



A STUDY TO ASSESS THE KNOWLEDGE LEVEL REGARDING HELPER SKIN TAP TECHNIQUE ON PAIN ASSOCIATED WITH INTRAMUSCULAR INJECTION AMONG NURSING STUDENTSAT SELECTED COLLEGES, CHENNAI

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Abstract

Nursing students using intramuscular injection had adequate knowledge. In this context, complementary therapy like Helper skin tap technique has its own significance, thus enhancing the scope of nursing. To evaluate the knowledge of Helper skin tap technique on pain associated with intramuscular injection. A quantitative approach using experimental group by using descriptive design. 60 nursing students injecting intramuscular injection having knowledge using non-probability convenient sampling technique from Sathyabama college of nursing. Helper skin tap technique is tapping the injection site 3 times before inserting the needle and 3 times after removing the needle. By using Chi square test to assess the level of knowledge associated with the Helper skin tap technique. Analysis among Experimental group by using chi square test found significant value at $X^2 < 0.05$ level. Most of the nursing student had adequate knowledge about the Helper skin tap technique is effective on pain associated with intramuscular injection.

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1. Introduction

Pain is a major problem that causes and reduces quality of life. Pain is one of the major Reasons that people seek health care. It is extremely unpleasant and a really personal sensation which will not be shared with Others. Understanding of the physiologic and psychosocial dimensions of the Pain is an important for effective assessment and management of patients with pain. The International associations for the study of pain (1998) define pain as an Unpleasant sensory and emotional experience associated with actual or potential tissue Damage. Pain is classified as acute pain, chronic pain .

The American Pain Society (2003) said that pain is referred to as “the fifth vital sign” to emphasize its Significance and to increase the awareness among health care professionals of the. Importance of effective pain management. Pain relieving measures is a most fundamental of Human. right; it is responsibility of the nurse to use best approach to pain management.

According to WHO (2006), Intramuscular Injection is an administration of Medication administered through a skin puncture by a syringe inserted deep into a large Muscle of the body for therapeutic purposes. This route provides faster absorption of the drug because the muscles have greater vascularity.

2. Research Methodology

Methodology deals with the research approach, research design, setting of the study, population, criteria for selection of sample, sample size, sampling technique, description of tool, scoring procedure, pilot study, data collection procedure, plan for data analysis and protection of human rights.

Research Approach

Polit and Hungler, (2004) defined the research approach as “a general set of orderly discipline procedure used to acquire information”. The research approach used for this study was quantitative approach to evaluate the effectiveness of Heifer skin tap technique on pain associated with intramuscular injection among nursing students .

Research Design

Polit and Hungler, (2004) defined research design as “overall planform addressing a research questions, including specification for enhancing the study integrity. In this research the research design was “Descriptive Design “

Variables

A variable is an attribute of a person or object that varies, that is, takes on different values. Variables are measurable characteristics of a concept and consist of logical group of attributes.

Dependent Variable

Dependent variable is that which is hypothesized to depend on (or) been caused by another variable. In this study the dependent variable is the level of knowledge in Helfer skin tap technique associated with intramuscular injection among nursing students .

Independent Variable

Independent variable is manipulated and it intends to cause a change in the dependent variables. In this study the independent variable is Helfer skin tap technique.

3. Setting of the Study

Polit and Hungler (2004) stated that “the physical location and conditions in which data collection has taken place in a study is the setting of the study”. The study was conducted in Sathyabama nursing college students . Sathyabama college is 60 student with nursing department at Bsc-Nursing.

Population

According to Polit and Hungler, (2005) “A population is the entire aggregation of cases in which a researcher is interested”. The target population is the aggregation of cases about which the researcher would like to make generalization. An accessible population is the section of the target population to which the researcher has reasonable access. In this study the target population was nursing students intramuscular injection. The accessible population was Sathyabama nursing college students those who are injected the intramuscular Injection.

Sample

According to Basavanthappa B.T, (2005) “sampling is a process of selecting representative. units of a population for study in a research. It is the process of selecting a subset of a population in order to obtain information regarding a phenomenon in a way that represents the entire population”.

The sample size for the study was 60. The subjects were selected in Sathyabama college nursing students.

Sampling Technique

According to Burns and Groove, (2005) “sampling technique is the process of selecting a portion of the population to represent the entire population”. The sample of the study was selected by adopting non probability convenient sampling technique. The total sample size was. and they were selected based on inclusion criteria.

Description of Tool Part A

It consists of variables of nursing students demographic data and knowledge related questionnaire.

Section A

It consists demographic variables such as Age,Gender,Maritalstatus, education and year of study

Section B: Self Structured Questionnaire

It consists self structured questionnaire such as application of Helfer skin tap technique while administering IM injection on the patients,If this

technique is not used what will be the effect on the patients, advantages of Helfer skin tap technique and time taken to reduce the pain while administering IM injections.

Data Analysis

Data analysis is the practice of working with data to glean useful information, which can. then be used to make informed decisions. “It is a capital mistake to theorize before one has data.

It is divided into four parts;

- Distribution of demographic variables among nursing students giving theintra muscular Injection
- Level of pain perception among patients receiving intra muscular injection.
- Data on effectiveness of Helfer skin tap technique on pain associated with intramuscular injection
- Data on association between pain associated with intramuscular Injection giving nursing students with their selected demographic variables.

4. Result and Discussion

Section I: Data On Demographic Variable of Nursingstudents

Table: 1 Frequency and Percentage Distribution of DemographicVariables among Nursing students

| S.NO | DEMOGRAPHICVARIABLES | FREQUENCY(f) | PERCENTAGE (%) |
|-------------|-----------------------------|---------------------|-----------------------|
|-------------|-----------------------------|---------------------|-----------------------|

| | | | |
|---|---------------|----|-------|
| 1 | Age | 5 | 8.3% |
| | ➤ >18 | 50 | 90% |
| | ➤ 18-25 | 1 | 1.7% |
| | ➤ 25-35 | | |
| 2 | Gender | | 26.7% |
| | ➤ Male | 16 | 73.3% |
| | ➤ Female | 44 | |
| 3 | Maritalstatus | | |
| | ➤ Married | 2 | 3.3% |
| | ➤ Unmarried | 58 | 96% |

N= 60

| | | | |
|---|--|--|--|
| | | | |
| 4 | <p style="text-align: center;">Education</p> <p><input type="checkbox"/> Diplomanursing</p> <p><input type="checkbox"/> PostBscnursing</p> <p><input type="checkbox"/> B.SCnursing</p> <p><input type="checkbox"/> ANM</p> | <p style="text-align: center;">0</p> <p style="text-align: center;">1</p> <p style="text-align: center;">59</p> <p style="text-align: center;">0</p> | <p style="text-align: center;">0</p> <p style="text-align: center;">1.7%</p> <p style="text-align: center;">98.3%</p> <p style="text-align: center;">0</p> |
| 5 | <p style="text-align: center;">So far approximately howmany IMinjection have youadministeron thepatient?*</p> <p><input type="checkbox"/> 50</p> <p><input type="checkbox"/> 50-100</p> <p><input type="checkbox"/> 100-150</p> <p><input type="checkbox"/> 150-200</p> <p><input type="checkbox"/> <200</p> | <p style="text-align: center;">41</p> <p style="text-align: center;">16</p> <p style="text-align: center;">2</p> <p style="text-align: center;">0</p> <p style="text-align: center;">1</p> | <p style="text-align: center;">68.3%</p> <p style="text-align: center;">26.7%</p> <p style="text-align: center;">3.3%</p> <p style="text-align: center;">0</p> <p style="text-align: center;">1.7%</p> |
| 6 | <p style="text-align: center;">what are the sites of IMinjection?</p> <p><input type="checkbox"/> Deltoidmuscle</p> <p><input type="checkbox"/> Dorsoglutealmuscle</p> <p><input type="checkbox"/> Ventroglutealmuscle</p> <p><input type="checkbox"/> Vastuslateralismuscle</p> <p><input type="checkbox"/> Alltheabove</p> | <p style="text-align: center;">31</p> <p style="text-align: center;">0</p> <p style="text-align: center;">0</p> <p style="text-align: center;">0</p> <p style="text-align: center;">26</p> | <p style="text-align: center;">52.5%</p> <p style="text-align: center;">0</p> <p style="text-align: center;">0</p> <p style="text-align: center;">0</p> <p style="text-align: center;">44.1%</p> |

Table 1 reveals that regarding age, majority of the nursing students 5 (8.3%) belong to the age group of below 18 years, 50 (90%) belong to 18-25 years, 1 (1.7%) belong to age 25-35 years. Regarding gender 44 (73.3%) nursing students were females and 16 (26.7%) were males. Regarding marital status 2 (3.3%) of nursing students were married, 58 (96%) were unmarried. Regarding educational status 0 (0%) of nursing students had completed diploma nursing, 1 (1.7%) had completed post B.sc nursing, 59 (98.3%) had completed B.sc nursing, 0 (0%) had completed ANM. Regarding the number of nursing students administered intramuscular injection on patient 41 (68.3%) had administered 5-10 patients, 16 (26.7%) had administered 50-100 patients, 2 (3.3%) had administered 100

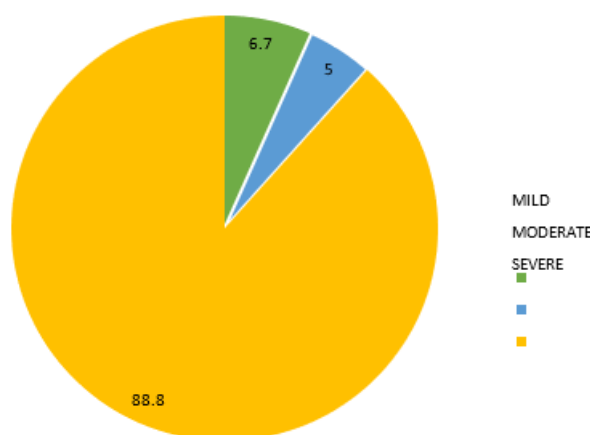
150 patients, 0 (0%) had administered 150-200 patients, 1 (1.7%) had administered <200 patients. It reveals that among nursing students having knowledge associated with intramuscular injection majority of them belong to the age group of 18 to 25 years, were females, had primary education, were moderate workers, had no habit of practicing muscle exercise, get a gaseous form of drug, no history of any allergic reaction due to intramuscular injection previously, <2ml volume of substance injected, had previous exposure to intramuscular injection.

Section II: Data on Level of Pain associated with Intramuscular Injection among nursing Students.

Table: 2 Frequency and Percentage Distribution Level of Pain Perception among patients associated with intramuscular Injection

| s.no | Level of pain | Frequency (f) | Percentage (%) |
|------|---------------|---------------|----------------|
| 1 | Mild pain | 4 | 6.7 |
| 2 | Moderate pain | 3 | 5 |
| 3 | Severe pain | 53 | 88.3 |

The above table shows that among patients receive intramuscular injections, 4 (6.7%) had mild pain, 3 (5%) had moderate pain and 53 (88.3%) had severe pain.

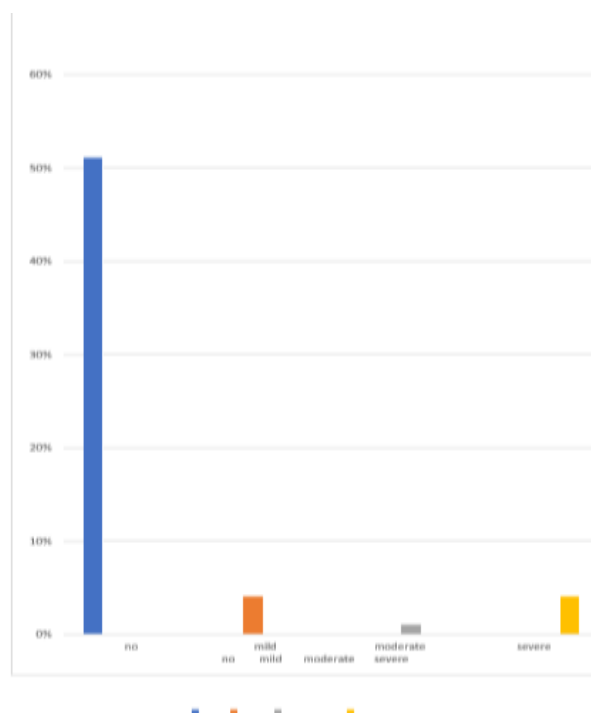


Section iii: Data on effectiveness of helper skin tap technique associated with intramuscular injection among nursing students

Table: 3 Effectiveness of Helper skin tap technique with level of pain and frequency and percentages.

| s.no | Level of pain | Frequency | percentages |
|------|---------------|-----------|-------------|
| 1 | No pain | 51 | 51 |
| 2 | Mild pain | 4 | 4 |
| 3 | Moderate pain | 1 | 1 |
| 4 | Severe pain | 4 | 4 |

The above table shows that effectiveness of helper skin tap technique 51 (85%) had no pain, 4 (6.6%) had mild pain, 1 (1.6%) had moderate pain, 4 (6.6%) had severe pain.



Nursing Implications

The findings of the study enables us to conclude that the nursing students had knowledge about Helper skin tap technique was effective to reduced the pain perception among patients receiving intramuscular injection which is a vital concern in the field of nursing profession including nursing

practice, Nursing administration, nursing education and nursing research.

Nursing Administration

- Make staff nurses to focus on the important aspect of Heifer skin tap Technique to reduce pain associated with intramuscular injection.

- Nurse administrator can assist in implementing Helfer skin tap technique on Public health awareness in hospitals.
- Nursing administrator can organize conferences, seminars, and workshop For nurses working in community to encourage a positive attitude on Helfer Skin tap technique.
- Organize in service education programme for the nurses on this technique.

Nursing Practice

- Can learn the techniques of Helfer skin tap technique.
- Nurses should develop their knowledge regarding the benefits of Helfer Skin tap technique among patients receiving intra muscular injection.
- Understand the importance of Helfer skin tap technique as an adjuvant to the conventional medicine.
- Nurses should develop skills in implementing Helfer skin tap technique.

Nursing Education

- Learn the effectiveness of heifer skin tap technique on reducing pain associated with intramuscular injection, as an independent nursing intervention
- Nursing students should receive adequate training regarding Helferskintap technique.
- Workshops or conferences for students should be conducted regarding the Use of Helfer skintap technique.
- Nurse educators should ensure that Helfer skin tap technique is included in the curriculum from the basic level of nursing education.
- Nurse educator should provide the students with adequate exposure to intra Muscular injection and Helfer skin tap technique.

Nursing Research

- Researcher can work on various methods to reduce the intra muscular Injection pain.
- Conduct further research in different setting using the above findings as a baseline data.
- Nurses can conduct research for further clarifications on the benefits of Helfer skin tap technique among patient receiving intramuscular injection.
- Nurses should be encouraged to conduct more research on the effect of Helfer skin tap technique.

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