain answers to research questions". The purpose of analysis is to reduce the data to be in intelligible and interpretable form, so that the relations of research can be tested.

Table 1: Showing the Variables of study samples

Independent Variable	Study sample	Dependent Variable
Age Marital Status Qualification Years of experience.	Pre-experimental group 200.	Knowledge and Practice Scores of Staff Nurses in selected Hospitals of Haryana

Table 2: Showing the Criterion of Measurement used to assess knowledge and practice of study samples

Criterion of Measurement			Level of practice score	Percentage	Score
Knowledge	Scores	Percentage			
Below Average	≤ 10	< 55 %	Satisfactory (≥ 75%)	76 – 100 %	23 - 30
Average	11 – 16	35 – 55 %	Moderate (55 - 75%)	51 – 75 %	16 - 22
Good	17 – 23	55 – 75 %	Unsatisfactory (< 55%)	≤ 50 %	0 - 15
Excellent	24 – 30	≥ 75 %			

Demographic characteristics of health care providers.

The data revealed that majority of subjects i.e. 83 (41.5%) are in age group of 30-39 years and the least number i.e. 10 (5%) in the age range 50 years. Marital status wise distribution of health care providers under study revealed that majority of subjects i.e. 151 (75.5%) were married and the least number i.e. 6 (3%) were widows. As regards distribution of health care providers according to their professional qualification, the data showed that majority of study subjects i.e. 188 (94%) subjects were qualified as General Nursing and Midwifery and least 2 (1%) had done M.Sc. Nursing. Majority of subjects i.e. 83 (41.5%) were having job experience up to 6-10 years, and least number of subjects i.e. 9 (4.5%) were having 16-20 years of experience.

Table 3: Distribution of subjects under study according to their pre-test and post-test level of knowledge regarding 'essential newborn care **N=200**

Level of knowledge (scores)	Pre test		Post test	
	f	%	f	%
Below Average (≤ 10)	1	0.5	0	0.0
Average (11-16)	27	13.5	0	0.0
Good (17-23)	98	49.0	5	2.5
Excellent (24-30)	74	37.0	195	97.5

Table 4: Comparison of overall pre-test and post-test knowledge mean scores of health care providers regarding essential newborn care **N=200**

Assessment of knowledge	Overall knowledge scores of study subjects		Paired 't' test value
	Mean	SD	
Pre test	21.80	4.03	13.96* P<.001
Post test	25.82	1.39	

* p<.001= Significant at 1% level

Table 4.1: Domain wise comparison of pre-test and post-test knowledge scores among health care providers

Domains	Knowledge scores		Paired t test value
	Mean	Mean	
General- introduction			
Pre test	2.20	±0.71	4.85* df= 199, p<.001
Post test	2.51	±0.58	
Maintenance of respiration			
Pre test	5.74	±1.47	10.23* df= 199, p<.001
Post test	6.88	±0.68	
Prevention of hypothermia			
Pre test	6.54	±1.61	11.11*, df= 199, p<.001
Post test	7.89	±0.66	

Table 5: Distribution of subjects understudy according to their pre-test and post-test levels of practice regarding 'essential newborn care' **N=200**

Level of knowledge (scores)	Pre-test		Post-test	
	f	%	f	%
Unsatisfactory (<55%)	1	0.5	0	0.0
Moderate (55-75%)	149	74.5	0	0.0
Satisfactory (≥75%)	50	25	200	100.0

Maximum practice scores=150

Table 5.1: Comparison of pre-test and post-test practice scores among health care providers regarding 'Essential Newborn Care' **N=200**

	Practice score of subjects (0-150)					Paired 't' Test
	Range	**Mean**	**SD**	**Mean %**	**Mean difference %)**	
Pre-test	46 (80-126)	105.91	8.35	70.61	15.5	36.79* Df = 199 P<.001
Post-test	27 (113-140)	129.16	5.94	86.11		

No. of items = 50, Max knowledge scores = 150 * P<.001 = highly significant

Table 5.2: Distribution of subjects under study according to their pre-test and post-test levels of practice regarding immediate newborn care (within 90 minutes of birth) **N=200**

Level of practices (scores)	**Pre test**		**Post test**	
	f	**%**	**f**	**%**
Unsatisfactory (<55%)	3	1.5	0	0.0
Moderate (55-75%)	152	76.0	14	7.0
Satisfactory (≥75%)	45	22.5	186	93.0

No. of items=36; Maximum practice scores=108

DISCUSSION

- The findings of the study have been discussed in accordance with the objectives of study. The review of literatures depicts that staff nurses are required with more skill training in essential new born care and neonatal resuscitation. The present study was undertaken in preview to assess knowledge and practice of staff nurses regarding essential new born care in selected government Hospitals of Haryana.
- The study findings revealed Majority of subjects i.e. 83 (41.5%) were in age group of 30-39 years. Majority staff nurses 151 (75.5%) were married. Majority 81 (40.5%) of the subjects had Rs10.000/- or less than Rs.10,000/- as monthly income. Majority of study subjects i.e. 188 (94%) were qualified in General Nursing and Midwifery. Majority of subjects i.e. 83 (41.5%) were having job experience up to 6-10 years and Majority of subjects 115 (57.5%) did not update their knowledge.
- Pre test: out of 200 subjects, 1 (0.5%) had below average knowledge regarding 'essential newborn care'; 27 (13.5%) had an average knowledge; 98 (49%) had good knowledge; and rest 74 (37%) had an excellent knowledge.
- After the administration of planned teaching programme on 'Essential Newborn Care', majority of subjects i.e. 195 (97.5%) had excellent knowledge and rest 5 (2.5%) had good knowledge.
- Pre-test and Post-test Practice levels of health care providers showed that in the pre-test, out of 200 subjects, 1 (0.5%) subjects had unsatisfactory practices regarding 'essential newborn care'; 149 (74.5%) had moderate practices; and rest 50 (25%) had satisfactory practices. After the administration of planned teaching programme on 'Essential Newborn Care', all subjects in the post test had satisfactory practices.

Table 6: Association of post test knowledge of health care providers with their selected socio demographic variables

N=200

Socio demographic variables	N	Post test level of knowledge				X^2
		Below Average	Average	Good	Excellent	
Age (in years)						
20-29	79	0	0	1	78	3.942 df =3, 0.268 (NS)
30-39	83	0	0	3	80	
40-49	28	0	0	0	28	
50 and above	10	0	0	1	9	
Marital status						
Married	151	0	0	3	148	5.478 df =3, 0.14(NS)
Unmarried	31	0	0	1	30	
Divorced	12	0	0	0	12	
Widow	6	0	0	1	5	
Monthly family income (Rs)						
≤ 10,000	81	0	0	0	81	11.12* df =3 0.011
10,001-20,000	13	0	0	2	11	
20,001-30,000	80	0	0	2	78	
30,001 and above	26	0	0	1	25	
Professional qualification						
General Nursing & Midwifery	188	0	0	5	183	0.327 df =3 0.955(NS)
B.Sc. (Nursing)	3	0	0	0	3	
Post Basic B.Sc Nursing	7	0	0	0	7	
M.Sc Nursing	2	0	0	0	2	
Experience						
0-5	51	0	0	0	51	3.032 df =4, 0.552(NS)
6-10	83	0	0	3	80	
11-15	42	0	0	1	41	
16-20	9	0	0	0	9	
above 20 years	15	0	0	1	14	
In-service education attended						
Yes	85	0	0	2	83	0.013 df =1, 0.909 (NS)
No	115	0	0	3	112	

P>.05 (NS) =Non significant, *p<.001=Significant at 1% level

CONCLUSION

The pre experimental study conducted on 200 staff nurses in selected Government Hospitals revealed that staff nurses required skill training regarding essential new born care and neonatal resuscitation. The study showed that there is a low correlation or slightly negative correlation between knowledge and practice among health care providers regarding

essential newborn care. This showed that knowledge had slightly inversely affected the practice of health care providers. Thus, the results showed that subjects, having higher knowledge scores, reported significantly less practice scores.

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