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Effectiveness of self-instructional module on knowledge regarding I. V. fluid therapy among student nurses at selected college & school in Gwalior M. P

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Abstract

Context: In hospital settings, most of the time intravenous fluids and drugs administered to patients and nurses are responsible for administration and care of intravenous therapy.

However, patients may develop complications related to intravenous therapy due to inadequate competency and knowledge of nurses regarding intravenous therapy.

Aim: The present study was to conduct for enhancing the knowledge by self-instructional module regarding I. V fluid therapy among student nurses.

Methodology: An evaluative approach was used for the study. Pre-experimental one group pre-test post-test research design was used in the study. The samples were recruited by probability simple random sampling technique. The size of population included in this study was 40 students nurses which were selected according to inclusive and exclusive criteria.

They were given a self-instructional module to give their response to assess the knowledge regarding I. V fluid therapy. Study was conducted in the P.G College of Nursing, Gwalior

M.P. informed consent from the student nurses was obtained prior to data collection process and collect the data in the form of pre-test and post-test. Then going for analysis and interpretation of data with inferential statistics like chi-square, mean, median, standard deviation etc.

Result: In pre-test knowledge score and it is reflected that exactly few students observed with poor level of knowledge about I.V Fluid therapy, 40% students nurses showed average level of knowledge, none of the students nurses identified with excellent level of knowledge about I.V Fluid therapy.

In was detected in post-test that none subjects were left in poor category. Major proportion of subjects 36.7% student nurses acquired excellent level of knowledge. 58.3% students nurses acquired good level of knowledge, few 5% students nurses observed with average level of knowledge.

Interpretation and Conclusion: The (Mean \pm Standard Deviation) knowledge scoring in pre-test found to be 12.37 ± 3.24 points about I. V Fluid. However, there was a change noticed in knowledge score at post-test stage found to be higher after administration of self-instructional module on knowledge and the knowledge score rose to 17.42 ± 2.12 points. Comparison between baseline (pretest) and post administration (posttest) of self-instructional module on knowledge indicated that there was difference and improvement at large in knowledge acquirement among students nurses about I. V Fluid therapy.

However, there was a gain of 40.82% in knowledge about I. V Fluid therapy among student nurses. Overall, the self-instructional module considers as an effective tool when there is a need in lacking, bridging and modifying the information about I. V Fluid therapy.

Lastly these statistical finding concluded the effectiveness of self-instructional module on knowledge among students nurses about I. V Fluid therapy which confirm the objectivity of the present research study.

Keywords: Self-instructional module, I. V fluid therapy, intravenous therapy, students

Introduction

Intravenous therapy and care of vascular devices play a central role in the delivery of modern health care treatment. Intravenous (IV) therapy has become a major component of patient care in hospital and nursing homes. It is prescribed for almost every individual who is admitted to the hospital and is used to support patient with acute and chronic problems.

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As nurses play a pivotal role in rendering quality care, they must be knowledgeable of modified and advanced technique, to meet the specific need of each patient.

Intravenous therapy is the administration of medicine, fluids, nutrition, blood and blood products through parenteral route for a patient. Administration of fluids and other product through a vascular access device is considered IV therapy. One of the most common complications related to IV therapy is thrombophlebitis which is due to infection and a probable reason for increased complications. Complications associated with IV therapy are preventable by health care professionals especially nurses. To prevent IV therapy related complications, the nurses require enhancing their knowledge. Knowledge and practice of nurses regarding IV therapy is an essential component to render quality care to the patient with IV therapy. Nurses are continuously being asked to extend and expand their traditional roles for professional development. Furthermore, it was also suggested that nurses need to have the competency to provide patient care. Very few studies were conducted on this topic in the healthcare setting previously. Thus, the investigators felt the need to find out knowledge of nurses regarding care and administration of IV therapy.

Research Design

The research design used in this study was one group pre-test post-test experimental research design.

Target Population

Student Nurses who are studied in P. G College of Nursing, Gwalior.

Accessible Population

40 student nurses studied in P. G College of Nursing, Gwalior.

Sample and Sample Size

The sample of the study comprised of 40 student nurses of P. G College of Nursing, Gwalior.

Sampling Technique

Non probability convenient sampling technique.

Criteria for Selection of Sample

Inclusive Criteria

- Student nurses of P. G College of Nursing, Gwalior.
 - The student nurses willing to participate in the study.
 - The students nurses present at the time of study
- #### Exclusive Criteria.
- Student nurses who are not available at the time of study.
 - Students nurses who are already involve in any other research activity.

Development of Tool

A self-structured knowledge questionnaire was developed by the researcher to assess the knowledge score of student nurses regarding I V Fluid Therapy. A check list was prepared to assess knowledge of student nurses regarding I V Fluid Therapy.

The tool was prepared on the basis of the objectives of the study Review of literature provided adequate content for the tool preparation personal experience of the investigator in the clinical field, expert opinion from teachers of medical

and surgical nursing department, content validity and reliability.

Description of the Tool

The tool comprised of two sections of questionnaire.

Section I

Consist of demographic characteristics of student nurses seeking information such as age, gender, educational qualification, stream of course, any workshop/seminars/ educational program attended, frequency of IV therapy per day.

Section II

Self- structured knowledge questionnaire pertaining to knowledge regarding administration of IV Fluid therapy among student nurses. Tool consists of 24 items were developed so as to cover knowledge score regarding IV fluid Therapy.

Pilot Study

Pilot study was conducted in Sophia College of Nursing, Gwalior. The investigator used purposive sampling technique to select the samples from the total population. 04 samples were selected for the study.

Finding of the Study

- The majority of samples more than one-third (38.3%) of the population of student nurses were more frequently belonged to the lower age group of 18-20 years and that followed by exactly one-third (33.3%) student nurses were belonged to age group of 20-22. The age group of 22-24 years consist of (13.3%) student nurses.
- The majority of samples gender that major part (65%) of population of staff nurses was most commonly female. Rest (35%) student nurses found to be male had also participated in the present study.
- Majority of the student nurses (62%) are attended in workshop/ seminars/ educational program attended related to IV fluid therapy.
- Majority of the student nurses (58%) are administering IV therapy >20 times in day.
- The mean pretest knowledge score was 12.37 ± 3.24 and posttest it was 17.42 ± 2.12 . The mean difference is found to be highly significant at the 0.001 level of significance. Mean difference 5.05 point, Henceforth, the statistical agreement demonstrated that the self-instructional module preferred as an effective conservative program for improving the knowledge among student nurses regarding I V fluid therapy.

Conclusion

The present study concluded that were a statistically significant in gaining knowledge of I V Fluid Therapy of student nurses. Thus, the intervention "self-instructional module" was effective.

Recommendation

- A study can be replicated on large samples. There by findings can be generalized for a large population.
- A similar study can be repeated with two group research design for generalized findings.
- A study can be done using different teaching technique

to educate the staff nurses.

- A similar study can be replicated on the other procedures
- A comparative study can be done between different colleges

Limitation

- This sample size is limited to 40.
- The study limited to those who are studied in nursing college.
- The data collection period is limited for one month.
- The study was limited to P. G College of Nursing, Gwalior

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