A Pre-Experimental Study to Assess the Effectiveness of Self Instructional Module on Knowledge Regarding Integrated Management of Neonatal and Childhood Illness (IMNCI) Strategy Among the Staff Nurses at Selected Hospitals in Dehradun

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Abstract: *Background: IMNCI is an integrated approach to child health that focuses on the well-being of the whole child. IMNCI aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. According to recent statistics, more than 7.5 million children younger than age five living in low and middle-income countries die every year Objectives: to assess the knowledge and effectiveness of self Instructional Module regarding IMNCI strategy among staff nurses. Methodology: A pre-experimental study was conducted in 2016 at selected hospitals in Dehradun (Uttarakhand). Sample of 60 staff nurses were selected using non-probability purposive sampling technique. Pre-test was conducted and same day, self instructional module was administered. After relapse of seven days, post-test was conducted using self-structured questionnaire. Result: the findings showed that mean pretest knowledge score was 14.16 and posttest mean knowledge score was 35.5. paired 't' test was applied and the value of 't' was33.620, P is <0.05 which was found to be significant and effectiveness seen in knowledge level of 33.620, which interpreted that majority of staff nurses have gained knowledge to adequate level regarding IMNCI Strategy.*

Keywords: Effectiveness, Self Instructional Module, Knowledge, Staff Nurses

1. Introduction

Approximately 28% of all deaths of newborn and 23% of all infants deaths in the world occur in India. Many of these deaths could be prevented by greater access to and use of high quality health care in combination with improved newborn and infant care practices in families.1The Integrated Management of Childhood Illness (IMCI) was introduced by UNICEF and WHO in 1995 as a new strategy aiming at reducing the continuing high morbidity and mortality in children under the age of five years. This integrated strategy led to the formation of "The Integrated Management of Childhood Illness (IMCI)" in 1992 by UNICEF and WHO. It was based on the rationale that decline in child mortality rates is not necessarily dependent on the use of sophisticated and expensive technologies but rather on a holistic approach that combines the use of strategies that are cheap and can be made universally available and accessible to all[2]. India adopted the IMNCI strategy aiming to reduce its newborn and infant mortality burden and renamed the revised strategy Integrated Management of Neonatal and Childhood Illness (IMNCI) [3.]

Objectives

a) To assess the pretest knowledge level regarding IMNCI strategy among staff nurses.
b) To assess the posttest knowledge level regarding IMNCI strategy among staff nurses.
c) To determine the effectiveness of structured teaching programme regarding IMNCI strategy among staff nurses.
d) To find out the association of post-test knowledge level with their selected socio-demographic variables.

2. Methodology

A pre-experimental (one group pre-test post-test) design was used and data was collected from 60 staff nurses, who were available at the time of study and willing to participate. The study was conducted at selected hospitals in Dehradun (Uttarakhand).

Non-probability purposive sampling technique was used and self-structured questionnaire was prepared to collect data. The tool comprised of three sections: section A included questions regarding socio-demographic variables of staff nurses like, age, gender, professional qualification, total years of experience, source of information Section B included self-structured questionnaire which consists of 40 knowledge items regarding IMNCI. Section C was self instructional module.

To ensure the validity of tool, it was submitted to 10 experts. The reliability of tool was assessed by using test-retest method and was calculated by Karl Pearson correlation coefficient. Where 'r' value was 0.78.

Ethical approval was taken from Chief Medical Officers of respective hospitals to conduct the research study. Written and informed consent was obtained from the

subjects before data collection and assurance was given and maintained regarding confidentiality of results.

3. Results

Frequency and percentage wise distribution of subject according to their socio demographic variables revealed the major findings that out of 60 staff nurses, 43.33% of them were between age of 26 to 30 years. 96% of them were females and majority of them were GNM with a percentage of 53.3%, majority 78.3 % of staff were having working experience of 0-3 years. Most of staff had previous source of information during training programme only with a percentage of 63.3%.
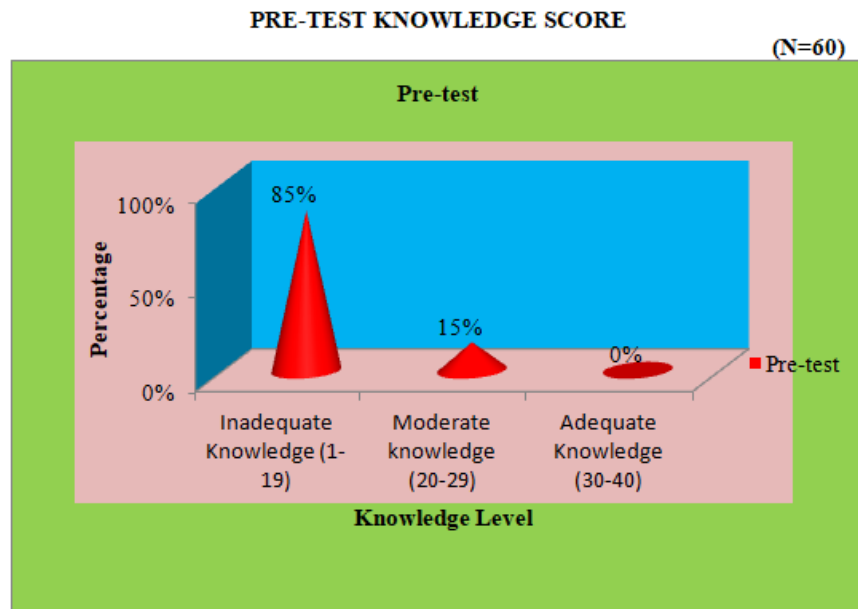

Figure 1: Percentage distribution of staff nurses according to their knowledge level in pre-test

As per the mentioned figure, majority of staff nurses were having inadequate knowledge level of 85.0% leading by 15.0% of staff nurses with moderately adequate knowledge level regarding IMNCI strategy. None of the sample lies under adequate knowledge level.

Table 1: Mean Standard Deviation and mean percentage of pre-test knowledge level of staff nurses regarding IMNCI strategy (N=60)

Descriptive Statistics	Mean	S. D.	Mean %
Pretest Knowledge	14.16	4.34	35.4

Table 1 depicts that pre-test mean knowledge level 14.16 which is 35.4% of total mean percentage. Hence it can be interpreted that knowledge of majority of staff nurses regarding IMNCI strategy was inadequate.
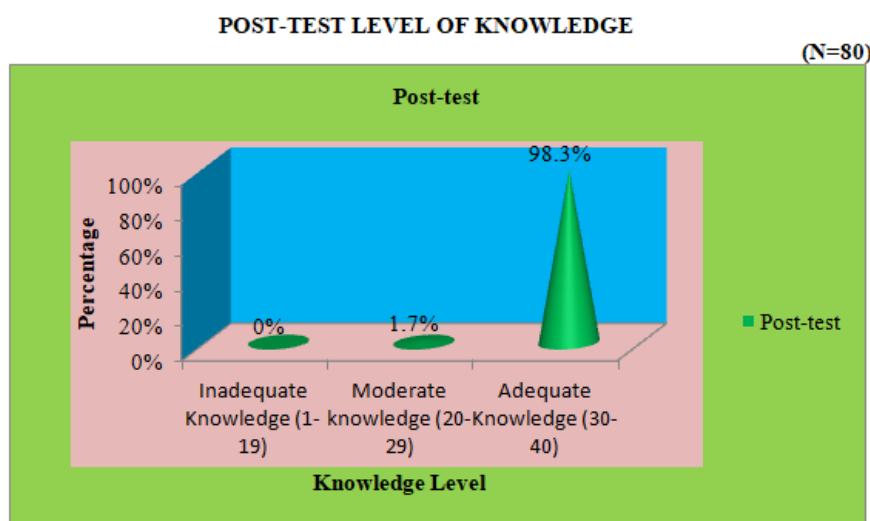

Figure 2: Percentage distribution of staff nurses according to their knowledge level in post-test

Above mentioned figure shows that majority of staff nurses have adequate knowledge with 98.3% following by 1.7% having moderately adequate knowledge level regarding IMNCI strategy.

Table 2: Mean, standard deviation and mean percentage of post-test knowledge level of premenopausal woman regarding osteoporosis and its prevention

(N= 80)

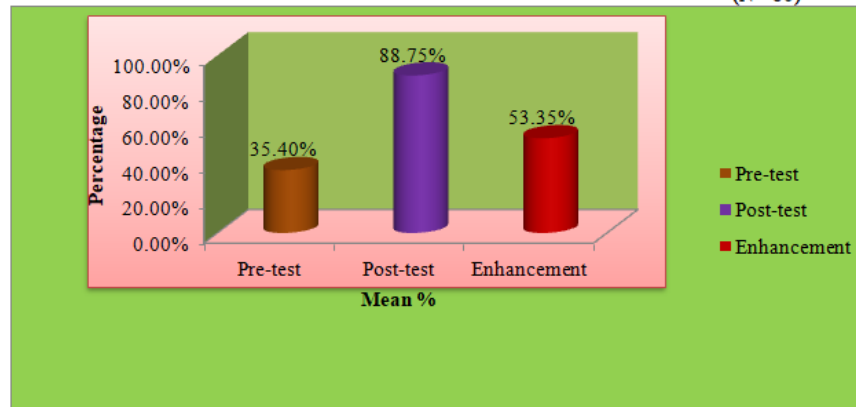| Descriptive Statistics	Mean	S. D.	Mean %
Posttest Knowledge	35.5	2.5	88.75

Figure 3: Percentage wise distribution of staff nurses according to mean percentage of pretest, posttest and their differences

Above mentioned figure shows distribution of staff nurses according to mean percentage of pre-test 35.40% and after implementation of self instructional module, the mean percentage of post-test was 88.75% with the mean percentage difference of 53.35%.

Hence it can be concluded that there is an increase in knowledge level of staff nurses by 53.35% which shows that self instructional module was effective to enhance the knowledge of staff nurses.

Table 3: Comparison of mean, mean percentage and standard deviation between pre-test and posttest knowledge level

(N=60)

Sl. No.	Knowledge aspects	Mean	Mean %	S D	Mean Difference	Enhancement	t Value	Inference
1	Pre test	14.16	35.4	4.34	21.34	53.35%	33.620*	S
2	Post test	35.5	88.75	2.5				

*Significance Level <0.05

Above mentioned table depicts that, mean pretest knowledge score is 14.16±4.34 and posttest knowledge score is 35.5±2.5 and mean difference is 21.34, the obtained "t" value 33.620 is greater than the table value at 0.05 level of significance. Therefore, "t" value is found to be significant. It means there is gain in knowledge level regarding Integrated Management of Neonatal and Childhood Illness (IMNCI) strategy among staff nurses. This supports that Self Instructional Module on Integrated Management of Neonatal and Childhood Illness (IMNCI) strategy is effective in increasing the knowledge level among staff nurses. Hence H_1 is accepted and null hypothesis is rejected.

Association of post-test knowledge level with selected socio-demographic variables of the subjects, N=60

There was no significant association found between the knowledge regarding IMNCI strategy among staff nurses with age, marital status, gender, professional qualification, total years of experience, source of information, in which hospital clinical exposure, previous exposure to IMNCI were not significant at 0.05 level. Thus it can be inferred that there is no significant association between knowledge level among the staff nurses regarding Integrated Management of Neonatal and Childhood Illness (IMNCI) strategy and selected demographic variables.

4. Conclusion

This study mainly focused on assessing the effectiveness of self instructional module on knowledge regarding IMNCI strategy in selected hospitals in Dehradun (Uttarakhand). As per recent statistics, more than 7.5 million children younger than age five living in low and middle-income countries die every year with five major childhood illness such as diarrhea, ARI, measles, malnutrition and malaria, so there is a great significance of imparting knowledge among staff nurses for better outcome in management of common illnesses among neonates and children. The findings of present study showed that mean pretest knowledge score was 14.16 and posttest mean knowledge score was 35.5. paired 't' test was applied and the value of 't' was 33.620, P is <0.05

which was found to be significant and effectiveness seen in knowledge level of 33.620, which interpreted that majority of staff nurses have gained knowledge to adequate level regarding IMNCI Strategy. So it was concluded that self instructional module was effective in increasing the knowledge regarding IMNCI strategy among staff nurses.

5.Future Scope

Nursing Education

- By educating health care professionals especially nurses and nursing students can remove misconceptions and improve quality of care.
- The present study can help the nurse to plan for the health education programmes and to aware the general public regarding early danger signs of various illnesses in their under-5 children.
- Nurse educator can plan various teaching programme to improve their knowledge and gain in skills in the provision of care as per the IMNCI guidelines.

Nursing Practice

Nurse can plan in service education programme to staff nurses to improve their practice in hospital settings as well as in community areas regarding IMNCI

References

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