

A Study to Assess the Effectiveness of Structured Teaching Programme Among III Semester B.Sc Nursing Students Regarding Prevention of Deep Vein Thrombosis in Selected Nursing Colleges at Koppal, Karnataka

**Mr. Maruthi Durugappa Uttangi¹,
Ms. Annapurna Fakkirappa Kalannavar²**

¹Associate Professor And HOD, Medical Surgical Nursing, Shree Gavisiddheshwara College Of Nursing

²Nursing Tutor, Medical Surgical Nursing, Shree Gavisiddheshwara College Of Nursing

ABSTRACT

The aim of the present study is to assess the effectiveness of structured teaching programme on knowledge regarding prevention of deep vein thrombosis among III SEMESTER B.Sc. Nursing students in selected nursing colleges at koppal , karnataka". Deep vein thrombosis (DVT) occurs when a blood clot (thrombus) develops in a vein deep in your body, often in your leg. This can happen because of a vein injury or slow-flowing blood. The blood clot may partially or completely block blood flow through your vein. Most DVTs happen in your calf, thigh or pelvis. But they also can occur in other parts of your body, including your arm, brain, intestines, liver or kidney. Deep vein thrombosis (also called venous thrombosis) is common. You need quick diagnosis and treatment to prevent life-threatening complications.

Keywords: Effectiveness, knowledge, Deep vein thrombosis, Structured teaching programme, students

INTRODUCTION:

Venous thrombosis is otherwise known as phlebothrombosis, is defined as the formation of a thrombus(clot) with inflammation of the vein. It was classified into two types superficial thrombophlebitis and deep vein thrombosis(blood clot formation in deep vein). Etiology of DVT advanced age, chronic heart disease, pregnancy, prolonged immovability, abdominal pelvic surgery and orthopedic surgery, deficiency of antithrombotic factors, obesity, use of contraceptive pills, smoking and catheter placement in vein. Pathophysiology : Localized platelet aggregation and fibrin entraps RBCS, WBCS and more platelets to form a thrombus. thrombus may detach and result in emboli because of turbulence blood flow, embolus that enters into venous circulation to the heart and lodges in the pulmonary circulation becoming pulmonary embolisms. clinical manifestations: palpitation and tenderness systemic temperature greater than 100.4⁰ F. A positive Homan's sign edema in affected extremities and cyanosis. management: bed rest elevation of extremity 2 to 4 days till thrombus stable.

Warm compresses early mobilization anti embolism stockings which prevents DVT and increase venous blood flow. physiotherapy vitamin B6 ,B12 and folic acid anticoagulation therapy heparin subcutaneously once in daily first dose 6-8 hours post operatively to minimize bleeding venous thrombectomy.

Objectives Of The Study:

1. To assess the level of knowledge regarding prevention of deep vein thrombosis among III SEMESTER B.Sc. Nursing students.
2. To evaluate the the effectiveness of STP on prevention of DVT in terms of knowledge among III semester B.Sc. Nursing students.
3. To find out the association between knowledge score on prevention of deep vein thrombosis among III semester B.Sc. Nursing students. with selected demographic variables.

Hypothesis:

- **H1:** The mean post test knowledge scores of nursing students receiving STP will be significantly higher than the mean pre test knowledge score of nursing students regarding prevention of DVT.
- **H2:** There will be significant association between the selected demographic variables and their pre-test level of knowledge regarding prevention of DVT.

Methods: A simple Quasi experimental one group pre test post test design is used to for the study with 130 samples. After 7th day of intervention post- test has conducted and the collected data was analyzed using descriptive and inferential statistics.

results: Evaluation of the effectiveness of structured teaching programme on knowledge regarding prevention of deep vein thrombosis shows that The Mean post – test knowledge score obtained by the subject ($x_2 = 44.4$ -) were higher than the mean pre- test knowledge score ($x_1 = 22$ -) the calculated ‘t’ value ($t = 5.75$) p value is $p < 0.0001$ is extremely small degree of freedom (df) is > 10 .

Interpretation and conclusion: Findings of the study showed that the knowledge score of the students’ nurses regarding prevention of deep vein thrombosis were less before the introduction of STP. The STP facilitated them to gain more knowledge about prevention of deep vein thrombosis which was evident in post-test knowledge scores. Hence it can be concluded that STP was an effective strategy for providing information and to improve knowledge of student nurses regarding prevention of deep vein thrombosis.

MATERIALS AND METHODS

Variables Two types of variables were identified in this study.

Dependent variables: Knowledge levels of III SEMESTER B.Sc. Nursing students regarding prevention of deep vein thrombosis.

Independent variables: Structured teaching programme on prevention of deep vein thrombosis.

Settings- selected Nursing colleges of koppal, karnataka

Sampling technique: In this study a simple random sampling technique is used with 50 samples.

Research design: The researcher approach adapted for the study was pre-experimental, using one group pre-test, post-test design (one group exposed to the pre-test and the same after administration of structured teaching programme post-test).

- The research design used in the present study is quasi experimental one group pre-test post-test design.

GROUP	Pre-test	INTERVENTION	POAT TEST
III SEMESTER B.Sc. nursing students	O1	X	O2

Data collection process: The data collection date, time and place were confirmed after discussing with the principal and class coordinator. A sample of 50 was selected by using simple random sampling method. A structure questionnaire administered to assess the pre –test knowledge level and the planned teaching programme was given on the same day. Post-test was conducted on the 7th day with the same structured knowledge questionnaire.

Table 1. Mean, median and SD of pre-test and post-test knowledge score of III SEMESTER B. Sc. nursing students regarding prevention of deep vein thrombosis.

KNOWLEDGE SCORE	MEAN	MEDIAN	SD
PRE- TEST	22	21	28.75
POST -TEST	44.4	45	6.32

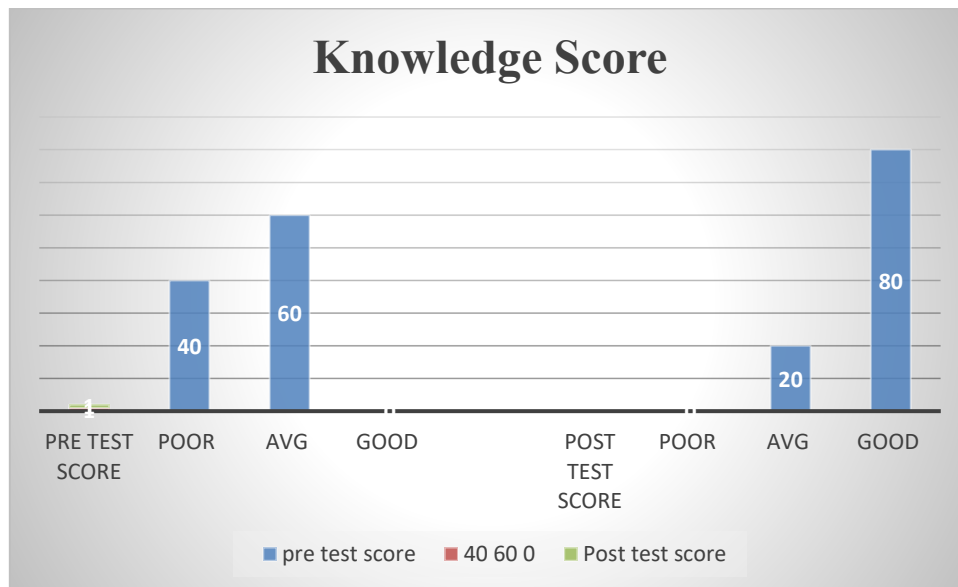
**TABLE NO.2 DISTRIBUTION OF SAMPLES ACCORDING DEMOGRAPHIC VARIABLES
N=50**

SL NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1.	AGE		
	a. 18 -24	40	40
	b. 21-25	10	10
2.	GENDER		
	a. MALE	20	20
	b. FEMALE	30	30
3.	TYPE OF FAMILY		
	a. Nuclear	30	30
	b. Joint	10	10
	c. extended	10	10
4.	RESIDENTIAL AREA		
	a. urban	30	30
	b. Rural	20	20
5.	Family income		
	a. <10,000	10	10
	b. 10,000-20,000	10	10
	c. >40,000	30	30

Table no.2 above table shows that maximum number 80% of samples belongs to age between 18-24. According gender the maximum number of students are females, according to the type of family 60 % belongs to nuclear family, residential area comes from urban area 60 %, the family income 60% belongs to above 40,000.

Table 3. Distribution of subjects according to the grading of pre -test knowledge level scores and post -test knowledge level scores

Pre-test score	
Poor	40
Average	60
Good	0
Post-test score	
Poor	0
Average	20
Good	80



DISCUSSION

results: Evaluation of the effectiveness of structured teaching programme on knowledge regarding prevention of deep vein thrombosis shows that The Mean post – test knowledge score obtained by the subject ($x_2 = 44.4$) were higher than the mean pre- test knowledge score ($x_1 = 22$) the calculated ‘t’ value ($t= 5.75$) p value is $p<0.0001$ is extremely small degree of freedom (d .f .) is >10 . With Regards to effectiveness of STP on knowledge regarding prevention Of DVT among III semester nursing students.

The obtained t-value for the level of knowledge was 5.75 with degree of freedom >10 highly significant at 0.0001 level of significance Thus the researcher accepted H1. With regards to association between selected demographic variables and their pre-test level of knowledge , Researcher found the following demographic variables such as age , gender , family income found t- value is higher than the tabulated ‘t’ value this indicate there is a significant association between these variables and pre-test knowledge , thus researcher accepted H2.

SUMMARY:

The investigator undertook the present study to assess the “a study to assess the effectiveness of structu-

red teaching programme among iii semester b.sc nursing students regarding prevention of deep vein thrombosis in selected nursing colleges at koppal , karnataka”.

- To assess the knowledge about prevention of deep vein thrombosis.
- To improve the knowledge regarding prevention of deep vein thrombosis.

CONCLUSION:

The main conclusion of this present study was STP to improve the level of knowledge regarding prevention of deep vein thrombosis and to find the significant association between the demographic variables and pre-test knowledge scores among III semester B.Sc. nursing students at selected Nursing colleges of koppal, Karnataka.

REFERENCES:

- 1 Sukhpal kaur, Text book of Adult health nursing –I (Medical surgical nursing) volume I , Jaypee Publications. Page no: 1337-1340
- 2 MJ Kumari , Text book of Adult health nursing –I (Medical surgical nursing) , Jaypee brothers medical publishers ,2004 ,new delhi page No:386-388.
- 3 Brunner and suddarth’s Text book of Medical surgical nursing , Volume- I ,Wolters Kluwer (india) publications , New Delhi, page No:632-634.
- 4 Lewis S.M et.AI “Text book of medical surgical nursing” , 6th edition , 2004 , Mosby’s publishers US, page no:927-933.
- 5 A Text book of medical surgical nursing ELSEVIER publishers, Joyce M Black Jane , Hokanson Hawks , 8th edition ,2009, volume 2.
- 6 <https://www.mayoclinic.org/diseases-conditions/deep-vein-thrombosis/symptoms-causes/syc-20352557>
- 7 <https://www.medanta.org/patient-education-blog/swollen-shocker-is-leg-puffiness-a-sign-of-deep-vein-thrombosis>
- 8 <https://my.clevelandclinic.org/health/diseases/16911-deep-vein-thrombosis-dvt>
- 9 <http://www.cdc.gov/features/thrombosis/>
- 10 <http://www.medicalnewstoday.com/articles/B1624.php>