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A Study to Assess the Effectiveness of the Structured Teaching Programme on Knowledge Regarding Integrated Management of Neonatal and Childhood Illness (IMNCI) among Nursing Students at a Selected Nursing College

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Abstract

“A Study to Assess the Effectiveness of the Structured Teaching Programme on Knowledge Regarding Integrated Management of Neonatal and Childhood Illness (IMNCI) among Nursing Students at a Selected Nursing College.”

Objectives

Primary Objective

1. To assess the effectiveness of Structured Teaching Programme on knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students.

Other Objectives

1. To assess the existing level of knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students.
2. To evaluate the effectiveness of Structured Teaching Programme on Knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students.
3. To find out the association between the pre-test level of knowledge score regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students.

Material and Methods

- ✓ The Quantitative research approach was used in this study.
- ✓ One group pre-test post-test research design was chosen for the study.
- ✓ The sampling technique was non-probability purposive sampling and 60 samples of Nursing Students were selected conveniently to suit the study.

Results

The collected data were be coded, tabulated and analyzed by using descriptive statistics (mean percentage, standard deviation) and inferential statistics

- ✓ At the time of pre-test, 0 Nursing Students at selected nursing college does not have poor knowledge (0.00%) regarding integrated management of neonatal and childhood illness, 15 Nursing students had average knowledge (25.00%), 30 nursing students had Good knowledge (50.00%), 9 nursing students are had very good knowledge (15.00%), 3 nursing students had excellent knowledge (5.00%), and 3-nursing students had extraordinary knowledge (05.00%).
- ✓ At the time of post-test, 0 Nursing Students at selected nursing college does not

have poor knowledge (0.00%) regarding integrated management of neonatal and childhood illness, 0 Nursing students does not have average knowledge (0.00%), 0 nursing students does not have Good knowledge (0.00%), 23 nursing students are had very good knowledge (40.00%), 30 nursing students had excellent knowledge (50.00%), and 6 nursing students had extraordinary knowledge (10.00%). Average knowledge score at the time of post-test was 19.66 with standard deviation of 2.5672 with mean percentage is 21.55%.

- ✓ The pre-test average knowledge score was 12 with standard deviation of 4.7102. The post-test average knowledge score was 19.66 with standard deviation of 2.5672. The test statistics value of the paired t test was 16.35 with p value 0.
- ✓ The p value less than 0.05 hence reject the null hypothesis and accept the alternative hypothesis.

Conclusion

The results of this study shows that in pre-test, 0 Nursing Students at selected nursing college does not have poor knowledge (0.00%) regarding integrated management of neonatal and childhood illness, 15 Nursing students had average knowledge (25.00%), 30 nursing students had Good knowledge (50.00%), 9 nursing students are had very good knowledge (15.00%), 3 nursing students had excellent knowledge (05.00%), and 3 nursing students had extraordinary knowledge (05.00%). Average knowledge score at the time of pre-test was 12 with standard deviation of 4.7102 with mean percentage is 13.68%.

And at the time of post-test, 0 Nursing Students at selected nursing college does not have poor knowledge (0.00%) regarding integrated management of neonatal and childhood illness, 0 Nursing students does not have average knowledge (0.00%), 0 nursing students does not have Good knowledge (0.00%), 23 nursing students are had very good knowledge (40.00%), 30 nursing students had excellent knowledge (50.00%), and 6 nursing students had extraordinary knowledge (10.00%). Average knowledge score at the time of post-test was 19.66 with standard deviation of 2.5672 with mean percentage is 21.55%.

Thus, it was concluded that effectiveness of structured teaching programme on knowledge regarding Integrated Management of Neonatal and Childhood Illnesses (IMNCI) was found effective as a teaching strategy.

Keywords: Integrated Management of Neonatal and Childhood Illness (IMNCI), Nursing College, India

Introduction

“Children are the keys of paradise”.

Children’s health focuses on the well-being of children from conception through adolescence. It is vitally concerned with all aspects of children’s growth and development and with the unique opportunity that each child has to achieve their full potential as a healthy adult. Children younger than 3 years old commonly suffer from fever (27% prevalence in the previous 2-week period), acute respiratory infections (17%), diarrhoea (13%) and malnutrition (43%) - and often a combination of these conditions. During the mid-1990s, the World Health Organization (WHO), in collaboration with UNICEF and many other agencies, institutions and individuals, responded to this challenge by developing a strategy known as Integrated Management

of Childhood Illness (IMCI). Due to high neonatal mortality and morbidity in the country, the Government of India revised the strategy to be called Integrated Management of Neonatal and Childhood Illness (IMNCI). This strategy addresses various aspects of nutrition, immunization and other important elements of disease prevention and health promotion in addition to early detection and prompt management of cited childhood illnesses^[1].

Every year about 9 million children in developing countries die before they reach their fifth birthday, many of them during the first year of life. Ethiopia has one of the highest under-five mortality rates with more than 321,000 children under the age of five dying every year. More than 70% of these child deaths are due to five diseases, namely pneumonia, diarrhoea, malaria, measles and malnutrition, and often to a combination of these conditions^[2].

These diseases are also the reasons for seeking care for at least three out of four children who come to health facilities. As children usually present with more than one of these conditions, it was recognized that there was a need for an integrated approach in order to manage the child in a holistic manner (taking into account all of the child's problems including the major childhood illnesses in the assessment and treatment of illness). This led to the development of the **Integrated Management of Neonatal and Childhood Illness (IMNCI)** strategy^[2].

Integrated Management of Childhood Illness (IMCI) is a globally proven, primarily community-based strategy to improve child survival and is being implemented worldwide in countries with high burden of child mortality^[3].

India adapted the Integrated Management of Childhood Illness (IMCI) strategy, aiming to reduce its newborn and infant mortality burden and renamed the revised strategy Integrated Management of Neonatal and Childhood Illness (IMNCI)^[4].

IMNCI is a program provided by a health facility to aid children under five years of age suffering from illness. It emphasizes the wellbeing of children who suffer from illness and it promotes prevention mechanisms to the caregivers. The preventive and curative feature is included in the program which supports to diminish loss, infection, and disability of children^[5].

Background

The critical intervention strategy under IMNCI is home visits in the early postnatal -period to ensure that preventative and curative care is provided in order to prevent infant deaths^[6].

Integrated Management of Neonatal and Childhood Illnesses (IMNCI) is one of the child health programs and it provides an integrated approach and focuses on the well-being of the whole child. Globally, nearly nine million children pass away every year with preventable and treatable conditions. IMNCI program is provided by the health facilities to aid children under five years of age from illness^[7].

Review of Literature

The Review of Literature is a broad, comprehensive, in depth review of information's from previous studies systematically.

Mittal K, Gupta V, Khanna, A prospective observational study was conducted on 500 children to evaluate the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) algorithm for diagnosis and referral of children

aged 0-59 mo. IMNCI algorithm performed well in diagnosis [except sepsis in 0-7 d (p < 0.01) and malaria in 2-59 mo (p < 0.01)] and referral of under five illnesses. The proportion of children with the mismatch between 'IMNCI' diagnosis and 'Gold Standard' diagnosis were highest (38.7 %) among children 0-7 d of age. The authors conclude that IMNCI algorithm in young children has good sensitivity for referring children with severe illnesses and is a good tool for diagnosis of most of childhood illnesses in under-five children^[8].

Bharani Sheela, Parmar Tarun, dr rahul Parmar, A cross sectional study including 50 AWWs of Vadodara taluka, selected by random sampling technique. The study reveals that, Most of the AWWs were ≤40 years of age. Out of 50 AWWs, 18 (36%) underwent IMNCI training between 1-2 years duration and 32 (64%) underwent training between 2-5 years period from the date of interview. Around 72% AWWs undertook 3 visits of young infants^[9].

Result

The collected data were be coded, tabulated and analyzed by using descriptive statistics (mean percentage, standard deviation) and inferential statistics.

Section-I Deals with analysis of demographic data of nursing students at selected nursing college in terms of frequency and percentage.

Table 1: Frequency & percentage distribution of nursing students at selected nursing college in terms of frequency and percentage n=60

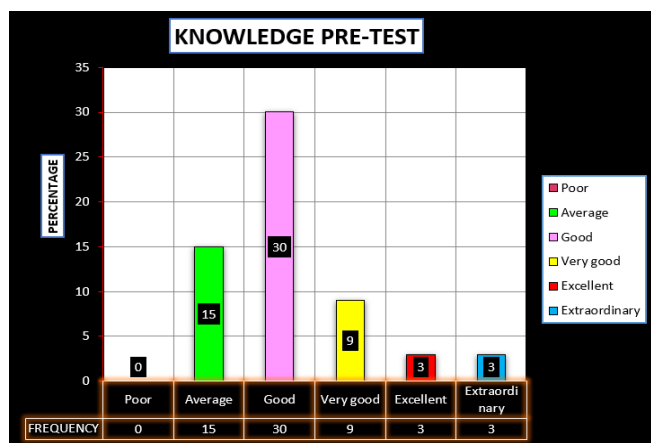
S. No	Variable	Groups	Frequency	Percentage
1	Age of Students	15-20 Years	30	50.00
		20-25 Years	24	40.00
		25-30 Years	03	05.00
		More than 30 Years	03	05.00
2	Gender	Male	36	60.00
		Female	24	40.00
3	Religion	Hindu	20	33.33
		Christian	10	16.67
		Buddhist	11	18.33
		Muslim	19	31.67
4	Type of family	Nuclear	24	40.00
		Joint	21	35.00
		Extended	15	25.00
		Intact Family	0	0.00

S. No	Variable	Groups	Frequency	Percentage
5	Educational Status of Students	G.N.M	15	25.00
		PB.BSc Nursing	12	20.00
		B.BSc Nursing	30	50.00
		MSc Nursing	03	05.00
6	Occupation of Parents	Home Maker	10	16.67
		Daily Wages	07	11.67
		Private Employee	16	26.67
		Government Employee	16	26.67
		Self Employee	11	18.33
7	Total Family Income	Rs. <5,000/	13	23.33
		Rs. 5,001-30,000/	16	26.67
		Rs. 30,001-65,000/	17	28.33
		Rs.65,0001 & above	14	23.33

Section-II It Deals with analysis of data related to assessment of the knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students at a selected nursing college in terms of frequency and percentage.

Table 2: General Assessment of Knowledge (Pre-Test) n=60

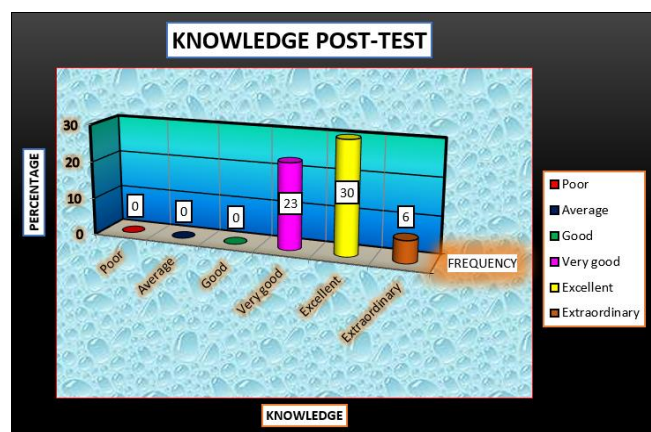
	Groups	Score	Frequency	Percentage
PRE-TEST	Poor	0-5	0	0.00
	Average	06-10.	15	25.00%
	Good	11-15.	30	50.00%
	Very good	16-20	9	15.00%
	Excellent	21-25	3	5.00%
	Extraordinary	26-30	3	5.00%
Knowledge	Minimum		06	
	Maximum		27	
	Mean Percentage		13.68%	
	Average (SD)		12(4.7102)	



It Deals with analysis of data related to assessment of the knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students at a selected nursing college in terms of frequency and percentage.

Table 3: General Assessment of Knowledge (Post Test) n=60

	Groups	Score	Frequency	Percentage
Post Test	Poor	0-5	0	0.00
	Average	06-10.	0	0.00
	Good	11-15.	0	0.00
	Very good	16-20	23	40.00
	Excellent	21-25	30	50.00
	Extraordinary	26-30	06	10.00
Knowledge	Minimum		16	
	Maximum		27	
	Mean Percentage		21.55%	
	Average (SD)		19.66(2.5672)	

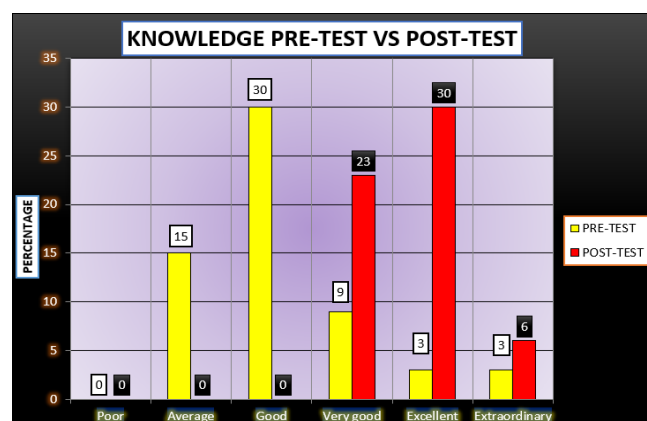


Section-II Deals with analysis of data related to assessment of the knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing

students at a selected nursing college in terms of frequency and percentage.

Table 4: General Assessment of Knowledge (Pre-test Vs Post Test) n=60

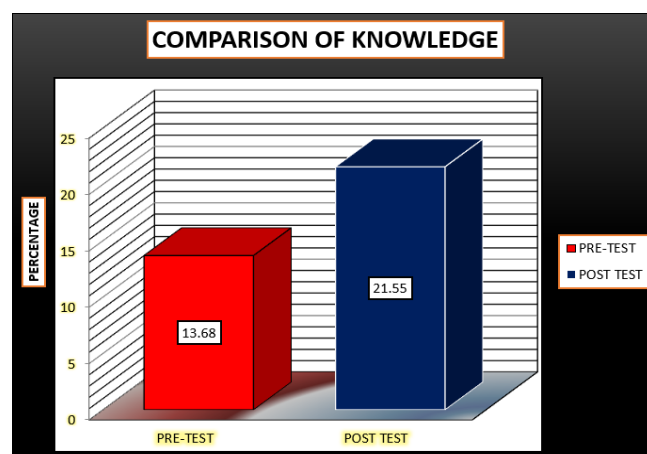
	Groups	Score	PRE-TEST		POST-TEST	
			Frequency	Percentage	Frequency	Percentage
Knowledge	Poor	0-5	0	0.00	0	0.00
	Average	06-10	15	25.00%	0	0.00
	Good	11-15	30	50.00%	0	0.00
	Very good	16-20	9	15.00%	23	40.00
	Excellent	21-25	3	5.00%	30	50.00
	Extraordinary	26-30	3	5.00%	06	10.00
Knowledge	Minimum		06		16	
	Maximum		27		27	
	Mean Percentage		13.68%		21.55%	
	Average (SD)		12(4.7102)		19.66(2.5672)	



Section-III Deals with analysis of data related to comparison of the knowledge regarding integrated management of neonatal and childhood illness (IMNCI) among nursing students at a selected nursing college in terms of average pre and post-test.

Table 5: Comparison of the Pre-test Vs Post Test knowledge of among nursing students at selected nursing college n=60

Test	N	Mean	S.D.	T-value	CL Value	P Value
Pre-Test	60	13.68	4.7102	16.35	.195	0
Post Test	60	21.55	2.5672			



Section-IV Deals with analysis of data related to the association of knowledge regarding integrated management of neonatal and childhood illness (IMNCI) with selected demographic characteristics of among nursing students at a selected nursing college.

Table 6: Association of Knowledge Score in Relation to Demographic Variables n=60

Variables	Groups	PRE-Test Knowledge (Score & Frequency)							Chi Square	d.f.	P Value	Significance
		n	Poor (0-5)	Ave. (6-10)	Good (11-15)	V.Good (16-20)	Excellent (21-25)	Extra Ordinary (26-30)				
Age of Nursing Students	15-20	30	0	7	18	3	1	1	0.0673	3	0.995	Not Significant
	20-25	24	0	5	12	4	2	1				
	25-30	3	0	1	0	1	0	1				
	More than 30	3	0	2	0	1	0	0				
Gender	Male	36	0	9	19	4	2	2	0	1	1	Not Significant
	Female	24	0	6	11	5	1	1				
Religion	Hindu	20	0	6	9	3	1	1	5.4062	3	0.144	Not Significant
	Christian	10	0	3	5	1	0	1				
	Buddhist	11	0	2	6	2	1	0				
	Muslim	19	0	4	10	3	1	1				
Type of Family	Nuclear	24	0	5	13	4	1	1	10.769	3	0.01	Significant
	Joint	21	0	5	11	3	1	1				
	Extended	15	0	5	6	2	1	1				
	Intact Family	0	0	0	0	0	0	0				
Variables	Groups	Pre-Test Knowledge (Score & Frequency)							Chi Square	d.f.	P Value	Significance
n	Poor (0-5)	Ave. (6-10)	Good (11-15)	V.Good (16-20)	Excellent (21-25)	Extra Ordinary (26-30)						
Educational Status of Nursing Students	G.N.M	15	0	5	7	1	1	1	9.898	3	0.019	Significant
	PB.BSc Nursing	12	0	2	6	2	1	1				
	B.BSc Nursing	30	0	7	16	6	0	1				
	MSc Nursing	03	0	1	1	0	1	0				
Occupation of Parents	Home Maker	10	0	3	3	2	1	1	0.3599	3	0.948	Not Significant
	Daily Wages	07	0	1	5	1	0	0				
	Private Employee	16	0	4	7	3	1	1				
	Government Employee	16	0	5	7	2	1	1				
Total Family Income	Self Employee	11	0	2	8	1	0	0	0.6008	3	0.896	Not Significant
	Rs. <5,000/	13	0	2	8	2	1	0				
	Rs. 5,001-30,000/	16	0	5	7	2	1	1				
	Rs. 30,001-65,000/	17	0	4	8	3	1	1				
	Rs.65,0001 & above	14	0	4	7	2	0	1				

The chi-square test was conducted to see the association of knowledge regarding integrated management of neonatal and childhood illness with selected demographic characteristics of nursing students at selected nursing college.

The chi-square test was conducted at 0.05% level of significance.

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