



An Experimental Study to Assess the Effectiveness of a Planned Teaching Programme on Administration of Intra Muscular Injection in terms of Knowledge and Practice among G.N.M. Students from Selected Schools of Nursing of Gujarat State

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Abstract

In the World, More than 12 billion Intra Muscular Injections are administered every year and Unsafe injections place patients at risk of disability and death Therefore, Investigator conducted An Experimental study to assess the effectiveness of a Planned Teaching Programme on Administration of Intra Muscular Injection in terms of Knowledge and Practice among G.N.M. Students of Selected Schools of Nursing of Gujarat State. Objectives of the Study were 1) To assess the knowledge and practice of experimental group of GNM students before and after administration of a Planned Teaching Programme on Administration of Intra Muscular Injection 2) To assess the knowledge and practice of control group of G.N.M. students who have not undergone for any treatment. On Administration of Intra Muscular Injection 3) To compare post test knowledge and practice score of experimental group with control group. A true experimental approach was used with pre test post test control group design and Multi Stage Random Sampling technique for 60 samples of 2nd year G.N.M. students (30 in experimental group and 30 in control group) and tools used were structured Knowledge questionnaire and Structured Observational Checklist. Mean score of post test Knowledge and Practice of Experimental Group was 26.9 and 26.6 higher than the mean score of pre test Knowledge and Practice 15.77 and 16.9 respectively. In addition, the calculated 't' for the Knowledge 20.18 and Practice 22.72 were greater than the tabulated $t = 2.04$, $p < 0.05$, $df = 29$ and $t = 2.76$, $p < 0.01$, $df = 29$. Mean score of post test Knowledge and Practice of Control Group was 15.72 and 16.53 approximately same as the mean score of pre test Knowledge and Practice 15.57 and 16.47. The Mean post test Knowledge and Practice of Experimental Group was 26.9 and 26.6 higher than the Mean score of post test Knowledge and Practice of Control Group was 15.72 and 16.53. In addition, the calculated 't' for the Knowledge 11.18 and Practice 10.07 was greater than the tabulated $t = 2.02$, $p < 0.05$, $df = 59$ and $t = 2.66$, $p < 0.01$, $df = 59$. Hence, Investigator concluded that a Planned Teaching Programme was effective in improving of Knowledge and Practice among Experimental Group of G.N.M. Students of selected Schools of Nursing of Gujarat State.

Keywords

Intra Muscular Injection, Knowledge, Practice, G.N.M. Students



INTRODUCTION

Injections are the most common health care procedure worldwide. In developing and transitional countries alone, some 16 thousand million injections are administered each year. Most injections, more than 90%, are given for therapeutic purposes while 5 to 10% are given for preventive services, including immunization and family planning.. A safe injection does not harm the recipient, does not expose the health care worker to any avoidable risk and does not result in waste that is dangerous for the community. When injections are medically indicated they should be administered safely. Unsafe injections place patients at risk of disability and death.

(WHO Report, 2006)

Administering injections is an activity inherent to nursing practice. A critical review of nursing fundamentals texts found that the "proper" procedure was often non-research based and reflected myths, traditions, and out-of-date recommendations regarding the technique In the World, More than 12 billion Intra Muscular Injections are administered every year and Unsafe injections place patients at risk of disability and death Therefore, Investigator conducted An Experimental study to assess the effectiveness

of a Planned Teaching Programme on Administration of Intra Muscular Injection in terms of Knowledge and Practice among G.N.M. Students of Selected Schools of Nursing of Gujarat State.

STATEMENT OF PROBLEM

"An Experimental Study to Assess the Effectiveness of a Planned Teaching Programme on Administration of Intra Muscular Injection in terms of Knowledge and Practice among G.N.M. Students from Selected Schools of Nursing of Gujarat State"

OBJECTIVES OF THE STUDY

1. To assess the knowledge of experimental group of G.N.M. students of Schools of Nursing of Gujarat state before and after administering of a planned teaching Programme on administration of intra muscular injection.
2. To assess the practice of experimental group of G.N.M. students of Schools of Nursing of Gujarat state before and after administering of a planned teaching Programme on administration of intra muscular injection.



3. To assess the knowledge of Control group of G.N.M. students of Schools of Nursing who have not under gone for any treatment related to administration of intra muscular injection.
4. To assess the practice of Control group of G.N.M. students of Schools of Nursing who have not under gone for any treatment related to administration of intra muscular injection.
5. To compare the post test knowledge score of experimental group with post test knowledge score of control group related to administration of intra muscular injection.
6. To compare the post test practice score of experimental group with post test practice score of control group related to administration of intra muscular injection.

HYPOTHESES

H1: The mean post test knowledge score of experimental group of G.N.M. students will be significantly higher than their mean Pre test knowledge score after administration of a planned teaching Programme on administration of intra muscular injection as evidenced by structured evidenced by structured knowledge questionnaire at 0.05 level of significance.

H2: The mean post test practice score of experimental group of G.N.M. students will be significantly higher than their mean pre test

practice score after administration of a planned teaching programme on administration of intra muscular injection as evidenced by structured evidenced by structured observational checklist at 0.05 level of significance.

H3: The mean post test knowledge score of experimental group of G.N.M. students will be significantly higher than their mean post test knowledge score of control group of G.N.M. students as evidenced by structured knowledge questionnaire at 0.05 level of significance.

H4: The mean post test practice score of experimental group of G.N.M. students will be significantly higher than their mean post test practice score of control group of G.N.M. students as evidenced by structured observational checklist at 0.05 level of significance.

METHODOLOGY

Research approach: true experimental approach

Research design: Research design selected for the present study was pre-test and post-test control group design.



Variables:

Independent Variable: a planned teaching programme on administration of intra muscular injection.

Dependent Variable: Knowledge and Practice of Samples

Research Setting:

This study was conducted in selected Schools of Nursing that is recognized by Gujarat Nursing Council of Gujarat state. The study has been conducted in laboratory of fundamental of nursing where no any disturbance was present and having facility of procedure in the Schools.

Target Population:

In this study the target population was the entire students of second year G.N.M. of selected Schools of Nursing of Gujarat state it is 2037 consisted of 557 from 19 Govt. Schools of Nursing and 1480 from 36 Self finance Schools Of Nursing.

Criteria for sample selection

1. Second year G.N.M. Students were selected through systematic random sampling method.
2. Students who were studying in second year G.N.M. and who were available during the study period.

3. Second year G.N.M. students who were willing to participate in the research study.

Preparation of Lesson Plan

Planned Teaching Programme

Part-1: Knowledge portion administration of an intra muscular injection the topic included was Introduction, Related anatomy and physiology

Definition, Purposes, Factors increasing drug absorption, Syringe and needle, Nursing responsibility, Sites for I.M. Injection.

The investigator used lecture and group discussion as the method of Teaching along with poster and object as A.V. Aids.

Part-2: Practice portion administration of an intra muscular injection the topic included was Preliminary assessment, Preparation of patient, articles and unit, Steps of the procedure. After care of the procedure, Recording and reporting.

Demonstration cum discussion with return demonstration used as the method of teaching along with stimulator and object as A.V. Aids.

Development of Structured Knowledge Questionnaire

An structured questionnaire developed to assess the knowledge towards Intra muscular injection among samples in selected second year G.N.M. Schools of nursing of Gujarat



state. In this section questions related intra muscular injection were included in form multiple choice question and true and false sentences. Total 30 questions in that 20 multiple choice questions and 10 true and false questions were developed to find out the knowledge regarding intra muscular injection.

Development of Structured observational checklist

A Structured observational checklist was developed to assess the practice of administration of intra muscular injection among Samples in selected second year G.N.M. Schools of nursing of Gujarat state. In this total 20 items were included in this section.

Plans for Data Analysis

The Investigator planned to analyse the data in the following manner

Section I personal data analysed using frequency and percentage and presented in the form of the table

Section II The data from structured knowledge questionnaire before and after administration of planned teaching programme to be analysed using mean, standard deviation(SD) and t -test and presented in the form of tables and graphs.

Section III The data from structured observation checklist before and after administration of planned teaching programme analysed using mean, standard deviation(SD) and t -test and presented in the form of tables and graphs

FINDINGS

The data were analysed and interpreted in terms of objectives of the study. Descriptive and inferential statistics were utilised for the data analysis.

After analysis the data major findings of the study were as follows,

1. The majority of the samples 57 (95%) were 19 to 21 years of age and only 3 (5%) were 22 to 24 years of age.
2. The majority of the samples 51 (85%) were female and 9 (15%) were male.
3. The mean pre-test knowledge score of experimental group about administration of intramuscular injection as observed by investigator was 15.77 whereas post-test knowledge score was 26.9 at 0.05 level of significance.
4. The mean pre-test knowledge score of control group about administration of intra muscular injection as observed by investigator



was 15.57 whereas post-test knowledge score was 15.72 at 0.05 level of significance.

5. The mean pre-test practice score of experimental group about administration of intra muscular injection as observed by investigator was 16.9 whereas post-test practice score was 26.6 at 0.05 level of significance.

6. The mean pre-test practice score of control group about administration of intra muscular injection as observed by investigator was 16.47 whereas post-test practice score was 16.53 at 0.05 level of significance.

7. The mean post-test knowledge score of experimental group about administration of intra muscular injection as observed by investigator was 26.9 whereas post-test knowledge score of control group was 15.72 at 0.05 level of significance.

8. The mean post-test practice score of experimental group about administration of intramuscular injection as observed by investigator was 26.6 whereas post-test knowledge score of control group was 16.53 at 0.05 level of significance.

CONCLUSION

The data demonstrated there was significant increase in the knowledge and practice of the

experimental group after the administration of the planned teaching programme on Administration of Intra Muscular Injection. Investigator concluded that a Planned Teaching Programme was effective in improving of Knowledge and Practice among Experimental Group of G.N.M. Students of selected Schools of Nursing of Gujarat State

IMPLICATION AND UTILIZATION OF THE STUDY

Students will be the future staff nurses so they are health care providers working directly with individuals, families and community who can play a vital role in national health care delivery system.

The findings of study have several implications for nursing education, nursing practice, nursing administration and nursing research.

NURSING EDUCATION

Evidenced base practice on administration of intra muscular injection needs to be planned from time to time for all categories of students working in Schools of nursing.

A nurse educator need to lay emphasis on teaching students regarding administration of intra muscular injection for providing quality services in administration of injection,



integrate the nursing curriculum and orient the students about step wise following of a procedure on intra muscular injection.

There should be adequate guidance, supervision and evaluation of nursing students in clinical area as regards the education of administration of intra muscular injection.

NURSING PRACTICE:

The findings of the study imply that there is a need for continued and intensified efforts to ensure that G.N.M. students enquire knowledge necessary to provide quality service in administering injection, are aware of effects of administration of intra muscular injection are engaging inappropriate precautionary problems.

Scientifically and evidenced base practice in administration of intra muscular injection is necessary to prevent complications and provide best quality nursing care to the patient. Periodic evaluation of the practice of administration of intra muscular injection to be done.

NURSING ADMINISTRATION:

Nurse administrator should be taking the initiative in providing best possible educational exposure regarding administration of intra muscular injection.

Appropriate teaching learning materials needs to be prepared and made available for students. Nurse administrator should plan in-service education for staff nurses on evidenced base practice in administration of intra muscular injection. The planned teaching Programme regarding practice can be used for the staff nurses.

NURSING RESEARCH:

Nursing research should be conducted to prepare various educational materials for students and evaluate their effectiveness.

Nursing research should be directed to further explore and update knowledge and practice of students towards administration of intra muscular injection. This can enhance quality of nursing services in administration of intra muscular injection.

RECOMMENDATION

On the basis of findings of the study the following recommendation were made:

1. The study can be replicated on a large samples ,thereby findings can be generalised for a large populations.
2. A similar study can be conducted by using quasi experimental approach.



3. Follow up or present study subjects can be done to evaluate the long term effects of guidelines.
4. A similar study can be done by using guideline, or self instructional module.
5. A comparative study may be carried out between G.N.M. and B.Sc.Nsg students of Gujarat state.
6. A similar study can be conducted to assess the practice of staff nurses working in Hospital.
7. A similar study can be conducted on administration of I/V Injection.
8. A similar study can be conducted on self administration of S/C Injection among patients.



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