International Journal of Neonatal & Pediatric Nursing
Volume 1 Issue 1

Assess the Effectiveness of Planned Teaching Program on Knowledge Regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) Among B.Sc. Nursing IV Year Students of Selected Nursing Colleges of Kota (Rajasthan)

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ABSTRACT

World Health Organization (WHO) stated that 1/3 rd. of neonatal deaths occur due to the improper care or due to infections e.g. Pneumonia, tetanus, neonatal diarrhea etc. Most of the newborn deaths can be avoided by effective management of complications and management of infection, In order to reduce the infant mortality rate and to contribute to the health for all by 2025 AD goal, is the responsibility of each health care providers, to control and prevent neonatal infection especially in a neonatal intensive care unit, where care specialized is rendered to the citizens of tomorrow. As IMNCI has become a developing need, the students of clinical calling ought to likewise be tended to pretty much all the more up to date ideas with the utilization of proper methods. Consequently IMNCI is additionally included educational plan of all the clinical understudies including nursing yet there is have to make the understudies progressively mindful of this required idea. Organized Teaching is an instrument utilized by educators and staff to sort out understudy work and give access to Content Curriculum. The "structure" comprises of adjustments in nature, concrete and visual methods of introducing data, and proactive schedules. It is separately structured around every understudy's qualities, aptitudes, interests and needs. The study was undertaken to find The Effectiveness of Planned Teaching Program on Knowledge Regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) among B.Sc. Nursing IV Year students of selected Nursing Colleges of Kota (RAJ). In view of the nature of the problem selected and to accomplish the objectives of the study, Quantitative research approach was utilized to assess the adequacy of planned teaching programme. Pre experimental research design [one group pre -test – post -test] was utilized in the examination to evaluate the knowledge regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) among B.Sc. Nursing IV Year students of selected Nursing Colleges of Kota (RAJ). After the presentation of the arranged showing program, the post-test measures demonstrated that there is a critical increment in the information on the B.Sc. Nursing IV year understudies in content zones with respect to NG Tube taking care of. The mean post-test information score (21.91) was altogether higher than their mean pre-test information score (12.76) recommending that the arranged instructing program was satisfactorily compelling in expanding the information on B.Sc. Nursing fourth year understudies. It is evident that the demographic variables such as age, gender, religion and educational status of parents the calculated chi square value is less than the critical value at $p<0.05$ level of significance, so null hypothesis is accepted and research hypothesis is rejected. Socio-Demographic variables such as area of residence, type of family and previous sources of information regarding IMNCI the calculated chi square value is higher than the critical value at $p<0.05$ level of significance, So null hypothesis is rejected and research hypothesis is accepted. Findings revealed that the mean post-test information score (21.91) was altogether higher than their mean pre-test information score (12.76) recommending that the arranged instructing program was satisfactorily compelling in expanding the information on B.Sc. Nursing fourth year understudies.

INTRODUCTION

Background of the study

The Birth of a baby is one of the most striking and enthusiastic occasions that can happen in one's life time. Following nine months of expectation and planning, the neonate shows up in the midst of a whirlwind of energy. The new person influences the lives of the guardians and furthermore the other relatives[1]. Kids are our future and the most valuable assets. The strength of things to come youngsters'

relies upon the supporting practice embraced by the family[1]. The initial few days of life is a time of a change happening from parasitic fetal life for example intrauterine condition to a totally free for example extra Uterine life. The procedure of birth and adjustment to the new environmental factors rely on various modifications with respect to the infant particularly[2].

The initial first year of life comprise the "Infancy period". The perfect essential requirements for any infant incorporate breathing, warmth, neatness, and taking care of mother's milk. At that point all infant babies require fundamental infant care to limit the ailment and amplify their development and advancement. Plainly, basic consideration of an infant will assist with forestalling numerous infant crises, model umbilical line might be the most widely recognized wellspring of neonatal sepsis and furthermore of lockjaw disease, and great string care could drastically decrease the dangers of these genuine conditions. Breastfeeding has a noteworthy defensive impact against contaminations, early breastfeeding and the child held near the mother to decrease the danger of hypothermia, as well as hypoglycemia[3].

Decrease of Infant and Child Mortality Rates and improving Child Survival has been a significant objective of the National Programs of India. Since 1977 to 1992, programs like Universal Immunization, Oral Rehydration Therapy (ORT), control of diarrhea sickness, intense respiratory contaminations, basic infant care, promotion of breast feeding, complementary feeding, prevention of anemia and vitamin A inadequacy were executed to address kids mortality as vertical projects[4].[4] A comprehension of youngster care is basic for nursing and clinical understudies to increase a valuation for patterns prompting our current ideas and practices explicit to kids. Medical caretakers can assume a significant job in improving the wellbeing status of youngsters via cautious and precise appraisal of basic manifestations and very much chose explicit clinical signs which provides sufficient information to guide rational and effective actions[5].

As IMNCI has become a developing need, the students of clinical calling ought to likewise be tended to pretty much all the more up to date ideas with the utilization of proper methods. Consequently IMNCI is additionally included educational plan of all the clinical understudies including nursing yet there is have to make the understudies progressively mindful of this required idea. Organized Teaching is an instrument utilized by educators and staff to sort out understudy work and give access to Content Curriculum. The "structure" comprises of adjustments in nature, concrete and visual methods of introducing data, and proactive schedules. It is separately structured around every understudy's qualities, aptitudes, interests and needs[6]. In 2015, India had over one million new born dies before they complete their first month of life, representing 30% of the world's neonatal passing India's present neonatal death pace of 24.4 per thousand live births speaks to 6.41 lakh youngsters who bite the dust every year. Neonatal mortality is higher in country regions at 50 for each thousand live births. The neonatal death rate additionally differs impressively among Indian states. Orissa and Madhya Pradesh has the most noteworthy neonatal death pace of 61(rural 63, urban 41) and 59 (provincial 63 urban 40) per thousand live births individually. In Uttar Pradesh the rate is 53/1000 (provincial 56, urban 39) and 31/1000 (rural33, urban 21) in west Bengal. Kerala has the least neonatal mortality of 10/1000 (provincial 10 and urban 9), trailed by Punjab 29/1000 (rustic 32, urban19) .66% of newborn child passing’s in India happen in first month of

life. Around seventy five percent of Indian neonatal passing's happen inside multi week of the birth while 90% happen inside the initial fourteen days of life. A significant test in Indian rustic zones is that the greater part of the births happen at home, helped by undeveloped work force. Just as the dangers related with the utilization of conventional birth chaperons, the earth into which a kid is conceived likewise impacts endurance[7].

The National Road Map Strategic Plan–2008–2015

India Current Affairs 2012 according to the most recent Sample Registration System (SRS) announcement, it is noticed that Infant Mortality Rate (IMR) dropped further by 3 from 50 to 47 newborn child's demises for every 1000 live births. In Karnataka (SRS) presently the IMR has been carried down to 20 contrasted and the normal of 38 (according to Sample Registration System results accessible from 2010). Additionally, the maternal death rate (MMR) has diminished to 178, which is the State normal.[7] The planning Commission's objectives for the 10th five year plan was to lessen IMR to the degree of 45/1000 live births by 2007 and 28 by 2012. These objectives are much more driven than the Millennium Development Goals, to which India is a signatory. But as indicated by the information given in the above expression these objectives is still not accomplished. So there is as yet a need to make more mindfulness in regards to IMNCI[8].

WHO/UNICEF have built up this way to deal with tackle the significant maladies of youth called the Integrated Management of Childhood Illnesses (IMCI). The coordinated methodology guarantees that every important need of the youngster are taken a gander at and took care of during the contact of the kid with the wellbeing laborers. As the wellbeing laborers assumes a significant job in the correct execution of this errand among which medical attendants are perhaps the biggest gathering of experts working in the social insurance framework. Their essence in the social insurance framework assumes a significant job and aides in the fast recuperation from the diseases. So the nursing understudies ought to be mulled over in the arrangement of this showing system and information[9]. IMNCI incorporates both preventive and corrective mediations. The procedure has the accompanying three segments[10]:

- **Health-specialist part:** Improvements for the situation the executives aptitudes of wellbeing staff through the arrangement of privately adjusted rules
- **Health-administration part:** Improvements in the general wellbeing framework required for compelling administration of neonatal and youth sickness
- **Community segment:** Improvements in family and network medicinal services rehearses

Considering the above facts, the nursing fraternity ought to be educated and able in anticipation of neonatal diseases. On the off chance that nursing work force neglects to receive the contamination control methods, it will prompt septicemia and neonatal demise. So as to decrease baby death rate, the nursing work force ought to be educated and able in giving disease free nursing care.

MATERIAL AND METHODS

In the current investigation, 120 B.Sc. Nursing IV Year Students of Selected Nursing Colleges of Kota (Rajasthan) are chosen, who satisfied the choice standards were chosen as test for the examination. Advantageous inspecting procedure includes the choice of subjects who are accessible at the ideal spot during the hour of information assortment. The example for the examination was chosen dependent on the consideration and rejection standards by advantageous inspecting. An evaluative research approach was adopted for this study in order to accomplish the

objectives. Evaluative research deals with the question of how well the program is meeting the objectives. The primary objective of the evaluative research is to determine the extent to which a given program or procedure is effective. Hence the evaluative research approach was considered most appropriate. The research design selected for present study was pre experimental in nature i.e., one group pre-test post-test design. This study is intended to find out the gain in knowledge by B.Sc. nursing IV year students after administering PTP, who was subjected for the study. Thus the group is observed twice. The effect of treatment would be equal to the level of phenomenon after the treatment minus the level of the phenomena before treatment.

Inclusion Criteria

- B.Sc. nursing IV year students those are accessible at the hour of information assortment.
- B.Sc. nursing IV year students who are willing to participate.

Exclusion Criteria

- B.Sc. nursing IV year students who are not ready to take an interest in this examination.
- B.Sc. nursing IV year students who are not accessible at the hour of information assortment.

SELECTION AND DEVELOPMENT OF TOOL

Tools were prepared on the basis of objectives of the study. An organized information survey was utilized for the information assortment as it is viewed as the most fitting instrument to evoke the reaction from educated members. An outline was set up to help in the development of the device. Two parts were considered for the arrangement of the device and inquiries for the device were partitioned under these two segments: Concept with introduction of IMNCI and Management of children under IMNCI.

DESCRIPTION OF THE TOOL

After an extensive review of literature and discussion with the experts, structured knowledge questionnaire was developed. Organized information survey was set up to evaluate the information level of B.Sc. nursing IV year students regarding Integrated Management of Neonatal And Childhood Illnesses (IMNCI), studying in selected nursing colleges, Kota.

The device utilized in the current investigation comprised of:

Section A: Socio- Demographic Variables

This section has 6 items. They are: Age, gender, Area of residence, religion, Type of family and previous source of information regarding IMNCI.

Section B: Structured Knowledge Questionnaire Regarding IMNCI

This section has 30 items with various aspects on Integrated Management of Neonatal and Childhood Illnesses (IMNCI).

Scoring of Items

For section B, a score of 1 mark apportioned for each right answer and a score of 0 for each wrong answer. In this way an aggregate of 30 imprints were given for information appraisal. To decipher the degree of information, the scores were circulated as follows:

Table 1: Score Interpretation

S.NO.	MAX SCORE ACHIEVED	INTERPRETATION
1.	>50%	Poor Knowledge
2.	50-75%	Average knowledge
3.	<75%	Good knowledge

Reliability

The reliability of the tool was established by using split half method. Utilizing the acquired qualities coefficient relationship was finished with the assistance of Speaeman Brown equation. The reliability was done manually. Reliability score acquired as 0.91 which implied that the Tool is good.

PROCEDURE FOR DATA COLLECTION

In the wake of getting a proper consent from the Principal of selected College of nursing Kota, which clarified the nature and reason for the investigation and guaranteed that the examination won't meddle with the normal timetable of college. The time of information assortment was a month, in the period of September (22/09/19 to 15/10/19). The reason and nature of the investigation was disclosed to every subject and got their assent. The organized information poll was managed with respect to various aspects of IMNCI. After pretest the PTP was administered to 120 B.Sc. nursing IV year students those belongs to experimental group. After the 7th day of implementation of PTP, posttest was carried out by the investigator by using the same structured knowledge questionnaire.

FINDINGS AND CONCLUSION

The analysis and interpretation of data of this study are based on data collected through Structured Knowledge Questionnaire regarding Integrated Management of Neonatal And Childhood Illnesses (IMNCI) of B.Sc. nursing IV year students, studying at selected nursing colleges, Kota. The results were computed using both descriptive and inferential statistics based on the objectives of the study. The data obtained will be analyzed using frequency, percentage, mean, median, mean percentage, standard deviation in terms of descriptive and inferential statistics.

OBJECTIVES OF THE STUDY

- To assess the existing knowledge level regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) of B.Sc. Nursing IV year students.
- To develop and administer PTP regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI).
- To assess the effectiveness of PTP regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) by comparing pre and posttest knowledge score of B.Sc. nursing IV year students.
- To find out the association between knowledge scores of students with their selected socio demographic variables.

HYPOTHESIS

- **H_0:** There will be no significant association between the knowledge scores and selected socio-demographic variables.
- **H1:-** There will be a significant difference between pre and posttest knowledge scores of students regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI).
- **H_2:** There will be significant association between the knowledge scores and selected socio-demographic variables.

ORGANIZATION OF THE STUDY FINDINGS

The analysis of the data is organized and presented under the following sections:

- **Section I:** Frequency and percentage distribution of samples according to demographic Variables.
- **Section II:** Analysis and interpretation of effectiveness of PTP regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) by comparing pretest and

posttest knowledge scores of B.Sc. nursing IV year students.

- **Section III:** Association between pre-test knowledge scores and selected demographic Variables.

Section -I

Table 2: Frequency and Percentage Distribution of B.Sc. Nursing IV Year Students According to Baseline Characteristics

(N=120)

Socio-demographic variables	Categories	Frequency	Percentage
Age in years	20-21	10	8.33
	22-23	70	58.33
	24-25	30	25.00
	26 and above	10	8.33
Gender	Male	70	58.33
	Female	50	41.66
Area of Residence	Urban	84	70.00
	Rural	36	30.00
Religion	Hindu	78	65.00
	Muslim	22	18.33
	Christian	18	15.00
	Others	02	1.66
Type of Family	Nuclear	84	70.00
	Joint	36	30.00
Previous sources of Information regarding IMNCI	Friends & peer	4	3.33
	Health Personnel	26	21.66
	Study material	90	75.00
	Workshop/seminar	00	0.00

SECTION-II

Analysis and interpretation of effectiveness of PTP regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) by comparing pretest and posttest knowledge scores of B.Sc. nursing IV year students

Table 3: Comparison Pre–test and Post–test Knowledge Scores of B.Sc. Nursing IV Year Students

(N= 120)

Knowledge scores	Pre-test			Post-test		
	Frequency	%	Cumulative frequency %	Frequency	%	Cumulative frequency %
1-6	00	00	00.00	-	-	-
6-12	08	06.66	06.66	-	-	-
13-18	106	88.33	94.99	-	-	-
19-24	06	05.00	100.00	10	8.33	8.33
25-30	00	00	100.00	110	91.66	100
	120	**100.00**		**120**	**100.0**	

Maximum total scores = 30

Data in Table 3 shows that majority of the respondents (95%) had scores below 18 and only 5% had scores between 19- 24 and none of them had scores above 24 in pre-test. In the post-test, none of them had scores below 18. On comparing the pre-test scores with the post-test scores it was found that all the students scored higher in post-test than the pre-test. This indicates that PTP was effective in increasing the knowledge scores of B.Sc. Nursing IV year students regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI).

Table 4: Grading of Pre and Post-Test Knowledge Scores of B.Sc. Nursing IV Year Students

(N=120)

Grade	Range	Pre-test		Post-test	
		Frequency	%	Frequency	%
Good	24-30	02	3.33	55	91.66
Average	16-23	50	83.33	05	8.33
Poor	1-15	08	13.33	0	0.0

Data in Table 4 shows that majority of students (91.66%) had scores ranging between (24-30) in post-test whereas in the pre-test none of them had scored above 25.

Table 5: Area Wise Pre and Post-test Knowledge Scores B.Sc. Nursing IV Year Students regarding IMNCI

(N=120)

Area	Max. Score	Mean % knowledge score		Mean % actual gain
		Pre-test	Post-test	
Concept and Introduction of IMNCI	7	31.51	76.02	44.51
Color coding of IMNCI	5	24.72	65.27	40.55
Management of young infant up to 0 to 2 month of age	8	48.54	90.10	41.56
Management of children from 2 month to 5 year of age	10	32.50	66.15	33.65

Maximum scores = 30

SECTION-III

Table 6: Association between Pre-Test Knowledge Scores among B.Sc. Nursing IV Year Students and the Selected Socio-Demographic Variables

(N= 120)

S. No.	Variables	Pre-test knowledge scores		χ2 (Chi-Square) Chi-Square	df	Level of significance
		< mean	> mean			
1	Age (in years)					
	20-21	8	2	**1.7412**	3	**No**
	22-23	38	32			
	24-25	16	14			
	26 and above	4	6			
2	Gender					
	Male	42	28	**0.8481**	1	**No**
	Female	24	26			

3	Area of Residence					
	Urban	40	44	**6.612**	1	**Yes**
	Rural	30	06			
4	Religion					
	Hindu	56	22	**3.7736**	3	**No**
	Muslim	18	04			
	Christian	10	08			
	Others	01	01			
5	Type of Family					
	Nuclear	40	44	**6.612**	1	**Yes**
	Joint	30	06			
6	Previous Sources of Information Regarding IMNCI					
	Friends and peer	8	4	**6.6907**	2	**Yes**
	Health Personnel	12	24			
	Study material	41	31			
	Workshop/seminar	00	00			

Note: S.- significant, N.S.- Not significant

From table 6, it is evident that the demographic variables such as age, gender and religion the calculated chi square value are less than the critical value at $p<0.05$ level of essentialness, So Null theory is acknowledged and investigates speculation is dismissed. In Demographic variables, such as area of residence, type of family and previous sources of information regarding IMNCI, the determined chi square worth is high than the basic incentive at $p<0.05$ level of essentialness, So Null speculation is dismissed and inquire about theory is acknowledged.

RECOMMENDATIONS

Based on the discoveries of the current examination and remembering the impediments of the investigation, the accompanying suggestions were proposed for additional exploration. The accompanying exploration based suggestions are drawn:

- The study can be duplicated in various settings with bigger examples, in this way the discoveries could be summed up better.
- A study should be possible to evaluate the adequacy of the data booklet arranged as result of the examination.
- A comparative investigation can be led by illustrative methodology, frequently serves to produce theory for future research.
- A comparative investigation can be led among staff nurses and other health workers.
- Improve educational plan and present nursing curriculum put together preparing programs with respect to Integrated Management of Neonatal and Childhood Illnesses (IMNCI).
- The medical caretakers ought to be given some in-administration instruction or ought to be offered opportunities to endeavor workshops or meetings on Integrated Management of Neonatal and Childhood Illnesses (IMNCI).

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