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Simulation And Its Role In Improving Neonatal Resuscitation, Competencies Among Nursing Officers In Selected INDEX Hospital Indore

"A Experimental Investigation"

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ABSTRACT:

Experimental study to assess effectiveness of simulation and its role in improving Neonatal resuscitation competencies among nursing officers in selected Index hospital Indore in the year.

OBJECTIVES: To assess mean pre-test knowledge score of nursing officers regarding Neonatal resuscitation competencies. To assess mean pre-test practice score regarding Neonatal resuscitation among nursing officers .To determine the effectiveness of simulation and its role in improving Neonatal resuscitation competencies among nursing officers.

RESEARCH METHODOLOGY: Quantative research will be used. Pre experimental one group pre-test post-test research designs were used. independent variable is the simulation competencies. Dependent Variable is the clinical competencies of nursing officers on Neonatal resuscitation extraneous variables includes the demographic characteristics of the subjects namely age, sex, exposure to information, sources of information. Convenience sampling used to facilitate maximum participation within the data collection period. Sample of this study consisted of 50 nursing officers.

RESULTS: mean post-test skill score 17.82 is apparently higher than the mean pre-test skill score (3.68) ,the dispersion of post test score(SD±1.86) is higher than pre-test score (SD±1.59) and the paired t value (t 49=55.54 p≤0.05)is greater than tabulated t value (t 49=1.677 p≤0.05) There were no significant association between knowledge with selected demographic. There were no significant association between score skill with selected demographic.

CONCLUSION: High fidelity Simulation can be recommended as an effective training strategy among nursing officers .

Key word: simulation, Neonatal resuscitation, competencies.

1.INTRODUCTION: Restoring respiration to around 10% of newborns who are not breathing on their own puts them at risk of lifelong organ damage and death. This emergency procedure is called neonatal resuscitation, or simply newborn resuscitation. After treatment, a large number of the babies who need this assistance start breathing on their own. When a baby is given the go-ahead to start breathing on their own, their heart rate usually stabilizes. This is something that medical professionals have expertise with.

2.PROBLEM STATEMENT: "A experimental study to assess effectiveness of simulation and its role in improving newborn resuscitation competencies among nursing officers in selected IDEX hospital in the year "

3 OBJECTIVES:

1.To assess mean pre-test knowledge score of nursing officers regarding newborn resuscitation **competencies.**

2.To assess mean pre-test skill score regarding newborn resuscitation among nursing officers

3.To determine the effectiveness of simulation and its role in improving newborn resuscitation competencies among nursing officers .

4.To determine the effectiveness of practice scores simulation and its role in improving newborn resuscitation competencies among nursing officers.

5.To find out association between pre-test knowledge score with selected demographic variables.

6.To find out association between pre-test practice score with selected demographic variables.

4.HYPOTHESIS :

H_1 : The mean pre-test knowledge scores will be significantly higher than post test knowledge score of Nursing officers regarding simulation and its role in improving newborn resuscitation competencies at 0.05 level of significance.

H_2 : The mean pre-test practice scores will be significantly higher than post test practice score of Nursing officers regarding simulation and its role in improving newborn resuscitation competencies at 0.05 level of significance.

5. RESEARCH METHODOLOGY: Quantative research will be used. Pre experimental one group pretest post test research design were used. independent variable is the simulation competencies. Dependent Variable is the clinical competence of nursing officers on newborn resuscitation extraneous variables includes the demographic characteristics of the subjects namely age, sex, exposure to information, sources of information. The setting chosen for the study was Index hospital Indore . target population for this study was the nursing officers from INDEX hospital Indore .Convenience sampling used to facilitate maximum participation within the data collection period. Sample of this study consisted of 50 nursing officers. Structured opinionnaire and observational checklist was used. Section-I This describe socio demographic variables. It compares 3 items for obtaining information regarding age, sex studying. Section -II It consists of items observational checklist.

6.DATA ANALYSIS AND INTERPRETATION:

Table 1:Comparison between Mean, Standard deviation and 't' value of pre-test andpost-test knowledge score

(N= 50)

KNOWLEDGE SCORE	MEAN	SD	MEAN DIFFERENCE	t – VALUE	Result
PRETEST	7	2.36	8.90	34.86	S
POST TEST	15.90	1.51			

Paired t value 49=34.86,P≤0.05

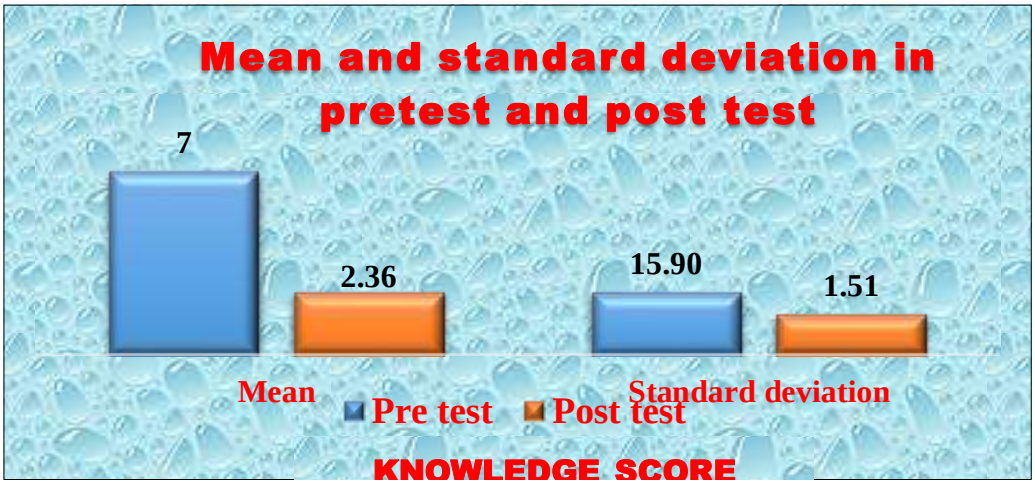

Figure 1 : Bar-diagram representing mean and standard deviation in pretest and post-test knowledge score.

INTERPRETATION: He data presented in table no.1 shows that the mean post test knowledge score 14.90 is apparently higher than the mean pre test knowledge score (5) ,the dispersion of post test score (SD±1.51) is lesser than pre test score (SD±2.36) and the paired t value (t 49=34.86 p≤0.05) is greater than tabulated t value (t 49=1.677 p≤0.05) shows there is significance difference between pre test and post test knowledge score , research hypothesis is accepted This indicated that simulation is effective in increasing knowledge score regarding role in improving newborn resuscitation competencies among nursing officers .

Table 2:Comparison between Mean, Standard deviation and 't' value of pre-test and post-test Practice score

PRACTICE SCORE	MEAN	SD	MEAN DIFFERENCE	t - VALUE	Result
PRETEST	4.68	1.59	14.14	55.54	S
POST TEST	18.82	1.86			

Paired t value 49 = 55.54 , P≤0.05

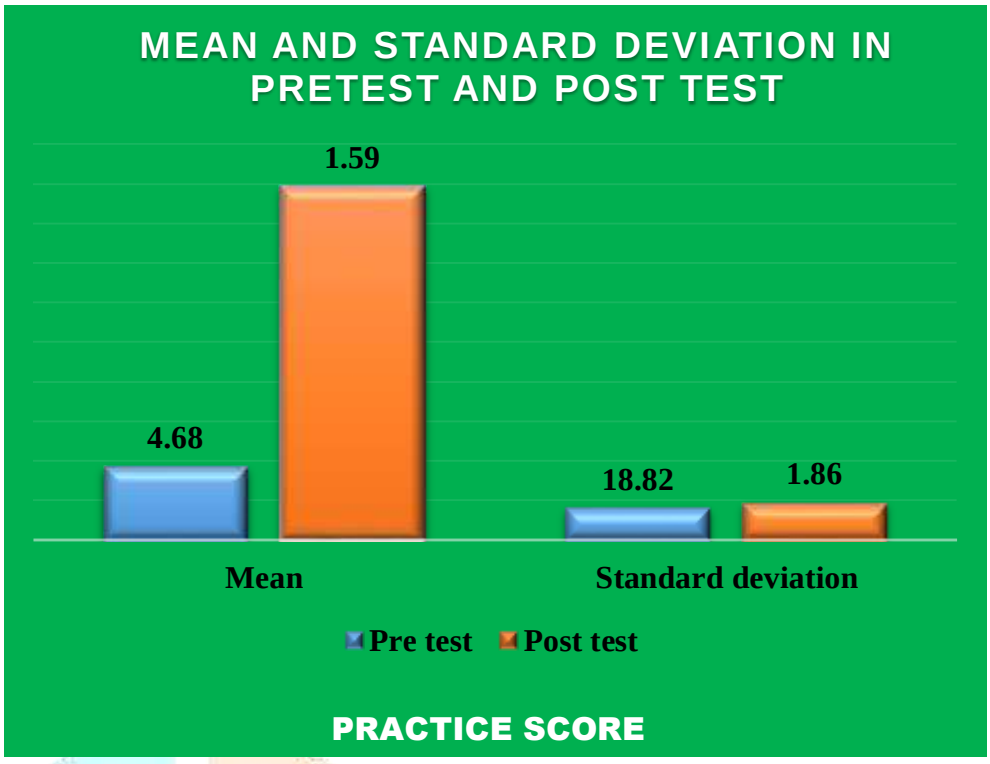

Figure :- 2 . Bar-diagram depicting Comparison between Mean ,Standard deviation and‘t’ value of pre-test and post-test practice score.

INTERPRETATION

The data presented in table no.2 shows that the mean post test skill score 18.82 is apparently higher than the mean pre test practice score (4.68) ,the dispersion of post test score(SD±1.86) is higher than pre test score (SD±1.59) and the paired t value (t 49=55.54 p≤0.05)is greater than tabulated t value (t 49=1.677 p≤0.05) shows there is significance difference between pre test and post test practice score ,thus null hypothesis is rejected and research hypothesis is accepted. This indicated that simulation is effective in increasing practice score regarding role in improving newborn resuscitation competencies among nursing officers. the computed chi-square value between pre-test knowledge score and the demographic variables to find out the association between pre-test knowledge score and demographic variable. Chi square value checked on significance level at <0.05 level. There were no significant association between knowledge with selected demographic. There were no significant association between score practice with selected demographic .

7.CONCLUSION: Simulation can be recommended as an effective training strategy among nursing officers. Simulation on was improving and its role in improving newborn resuscitation competencies of the nursing officers self-efficacy and attitudes and decreasing their anxiety.

8.NURSING ADMINISTRATION:

• Nurses should be given the administrative assistance they need to create and implement teaching materials, such as simulations of newborn resuscitation.

• Nursing administrators should work with the government to implement rules that ensure the availability of suitable facilities for teaching newborn resuscitation competencies simulation.

• Administrators should implement an in-service education program for nurses so that they may increase their expertise and apply it to patients.

• Institutes should conduct periodic inspections to ensure that students have proper knowledge of the newborn resuscitation process.

• Administrative assistance should be provided for the production of such teaching materials, which are driven by simulation, etc.

9.**NURSING RESEARCH:**

The findings of the study add to the corpus of knowledge in nursing. In the future, the investigators can utilize the findings and technique as reference materials. It identifies the areas that deserve more investigation. Other researchers undertaking more research in the same topic can use the ideas and recommendations. Further research may be undertaken on this area to have a more comprehensive understanding of low and newborn resuscitation simulation among nursing officers A behavior change message that will effectively raise awareness of simulation.

10.RECOMMENDATIONS

The following recommendations are made on the basis of the findings of the study:

 A similar study can be undertaken on a large scale for making a more valid generalization.

 A comparative study can be arranged between knowledge and practice.

 A similar study can be arranged for b.sc nursing students working in specialist hospitals or Mult specialist hospitals in different settings.

 An experimental study can be conducted to evaluate effectiveness of self-instructional module in terms of knowledge and attitude of nursing students.

 Periodical assessment of nursing officers who work into hospitals, knowledge and attitude regarding newborn resuscitation procedure.

 A similar study can be undertaken with a descriptive survey research design.

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