

A Study to Evaluate the Effectiveness of Structured Teaching Program on Knowledge Regarding Prevention and Management of Thrombophlebitis in IV Therapy among GNM 3rd Year Students in SITE A - School of Nursing, Balangir, Odisha

Madhusmita Sahoo

Assistant Professor, Royal School of Nursing, The Assam Royal Global University, Assam, India

Abstract: *Peripheral venous cannulation is the most widely used procedure in hospital to deliver fluids and medicines. Peripheral venous devices were introduced more than 40 years ago. Today hospitals rely on intravenous catheters as essential tools to deliver intravenous medications, blood transfusion & blood products, nutritional therapy. The study was conducted with the objective to assess the knowledge regarding prevention and management of thrombophlebitis, to determine the effectiveness of structured teaching program by comparing the pretest and post test scores. Data was collected by using convenient sampling by taking 30 samples in SITE A - School of Nursing, Balangir, Odisha. The data was analyzed by calculating the frequency, percentage, mean and standard deviation. The findings revealed that prior to the implementation of structured teaching program mean score was (11.7±3.84) which is 39% of knowledge score. Post - test mean score was 21.1±3.40 which is 70.33% showing a difference of 31.33 % showing effectiveness of structured teaching program.*

Keywords: Assess, Effectiveness, Structured teaching program, knowledge, Intravenous cannulation, Thrombophlebitis, IV therapy

1. Introduction

Thrombophlebitis is an acute venous disorder which is caused by thrombus (clot) formation that obstructs venous flow. Blockage may occur in either the superficial or deep veins. Thrombophlebitis is phlebitis (vein inflammation) related to a thrombus (blood clot) when it occurs repeatedly in different location. It occurs repeatedly in different locations. It is known as migrating thrombophlebitis.

Although intravenous cannulation is a key procedure in almost all department of health care, it also has its own disadvantages when not taken care of. These vascular access devices cause many complications like intravenous phlebitis, thrombophlebitis, catheter embolism, bleeding nerve, tendon or ligament damage, needle stick injury, sepsis etc. About 60% of blood infections are introduced by intravenous feeding lines or catheters. This is because micro - organisms on the patients skin can gain access into the deeper tissues or the blood stream when a cannula or catheter is inserted into the vein.

Thrombophlebitis is an inflammation of a vein due to blood clot. The term "thrombophlebitis" comes from combinations of "thrombus" meaning "blood clot" & "phlebitis" meaning "inflammation or infection of a vein". When blood clots form, they release a number of toxic chemicals that cause inflammation of the vein.

It is well accepted that many infusion related complications including thrombophlebitis are preventable. Though disinfection is carried out, yet the prevention depends upon sincere practice by every health care providers.

Problem Statement

A study to evaluate the effectiveness of structured teaching program on knowledge regarding prevention and management of thrombophlebitis in IV therapy among GNM 3rd year students in SITE A - School of Nursing, Balangir, Odisha.

Objective of the Study

- 1) To assess the knowledge regarding prevention and management of thrombophlebitis among the GNM 3rd year Students.
- 2) To administer structured teaching program on thrombophlebitis, its prevention and management.
- 3) To determine the effectiveness of structured teaching program by comparing the pretest and post test scores.

2. Research Methodology

Research design: Quantitative research approach, one group pre - test post - test pre - experimental design ($O_1 \times O_2$) was selected.

Variable:

Independent variable: Structured teaching program

Dependent variable: - knowledge of students regarding prevention and management of thrombophlebitis

Setting of the study: The study was conducted in SITE A - School of Nursing Balangir.

Population: Population consist of GNM students of SITE A - School of Nursing Balangir.

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Sample: GNM 3rd year students of SITE A - School of Nursing Balangir.

Sample size: 30

Sampling technique: Convinient sampling technique.

Tool:

- 1) Structured questionnaire.
- 2) Structured teaching program

Validity: Validity of the tool was established in consultation

with guide and experts in the field of medical surgical nursing and statistics with ($r=0.82$)

3. Findings

Highest Percentage of students (54%) come from age group 20 - 25 years. Majority of students (60%) are Hindu religion.60% of students are having previous knowledge. Highest (90%) of them got information through book, journals and articles etc.

Table 1 (N=30)

	No of Student	Pre - test Mean+ S. D	Post - test Mean S. D
Over all knowledge score	30	11.7 ± 3.848	21.1 ± 3.407

Table 2: Comparison of pre and post - test mean knowledge score of Students on prevention and management of thrombophlebitis in IV therapy, (N=30)

Sl. No	Area of knowledge	Post - test			Pre - test			Difference in mean %
		Mean	Standard deviation	Mean%	Mean	Standard deviation	Mean%	
1.	Knowledge of thrombophlebitis	8.5	2.578	44.73%	12.9	2.348	67.89%	23.16
2.	Knowledge regarding prevention & management of thrombophlebitis	2.83	1.27	25.72	8.2	1.469	74.54%	48.28
3.	Total	11.7	3.848	39	21.1	3.407	70.33	31.33

Table - 2 reveals that pretest mean score was (11.7±3.84) which is 39% of knowledge score. Post - test mean score was 21.1±3.40 which is 70.33% showing a difference of 31.33 %.

4. Conclusion

Prior to the implementation of structured teaching program mean score was (11.7±3.84) which is 39% of knowledge score. Post - test mean score was 21.1±3.40 which is 70.33% showing a difference of 31.33 % showing effectiveness of structured teaching program. So study revealed that the self - instructional module was effective in improving the knowledge of students regarding prevention and management of thrombophlebitis in IV therapy By being updated with the knowledge the student Nurses can minimize the infections and other complications related to IV Therapy and can help the patient to recover with a positive life.

References

- [1] Lippincott; "Manual of Nursing Practice"; chapter - 6; 9th edition; Wolters Kluwer Private Ltd; page no.100 - 101
- [2] Basavanhappa BT; "Medical Surgical Nursing; chapter - 15; 2nd edition; Jaypee Publication; page no.911 - 912
- [3] Nair Usha Ravindran; "Textbook of Medical and Surgical Nursing"; chapter - 17; 1st edition; Jaypee Brothers Medical Publishers; page no.474 - 478
- [4] Brunner & suddharth; Textbook of Medical - Surgical Nursing"; chapter - 31; 10th edition; Lippincott Williams & Wilkins Publications; page no.842 - 844
- [5] Black Joycee M. & Hawks Jane Hokanson; "Medical - Surgical Nursing"; chapter - 55; 7th edition; Elsevier India Private Ltd.; page no.1540
- [6] Lewis, Heitkemper, Dirksen, O'Brien, Butcher; "Medical - Surgical Nursing"; chapter - 38; 7th edition; Elsevier India Private Ltd.; page no.908 - 911
- [7] Lemone Priscilla & Burke Karen; "Medical - Surgical Nursing"; chapter - 35; 4th edition; Dorling kindersely Pvt. Ltd. Page no.1186 - 1188
- [8] Sir Davidon Stanley; "Davidson's Principles & Practice of Medicine"; chapter - 24; 20th edition; Elsevier Publication; page no.1017
- [9] Davidson; "Davidson's Principles & Practice of Medicine"; chapter - 5; 17th edition; Medical Division of Pearson Professional Limited; page no.275
- [10] Paudyal P. Simkhada, P Bruce J (2008) Infection control knowledge, attitude and practice among Nepalese healthcare workers, Amj Infection control Oct; 36 (8); 595 - 7.
- [11] Hemmings P (2005) Survey highlight infection control issues facting nurses, nursing Times, Mar - 8, 101 (10), page no.10 - 11
- [12] Campbell H. IV related phlebitis complication and length of hospital stay, British Journal of nursing 7 (21); page no.1767 - 1786.
- [13] Daniell harry W (1998) Heparin in the prevention of infusion phlebitis, Journal of American Medical Association; page no.1317 - 1321
- [14] Guideline for preventions of IV device related infection, American medical Journal Infection control; page no.262
- [15] Fernandez RS, Grifitths RD. Murie P (2003) peripheral venous catheter, a review of current practice. Journal of nursing 26 (6), page no.388 - 392.