

# A Study to Evaluate the Effectiveness of Self Instructional Module on Knowledge and Practice regarding Integrated Management of Neonatal and Childhood Illnesses among Staff Nurses working in Paediatric Wards of Selected Hospitals in Patna, Bihar

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## Abstract—

**Introduction:** Children are our future and our most precious resources. Today's children are the citizens of tomorrow's world. The IMNCI case management component is mainly focused on the classification of the five most common causes of infant mortality (diarrhoea, pneumonia, malaria, measles and malnutrition), identification of treatment, accurate treatment or timely referral, counseling of the mother and giving follow-up care. IMNCI integrated treatment guidelines are devised to assist the health workers to assess the sick child by observing easily recognizable signs. Working through a color-coded system, the health worker classifies the sickness and takes the necessary steps such as urgent referral for medical treatment at a health Centre, medical treatment on the spot or advice for home management.

**Method & Material:** An evaluative research approach and quasi-experimental research design was adopted. 150 nurses working in pediatric wards of selected hospitals at Patna were selected for the study by using purposive sampling technique. By using knowledge questionnaires, and competency checklists questionnaires.

**Results:** The study reveals that out of 100% of nurses 3.3% of the nurses had good knowledge before Self-instructional module; majority of the nurses 60% had average knowledge; 36.6% of the nurses had poor knowledge. Whereas majority of the subjects 76.7% had good knowledge, 23.3% nurses had average knowledge after a Self-instructional module in IMNCI. In competency 51.7% had moderate on practice, 38.3% had adequate knowledge on practice, and 10% of the nurses had inadequate knowledge on practice before the Self-instructional module. Whereas majority of the nurses 83.3% had adequate knowledge on practice, 16.7% nurses had moderate knowledge on practice after the Self-instructional module on IMNCI.

**Conclusion:** There is a positive co-relation observed between the level of knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses. The study revealed that Self-instructional module improved the knowledge and practice regarding Integrated Management of Neonatal and Childhood Illness among Staff nurses.

**Keywords—** Knowledge, Practice IMNCI.

## I. INTRODUCTION

Children are our future and our most precious resources. Today's children are the citizen's of tomorrow's world. In other words, the children are the budding human resources and the future citizens of the nation. Healthy children are not only assets but also the stepping stone to build a strong and prosperous nation. Their survival and protection is prerequisite for the future development of humanity. Every child represents the unit of human capital. He/she has the potential to grow into a productive adult and contribute to the economic and social development of the country. The Integrated management of neonatal and childhood illness strategy is a broad strategy developed by WHO in collaboration with UNICEF, and it aims at reducing childhood deaths, illness, and disability, and improving growth and development. It combines improved management of childhood illness with aspects of nutrition and immunization in children below the age of five years.

### 1.1 Statement of the Problem

“A study to evaluate the effectiveness of Self Instructional Module on knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses working in Paediatric wards of selected Hospitals in Patna, Bihar”

## 1.2 Objectives

- 1) To assess the knowledge regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses before and after a Self instructional module.
- 2) To assess the practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses before and after a Self instructional module.
- 3) To evaluate the effectiveness of a Self Instructional Module based on Integrated Management of Neonatal and Childhood Illnesses among staff nurses.
- 4) To correlate the post test knowledge score with the practice score regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses.
- 5) To associate the post test knowledge score regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses with selected demographic variables.
- 6) To associate the post test practice score regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses with selected demographic variables.

## II. MATERIALS AND METHODS

The present study evaluates the effectiveness of Self Instructional Module on knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses. An evaluative research approach, quasi-experimental research design was adopted. 150 nurses working in pediatric wards of selected hospitals at Patna were selected for the study. Purposive sampling technique is used. The data is collected by structured interview questionnaire and an observational checklist. This structured interview questionnaire contains 40 questions and an observational checklist consists of 20 questions.

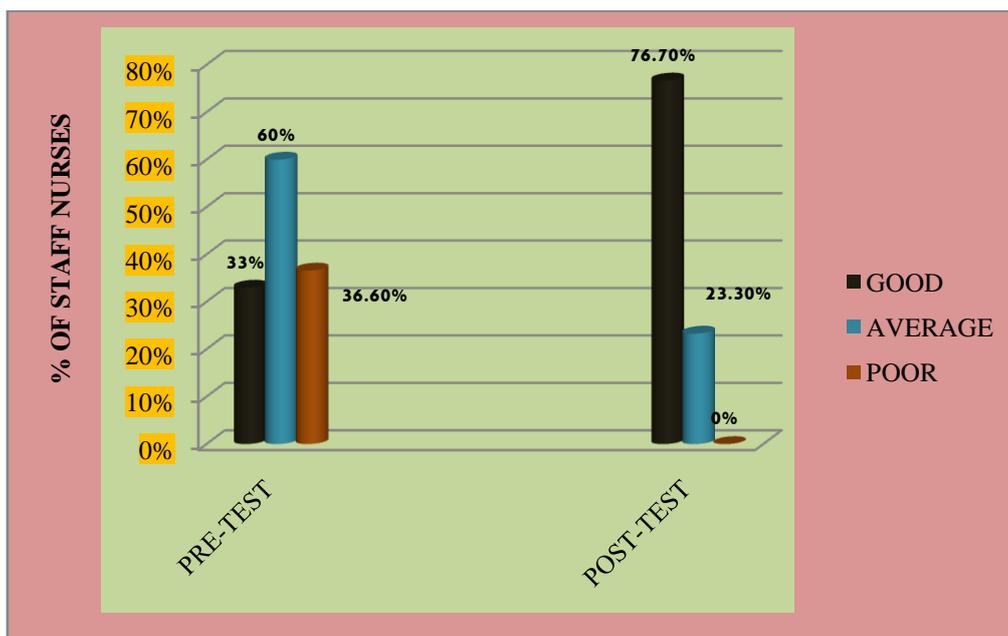
### 2.1 Description of data collection instruments

**Section –I** Baseline data

**Section-II** Knowledge questionnaire regarding integrated management of neonatal and child hood illnesses.

**Section- III** Structured Observational checklist on integrated management of neonatal and child hood illnesses.

**Section- IV** Self Instructional Module on integrated management of neonatal and child hood illnesses.

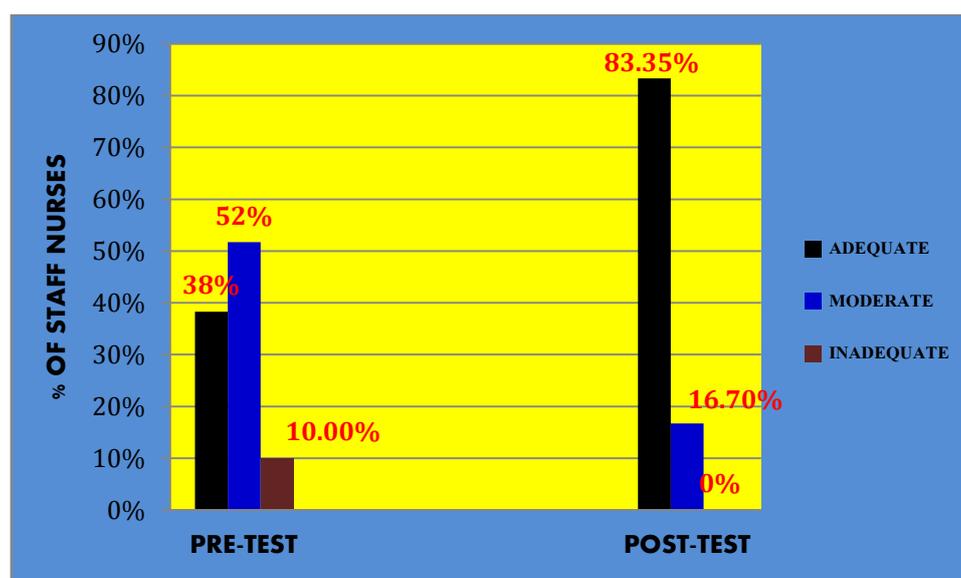


**FIGURE 1: Distribution of staff nurses knowledge before and after self instructional module on IMNCI**

Figure 1. The findings revealed that among the 150 staff nurses, before the administration of Self instructional module, majority of them 90(60%) had average knowledge and 5 (33%) had good knowledge. After the administration of Self instructional module, majority of them 115 (76.7%) had good knowledge and 35 (23.3%) had average knowledge on IMNCI.

**TABLE 1**  
**FREQUENCY AND PERCENTAGE DISTRIBUTION OF SELECTED DEMOGRAPHIC VARIABLES OF NURSES**  
**n=150**

S. No	Demographic variables	Frequency(f)	Percentage (%)
1	<b>Age (Years)</b>		
	a) 20-25	69	46%
	b) 25-30	57	38%
	c) 30-35	18	12%
	d) 35 and above	6	4%
2.	<b>Gender</b>		
	Male	42	28%
	Female	108	72%
3.	<b>Religion</b>		
	Hindu	107	71.33%
	Muslim	15	10%
	Christian	28	18.66%
4.	<b>Professional Education</b>		
	GNM	81	54%
	B.SC.N	60	40%
	PB B.SC.N	9	6%
5.	<b>Years of Experience (Years)</b>		
	0-3	21	14%
	3-6	108	72%
	6-10	12	8%
	10 and Above	9	6%
6.	<b>Source Of Information</b>		
	Books	9	6%
	Journals	24	16%
	Training	21	14%
	In service education	15	10%
	Any other	36	24%
	Nil	45	30%



**FIGURE 2: Distribution of staff nurses knowledge on practice before and after a Self-instructional module on IMNCI**

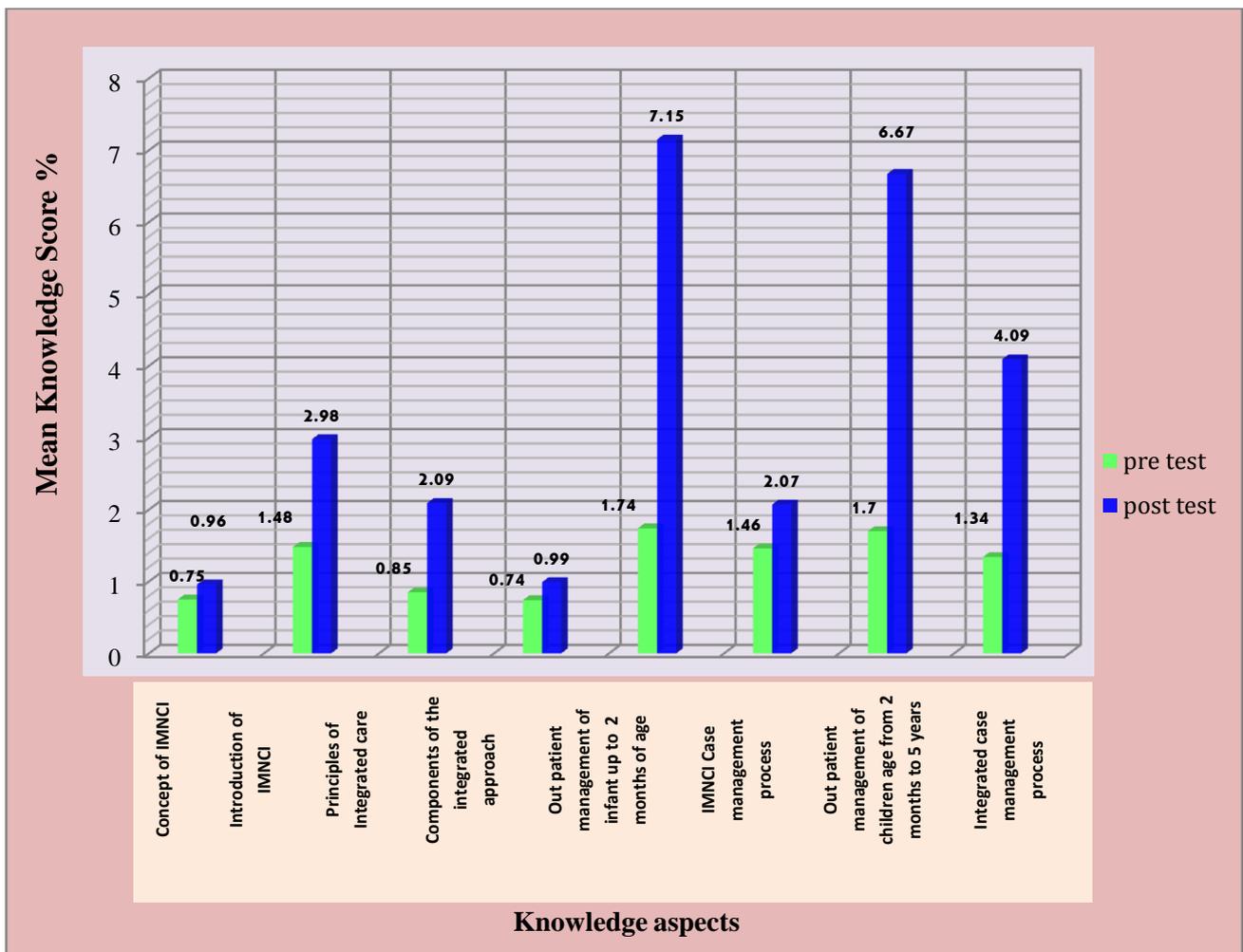
Figure 2. The findings revealed that among the 150 staff nurses, before the administration of Self instructional module majority of the them 78(51.7%) had moderate knowledge on practice and only 15(10%) had inadequate knowledge on practice. whereas after the administration of Self instructional majority of them 125(83.3%) had adequate knowledge on practice and 25(16.7%) had moderate knowledge on practice on IMNCI.

**TABLE 2**  
**EFFECTIVENESS OF THE SELF INSTRUCTIONAL MODULE IN IMPROVING THE LEVEL OF KNOWLEDGE AND PRACTICE REGARDING INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESSES AMONG STAFF NURSES**

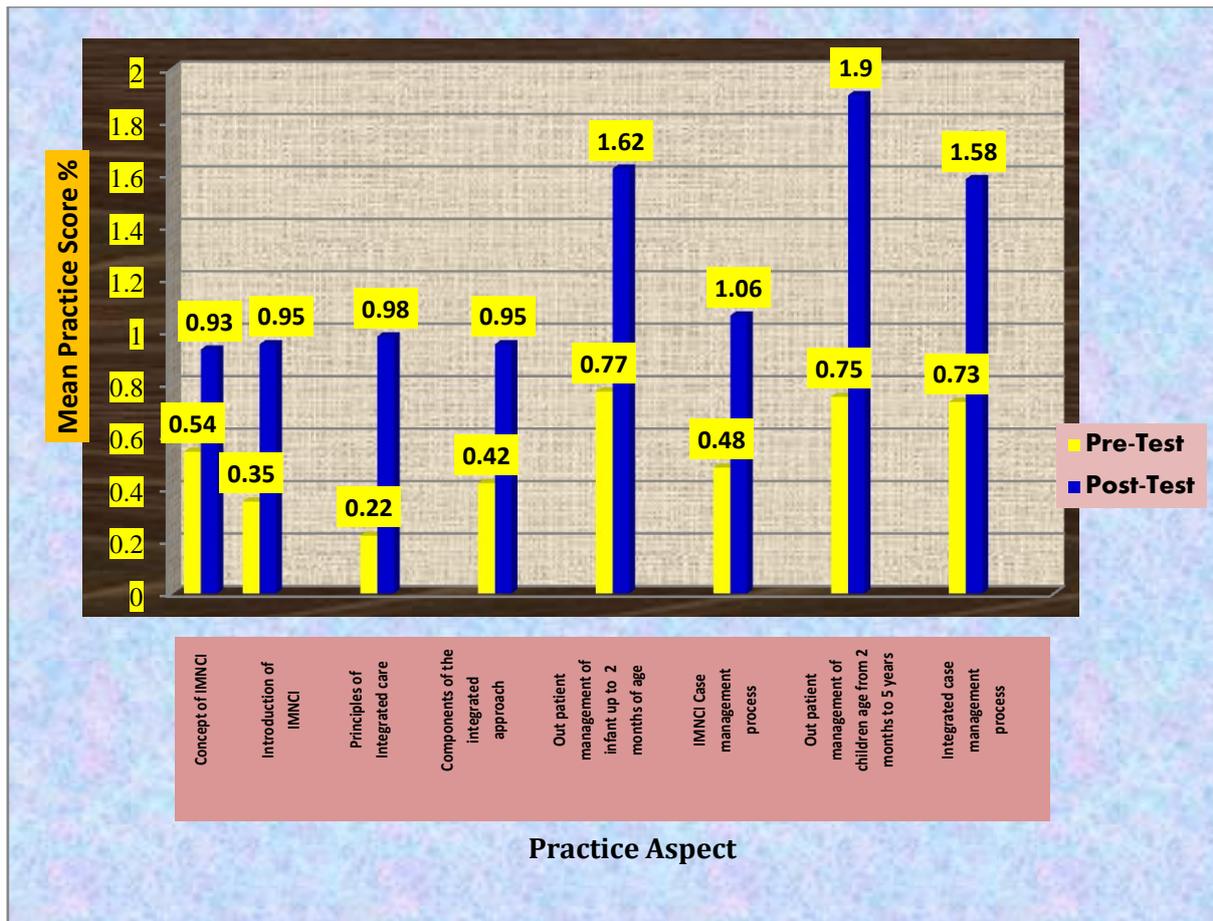
S. No	variables	Maximum Score	Pre test		Post test		‘t’ Value
			Mean	SD	Mean	SD	
1.	Knowledge	40	11.8	3.6	24.5	3.16	32.42
2.	Practice	20	4.3	1.69	8.8	1.56	23.96

n=150

Table 2 Showed that there was a significant difference found ( $P < 0.05$ ) between the pretest mean score 11.8 ( $\pm 3.6$ ) and posttest mean score of knowledge 24.5 ( $\pm 3.16$ ) and mean score pretest knowledge on practice 4.3 ( $\pm 1.69$ ) and posttest mean score 8.81 ( $\pm 1.56$ ). The t value for knowledge were 32.42 and 23.96 for practice which is greater than table value (1.655) at  $p < 0.05$ . It shows that the self instructional module was effective in improving the knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses.



**FIGURE 3: Effectiveness of the self instructional module in improving the level of knowledge regarding individual aspects of Integrated Management of Neonatal and Childhood Illnesses among staff nurses.**



**FIGURE 4: Effectiveness of the self instructional module in improving the practice regarding individual aspects of Integrated Management of Neonatal and Childhood Illnesses among staff nurses.**

**TABLE 3**

**CO-RELATION BETWEEN THE POST TEST LEVEL OF KNOWLEDGE SCORE AND PRACTICE SCORE REGARDING INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESSES AMONG STAFF NURSES.**

n=150

	Knowledge		Practice		'r' Value
	Mean	SD	Mean	SD	
<b>Sample 150</b>	24.5	3.16	8.8	1.56	1

Table 3- showed that there is a positive co-relation observed between the level of knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses.

**III. RESULTS**

The study reveals that out of 100% of nurses 3.3% of the nurses had good knowledge before Self-instructional module; majority of the nurses 60% had average knowledge; 36.6% of the nurses had poor knowledge. Whereas majority of the subjects 76.7% had good knowledge, 23.3% nurses had average knowledge after a Self-instructional module in IMNCI. In competency 51.7% had moderate on practice, 38.3% had adequate knowledge on practice, and 10% of the nurses had inadequate knowledge on practice before the Self-instructional module. Whereas majority of the nurses 83.3% had adequate knowledge on practice, 16.7% nurses had moderate knowledge on practice after the Self-instructional module on IMNCI. There was a significant difference found ( $P < 0.05$ ) between the pretest mean score 11.8 ( $\pm 3.6$ ) and posttest mean score of knowledge 24.5 ( $\pm 3.16$ ) and mean score pretest knowledge on practice 4.3 ( $\pm 1.69$ ) and posttest mean score 8.81 ( $\pm 1.56$ ). The t value for knowledge were 32.42 and 23.96 for practice which is greater than table value (1.655) at  $p < 0.05$ . It shows that the

self instructional module was effective in improving the knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses. There is a positive co-relation observed between the level of knowledge and practice regarding Integrated Management of Neonatal and Childhood Illnesses among staff nurses. There is no association between age, gender, religion, professional education, years of experience and source of information regarding Integrated Management of Neonatal and Childhood Illnesses with the knowledge score of staff nurses. There is no association between age, gender, religion, professional education, years of experience and source of information regarding Integrated Management of Neonatal and Childhood Illnesses with the practice score of staff nurses.

#### IV. CONCLUSION

From the findings of the present study, it is concluded that the level of knowledge and practice regarding Integrated Management of Neonatal and Childhood Illness among staff nurses was inadequate during the pre-test assessment. However, the findings in the post-test, knowledge and practice have improved and the scores indicated an adequate level of knowledge and practice among staff nurses. The improvement is due to the administration of the Self instructional module. Therefore the knowledge and practice of the staff nurses can be further improved by providing on-going teaching and health education programmes.

The study revealed that Self instructional module improved the knowledge and practice regarding Integrated Management of Neonatal and Childhood Illness among Staff nurses

#### LIMITATIONS OF THE STUDY

- There was no actual observation of the practical performance of the staff nurses but only their responses on practice.
- The duration after the study post test assessment was very small; so long term retention cannot be measured.

#### RECOMMENDATIONS

- 1) A similar study can be undertaken with larger samples to validate and generalize the findings of the study.
- 2) The present study can be replicated in similar and different settings.
- 3) A similar study can be conducted among school students and non-medical college students.
- 4) A study can be conducted to assess the knowledge and practice of mothers of under five children regarding Integrated Management of Neonatal and Childhood Illnesses in community.
- 5) A similar study can be undertaken by using different teaching methods.
- 6) A similar study can be conducted on various aspects of IMNCI guideline

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