

Effectiveness Of The Planned Teaching Programme On Knowledge About Newborn Care Among Ann 2nd Year Students In K.S Nursing College Gwalior(M.P)

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Abstract

A Pre experimental study to assess the effectiveness of the planned teaching programme on knowledge about newborn care among ANM 2nd year students in K.S Nursing College Gwalior(M.P)

- To assess the existing knowledge of ANM 2nd year students on newborn care.
- To determine the effectiveness of planned teaching programme among ANM 2nd year students.
- To find out the association between knowledge score with their selected demographical variables.

The study was pre experimental in nature. This was conducted in K.S nursing college Gwalior. The research design used for this study was pre-experimental. The conceptual framework used for this study is based on Bertalanffy's general system theory (1968). The research design used for this was knowledge questionnaire. The data was collected to assess the level of knowledge about newborn care. The data collected was analyzed and interpreted by using descriptive and inferential statistics. Major findings of the study revealed that the knowledge score of the study in pretest 25% of students have adequate knowledge score, 75% of students have moderate knowledge score, and 0% have knowledge score and mean was 16.5, standard deviation 0.50. In post test 35% of students have an inadequate knowledge score, 65% of the students have an adequate knowledge score, 0% of the students have inadequate knowledge score and mean was 17.45 and standard deviation was 0.42. The study proves that there was significant association between demographic variables such as age, sex, professional of parents, religion, area of living, source of information and marital status. It can be concluded that in our study score was moderate regarding newborn care after implementation of structured teaching programme the knowledge of ANM 2nd year students was improved. Hence the structured teaching programme was effective.

Keywords: New born, planned teaching programme, new born care.

Date of Submission: 11-03-2020

Date of Acceptance: 25-03-2020

I. Introduction

Children all our future and our most precious resources. Health of the future children's depends on the nurturing practice adopted by the family. The first few days of life is a period of transition occurring all of a sudden from parasitic fetal life (intra uterine environment) to a completely independent (extra uterine life). The process of birth and adaptation to the new surroundings depend Upon number of adjustment on the newborn baby especially.

The first four weeks of life constitute the "neonatal period". The ideal basic needs for any new born includes breathing, warmth, cleanliness, and feeding mothers milk. Then all newborn babies require essential newborn care to minimize the illness and maximize their growth and development.

Nearly 50% of all infant deaths occur during the neonatal period. Half of this death occur in the first seven days due to pre-maturity, neonatal tetanus, birth asphyxia and infection, which can be prevented by proper and timely care of the new born .

(CSSM-1992 and family welfare – 1992)

Cleanliness at delivery reduce the risk of infection for the mother and baby, especially neonatal sepsis and tetanus, clean illness require mother, families and health professionals to avoid harmful traditional practice and prepare necessary material. In 1993.42% (1.7 million) of newborn death due to infection (neonatal tetanus sepsis, meningitis pneumonia, diarrhea). Two third of those infections were related to the birth process.

Neonatal tetanus causes more than half a million of these deaths (14% of the total). But babies may still die of other bacterial infection. Caused by lack of hygiene at birth and during the newborn period without precaution of hygiene are particularly.

The newborn baby care procedures begin immediately at birth. The best preparation is to have considered them and decided beforehand what procedures desired to newborn. For a hospital birth, there are

numerous routine procedures which can be administered, delayed or even refused. First time parents are often unaware that many of these routine procedures are not grounded in evidence-based practice, but are rather the product of ease and access for staff. Newborn care often receives less-than optimum attention. Although, over the past 25 years, child survival programs have helped reduce the death rate among children under age 5. The biggest impact has been on reducing mortality from diseases that affect infants and children more than 1 month old. As a result, the vast majority of infant deaths occur during the first month of life, when a child's risk of death is nearly 15 times greater than at any other time before his or her first birth. Unlike infant and under five mortality rates, reductions in neonatal mortality have been less in the developing countries.

Traditional care practices at home and in the community inevitably affect maternal and newborn health. In the countries of South Asia women often have many children who are closely spaced. Women maintain their full workload during pregnancy and restrict their diet due to fear of delivering a big baby. Lack of understanding of the urgency attached to newborn illnesses or obstetric emergencies, traditions of seclusion of mother and newborn, fatalistic outlook, belief in evil spirits, and lack of family finances to pay for care and transport also cause delay in deciding to seek care.

Mother and child health is one of the major concerns of public health throughout the world. Health education and increased knowledge of mothers in relation to their health is an important strategy for improving maternal health

Even with the best possible antenatal screening, any delivery can become a complicated one requiring emergency intervention. Therefore, skilled assistance is essential to delivery care. In the absence of midwives or nurses, TBAs (who usually perform home deliveries, often as a source of income) should be trained to identify complications, provide immediate first aid, and know when and where to refer Mothers for additional care.

It should also be remembered that the first priority for a delivery is to be safe, a traumatic and clean; and most maternal deaths are due to a failure to get skilled help in time for delivery complications.

A strategy was formed in Saving Newborn Lives (SNL) on recent data, research on effective interventions, and broad local participation.

Another point to be remembered that every mother has the right to receive information about each and every procedure that will be performed, as well as the right to either request for the procedure to be performed in the mother's room or that a parent/guardian accompany the newborn for each one. This includes weighing, measuring and the pediatrician's evaluation of the baby - all can be performed right there in the mother's room. The first responsibility was to be the welfare of the child, not to the comfort of the hospital staff nor arbitrary hospital policies

NEED FOR THE STUDY

In Indian 25 million babies are born every year. The **World Health Organization (WHO)** estimates that, more than 4 million new born die in their first month of life due to inadequate new born care in our country, current infant mortality rate (IMR) is around 45%. World it is 26% live birth, and in Karnataka state 62% live birth.

A survey conducted by the Institute of Health and Family Welfare, Hyderabad, reveals that Andhra Pradesh, with 62 infant's deaths for every 1,000 births has the highest infant mortality rate among south Indians states. The data collected shows that while states like Kerala and Tamil Nadu have managed to reduce their infant deaths considerably over the last 10 years, the situation in Andhra Pradesh has not changed much.

It is possible to increase prenatal survival and quality of human life through prompt and adequate of management of new born. So the care of new born is so much important. On account of above stated matters the researcher understood that appropriate care is very important for survival and healthy development of new born. Thus, it was in motivation for the researcher to undertake this study.

The common causes of new born death in other country are infection 52%, Asphyxia or lack of oxygen to fetus 20%, prematurity 15%, congenital malformation 14%, birth defects 11%, and other miscellaneous. Sepsis accounts for almost half of death occur during neonatal ineffective infant care, due to lack of awareness of mother account for increasing rate of mortality with respect to time after delivery.

Care is very important for survival and healthy development of newborn. Thus it was a motivation for the researcher to conduct this study.

According to WHO about 98% of newborn deaths occur in developing countries, where most newborns deaths occur at home. A cross-sectional survey carried out in an immunization clinics of western Nepal during 2006 reveals that, out of 240 mothers interviewed, 140 (58.3%) were planned home deliveries and 100 (41.7%) were unplanned. Only 46 (16.2%) women had used a clean home delivery kit and only 92 (38.3%) birth attendants had washed their hands. The umbilical cord was cut after expulsion of placenta in 154 (64.2%) deliveries and cord was cut using a new/boiled blade in 217 (90.4%) deliveries. Birth place was heated throughout the delivery in 88 (64.2%) deliveries. Only 100 (45.8%) newborns were wrapped within 10 minutes and 233 (97.1%) were wrapped within 30 minutes. Sixteen (10.8%) mothers did not feed colostrum to their

babies. Main reasons cited for delivering at home were 'preference' (25.7%), 'ease and convenience' (21.4%) for planned deliveries while 'precipitate labour' (51%), 'lack of transportation' (18%) and 'lack of escort' during labour (11%) were cited for the unplanned ones.

PROBLEM STATEMENT

A Pre experimental study to assess the effectiveness of the planned teaching programme on knowledge about newborn care among ANM 2 nd year students in K.S Nursing College Gwalior (M.P).

OBJECTIVES

- To assess the existing knowledge of ANM 2nd year students on newborn care.
- To determine the effectiveness of planned teaching programme among ANM 2nd year students.
- To find out the association between knowledge score with their selected demographical variables

HYPOTHESIS

H0-There is no significant association between the knowledge of ANM 2nd year students with their selected demographic variables.

H1-There is a significant difference between pretest and post-test knowledge of ANM 2 nd year students.

ASSUMPTION

- ANM 2nd year students may have some knowledge regarding newborn care.
- Planned teaching programme will enhance knowledge on newborn care among ANM 2 nd year students.

REVIEW OF LITERATURE

Review of literature is a key step in research process. It is used by investigator in the activities involved in identifying and searching for information and gaining insight in the problem selected for the study.

- Studies related to newborn care
- Studies related to prevention of newborn infection

Studies related to newborn care

- Review of literature of skin care

Dongre AR, Deshmukh PR, Garg BS, et.al (2008) study conducted on mother's knowledge related to care of the newborn. The study revealed that the educational status and age of the mothers had a significant influence on their knowledge regarding newborn care. The mothers who were 30 years or older and also had more than high school education demonstrated good skills in the care of their newborn. A study conducted on knowledge attitude and practices of mothers and knowledge of health workers regarding care of newborn umbilical cord in Nairobi. Samples included were 307 mothers of infants with less than 3 months of age attending child clinic and health workers in clinics were interviewed. 91% knew of need for hygiene of cord, 40% had good knowledge, 66% were good in practice, 79% of mothers were afraid to handling unhealed cord, and 50% of health workers had correct knowledge. Researchers found poor knowledge, attitude, and practice were associated with young poor mothers of low education

Review of literature on cord care

Kishore MS, et.al. (2009), study was conducted in the community involving mothers who had given birth in two hospitals in the Puttalam district in Sri Lanka. The intervention was a 4-day training programme and primarily aimed at increasing knowledge and skills of essential newborn care (ENC) among health care providers in the maternity units of these hospitals. Before the intervention, 144 mother–newborn pairs were followed-MP and interviewed at their households within 28–35 days of delivery. Three months after the intervention, 150 mother–newborn pairs were interviewed at home. Results revealed that there was a significant improvement in umbilical cord care practices at home following the intervention. Application of 'surgical spirit' on umbilical cord has declined from 71.5% in the pre-intervention to 45.3% in the post-intervention samples. Pre-intervention breastfeeding rates were high, and there wasn't any further improvement in the post-intervention. There was a 35% reduction in the proportion of newborns that developed any undesirable health events at home.

Review literature on Establishment of breast feeding:

KALACHELVI SOLOMON (2008) study conducted on, a maternal attitudes and trends in initiation of new born feeding in lady Hardinge Medical College, New Delhi in India. In this study 305 of the mothers were primi para and 297 multi para 95.01% of the mothers indicated inclinations about breast feeding 47.37% of the mothers who knew about breast feeding had been instructed by the doctors at some stage lastly the study was

concluded that clearly, better health education is called for regarding the early initiation of breast feeding and the importance of the colostrum's to new born weaning practices.

Studies related to prevention of newborn care infection

Review literature on prevention of infection

Bang AT, Desmukh MD (2009), study was carried out from April to May 2009 in 20 health care facilities within two districts of Gujarat. 70% of respondents said that standard infection control procedures were followed, but a written procedure was only available in 5% of facilities. Alcohol rubs were not used for hand cleaning and surgical gloves were reused in over 70%. Only 15% of facilities reported that wiping of surfaces was done immediately after each delivery in labour rooms. A few facilities had data on infections and reported rates of 3% to 5%. By this study the researcher felt the need improved information systems, protocols and procedures, and for training and research.

Review of literature of immunization:

VIJAYALAKSHMI.N (2007) cross-sectional study was conducted on Inequalities in immunization and breast feeding in an ethnically diverse urban area. Participants 20203 children born in Manchester UK. The result found that Black or black British infants had the highest rates of breast feeding at 2 weeks post-partum. Within the white ethnic group, lower percentages of immunization and breast feeding were significantly associated with living in a deprived area and with increasing parity. Practices that are protective of child health were consistently less likely to be adopted by white mothers living in deprived area.

Review of literature is on prevention of hypothermia:

KESTERTON AJCLELAND et.al (2009) study was conducted on mothers knowledge regarding impact of hypothermia on neonatal mortality in R.M Medical college and hospital, Chidambaram. 35 mothers were selected for the study. According to the study, mothers (17.14%) had inadequate knowledge, 25 mothers (71.4%) had moderately adequate knowledge, and four mothers (11.4%) had adequate knowledge regarding hypothermia and its impact on neonatal mortality. This study suggests that mother's knowledge plays a vital role in preventing hypothermia among newborns.

II. Research Methodology

RESEARCH APPROACH

A quantitative research approach was used.

RESEARCH DESIGN

Pre-experimental design one group pre-test post-test design without control group was selected.

Setting of study: The study was conducted among ANM 2 nd year students in K.S Nursing College Gwalior, MP.

Population:

In the present study, the population was ANM 2 nd year students in K S Nursing College Gwalior, MP.

Sample:

In the present study, the sample comprise of 40 A.NM 2 nd year students (18-30 years) in K.S Nursing College Gwalior, MP that fulfilled the criteria was selected.

Sampling Technique:

Non Probability (purposive sampling) was used in this study.

DEVELOPMENT OF TOOL

A structured questionnaire was prepared with the help of review of literature i.e. book journals, internet expert opinions, personal experiences and discussion with expert.

DESCRIPTION OF TOOL

The tool may two sections-

Section 1: Demographic data

This section of tool consists of items pertaining of demographical variable of students like age, sex, marital status, profession of parents, sources of information, area of living, religion regarding newborn care.

Section 2: knowledge questionnaire

This section consists of knowledge questionnaire to assess the pretest and post test knowledge regarding newborn care among ANM 2 nd year students in K.S Nursing College Gwalior MP. Total number of questionnaire is 30 related to newborn care.

SCORE PROCEDURE

For the convenience, the level of knowledge of the ANM 2 nd year students of the regarding newborn care was divided into adequate, moderate, inadequate.

Maximum -30

Minimum -0

LEVEL OF KNOWLEDGE	SCORE
Adequate	21-30
Moderate	11-20
Inadequate	1-10

CEITERION MEASURES

All the items of the tools were analyzed by using descriptive statistic (frequency distribution, percentage distribution and graphs) and inferential statistic (t- test).

PROCESS OF DATA ANALYSIS AND INTERPRETATION

Analysis of data was done in accordance with the objectives. It was done by using the descriptive and inferential statistics that is by calculating frequency, percentage distribution, t-test to identify the association of knowledge of newborn care among ANM 2 nd year students with selected variables. Reliability of tool was estimated by Carl Pearson’s relation co-efficient formula.

ANALYSIS AND INTEPRETATION OF THE DATA

The main objectives of the study are:

- To assess the existing knowledge of ANM 2 nd year students on newborn care.
- To determine the effectiveness of planned teaching programmed among ANM 2 nd year students.
- To find out the association between knowledge score with their selected demographical variables

The data has been organized and presented in 3 sections;

Section 1: Description of demographic variables of ANM 2 nd year students.

Section 2: Assessment of knowledge regarding on newborn care.

2.1: Assessment of knowledge before and after given structured teaching programmed.

Section 3: Association of pre-test knowledge which selected demographical variables.

Section 1: Demographic variables:

Table 1: frequency and percentage distribution of subjects by their selected variables (age, sex. profession of parents, religion, area of living, source of information, marital status.

N=40

CHRETERSTICS	CATEGORY	RESPONDENCE	
		NUMBER	PERCENT
Age	18-21	25	62.5%
	22-25	14	35%
	26-29	1	2.5%
	30 above	0	0
sex	female	40	100%
	male	0	0
professional of parents	medical profession	12	30%
	teaching profession	21	52.5%
	agriculture	4	10%
	others	3	7.5%
Religion	Hindu	39	97.5%
	Muslim	1	2.5%
	Christian	0	0%
	Sikh	0	0%
Area of living	Rural	25	62.5%
	Urban	15	37.5%
Source of information	Media	18	45%
	Workshop	6	15%
	Classroom	11	27.5%
	Hospital	5	12.5%
Marital status	Married	12	30%
	Unmarried	28	70%
	Divorce	0	0%

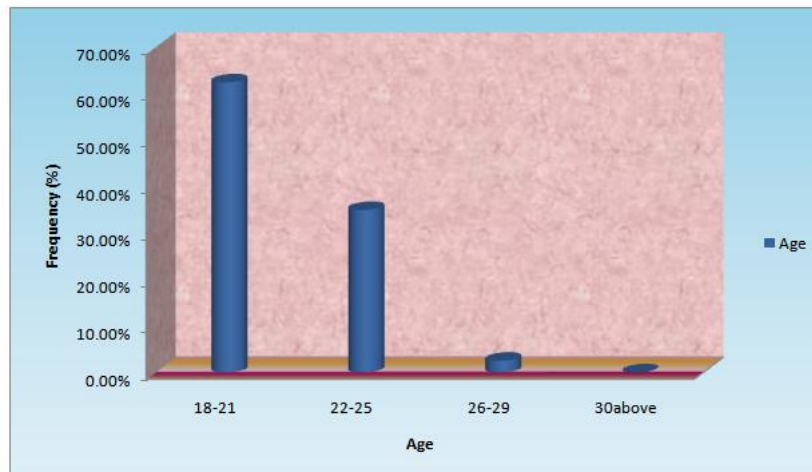


Figure 1:-Percentage distribution of samples according to their age

Figure 1 shows percent wise distribution of students in relation to their age group depicts that highest number of students was in age group 18-21 years (62.50%) and students of age group above 30 years were less in number (0%).

SECTION: B Assessment of knowledge regarding essential newborn care.

Table: 4 Mean and standard Deviation of pre- test and post test knowledge regarding newborn care among ANM 2 nd year students.

Level of knowledge	Mean	Standard deviation	Df	Calculated value (t)	Table value	Level of significant
Pre-test	16.5	0.50	39	407.6	2.02	significant
Post-test	17.45	0.42				

N=40

(P<0.05 significance)

Table 4: shows that the mean pretest knowledge score was 16.5 and mean post test knowledge score was 17.45. The difference between pretest and post test knowledge score was statistically significant.

Hence it was inferred that there was an increase in the level of knowledge after structured teaching program regarding newborn care among ANM 2 nd year students So, the research hypothesis was accepted.

Section 3: association of pre-test knowledge which selected demographical variables.

Table 6: Association between Pretest level knowledge and demographic variable among ANM 2 nd year students regarding newborn baby. N=40

S. NO	DEMOGRAPHIC VARIABLES	ADEQUATE		MODERATE		INADEQUATE		DEGREE OF FREEDOM (df)	CALCULATED VALUE (x2)	TABULATED VALUE	LEVEL OF SIGNIFICATION
		F	%	F	%	F	%				
1	Age										
	a) 18-21	2	5%	25	62.5%	0	0%	6	38.31	12.59	#
	b) 22-25	2	5%	10	25%	0	0%				
	c) 26-29	0	0%	1	2.5%	0	0%				
d) 30above	0	0%	0	0%	0	0%					
2	Sex										
	a) Female	15	37.5%	25	62.5%	0	0%	2	8.10	5.99	#
b) Male	0	0%	0	0%	0	0%					

3	profession of parent										
	a) Medical profession	1	2.5 %	11	27.5 %	0	0%	6	23.96	12.59	#
	b) Teaching profession	2		19		0	0%				
	c) Agricultu	2	5%	2	47.5 %	0	0%				
d) other	1	5% 2.5 %	2	5% 5%	0	0%					
4	Religion							6	64.70	12.59	#
	a) Hindu	4	10%	26	65%	0	0%				
	b) Muslim	5	12.5 %	5	12.5 %	0	0%				
	c) Christian	0	%	0	%	0	0%				
d) Sikh	0	0% 0%	0	0% 0%	0	0%					
5	Area of living							2	6.01	5.99	
	a) Rural	4	10%	19	47.5 %	0	0%				
b) Urban	6	15%	11	27.5 %	0	0%					
6	Source of information							6	17.93	12.59	#
	a) Media	4	10%	14	36%	0	0%				
	b) Worksho	2	5%	4	10%	0	0%				
	p	1	2.5 %	10	25%	0	0%				
c) Classroo	0	%	5	72.5 %	0	0%					
d) Hospital		0%									
7	Marital status							4	10.29	9.49	#
	a) Married	3	7.5 %	8	20%	0	0%				
	b) Unmarrie	7	%	22	55%	0	0%				
	d	0	17.5 %	0	0%	0	0%				
c) Divorce		0%									

III. Conclusion

On the basis of findings of the study obtained, following conclusion were drawn. The level of knowledge was less when assessed after conducting pre-test, whereas the score had increase in post-test after the implementation of structured teaching programme on newborn care.

From the finding of the study, it is concluded that highest percentage of level of knowledge (62.5%) was in age group 18-21 years, Maximum samples 100% were in sex group of female, highest percentage of their profession of parents was in 52.5%, maximum samples 85% belong to Hindu religion, maximum samples 62.5% belong to rural area, the highest percentage of source of information is taken from media (45%), most of the students 70% were unmarried.

During posttest level of knowledge was improve. After pre and posttest assessment of level of knowledge regarding newborn care significant difference between the pre and post test score was demonstrating by using “t” test and it was found that the structured teaching programme was effective tool.

Study proved that there is association between pre-test knowledge score and demographic variables that are age, sex, and area of living, source of information, marital status, religion and professional of parents.

Thus the investigator concluded that the structured teaching programme was helpful in increase the knowledge of newborn care among ANM 2 nd year students in K.S Nursing college Gwalior.

NURSING IMPLICATIONS

The result of the study proved that ANM 2 nd year students in K.S Nursing College Gwalior had a significant effect in their knowledge regarding newborn care.

The findings of this study have implication for various aspects of nursing that are:

- Nursing Education
- Nursing Practice
- Nursing Administration
- Nursing Research

NURSING EDUCATION

- Nursing curriculum equip the nursing personals with the essential and updated knowledge, skills and professional attitude/equities so that they are able to assume their duties and responsibilities once they become fully fledged professional nurses.
- The nursing personnel are challenged to provide standard and quality nursing care. This be met only by keeping abreast with current trends an ever changing advanced health technology.
- The nurse in the role teacher should educate the nursing personals regarding newborn care.
- The nurse educator should educate the nursing personals in the nursing profession so as to make them ready to take safe care of the newborn.

NURSING PRACTICE

- The students have planned and allotted time and day to provide the knowledge.
- They can encourage the nursing personnel's to participate the test.
- Research based nursing practice is the need of the society. On the basis of research, the nursing students' knowledge is modified.

NURSING ADMINISTRATION

- The study assists the nursing administrative authorities to initiate and increase the knowledge level.
- It is important for nurse administrator to facilitate programme to improve the knowledge of nursing students regarding newborn care.

NURSING RESEARCH

- More researcher can be done on longitudinal study basis and taking more sample generalizability of finding is possible.
- Large scale studies can be conducted

IV. Recommendations

Based on the finding of the study, there are following recommendations for further research:

- The large scale study can be conducted on large sample to generalize the findings.
- The study can be carried out among adults.
- A comparative study can be conducted to assess the level of knowledge regarding newborn care.
- A similar study can be conducted among the Nursing personnel's.
- A Pre-experimental study can be conducted regarding the newborn care.
- The study can be done on teachers regarding newborn care.

LIMITATION

The study is limited to:

- Nursing personnel under the age of 18-30years.
- Nursing personnel who are willing to participate in the study.
- Sample size was limited to 40.
- Those who are able to understand English.

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Kavita Sharma. “Effectiveness Of The Planned Teaching Programme On Knowledge About Newborn Care Among Anm 2nd Year Students In K.S Nursing College Gwalior(M.P).” *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 9(2), 2020, pp. 24-32.