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Research Paper

Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Prophylactic Measures in Prevention of Deep Vein Thrombosis Among Patients Confined To Bed In Tertiary Hospital, Chennai, Tamilnadu, India

Nursing

KEYWORDS : Structured Teaching Programme, Prophylactic Measures, prevention of Deep Vein Thrombosis

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ABSTRACT

Aim: To assess the effectiveness of structured teaching programme regarding knowledge of prophylactic measures in prevention of Deep vein Thrombosis among patients confined to bed in Tertiary hospital, Chennai, Tamilnadu, India

Methods and Materials: A preexperimental research with one group pre test post test design was used for this study. The study was conducted in medical and surgical wards in Chettinad hospital and research institute,Kanchipuram Dist, Tamilnadu. The population consists of patients confined to bed during the study period. The sample was 50 bed ridden patients who fulfilled the inclusion criteria. The tool used for data collection was structured questionnaire. The data were collected for a period of four weeks from September 2012- October 2013.

Results: There was a significant difference in the knowledge on prophylactic measure in the prevention of deep vein thrombosis in the patients confined to bed after structured teaching programme. There was no significant association of post test knowledge on prophylactic measure in the prevention of deep vein thrombosis in the patients confined to bed score with the selected demographic variables except for occupation and history of blood clotting disorders.

Conclusion The result from this study reveals that the knowledge on prevention of Deep vein thrombosis among patients confined to bed was inadequate. This has to be taken into consideration. Structured teaching programme is effective in increasing the knowledge regarding prevention of Deep vein thrombosis among patients confined to bed. The findings of the study revealed a significant increase in the post test knowledge scores after structure teaching programme.

INTRODUCTION

Deep vein thrombosis (DVT) is a condition in which a blood clot (a blockage) forms in a deep vein. While these clots most commonly occur in the veins of the leg (the calf or thigh), they can also develop in other parts of the body. DVT is very dangerous and is considered as the medical emergency. Although effective pharmacological and mechanical preventive options have existed for decades, venous thromboembolism (VTE) remains a major cause of morbidity and a significant cause of mortality in hospitalized bed confined patients. In the past decade, deep vein thrombosis has increasingly been recognized as an important and possibly preventable cause of morbidity and mortality in hospitalized patients. Understanding the natural history of venous thrombosis, it is important for optimal management of this condition. Once risk factors are recognized it is possible to avoid these risk factors or to use active prophylaxis to reduce the morbidity and mortality.

Epidemiology indicates that Deep vein thrombosis or pulmonary embolism may occur in almost 2 in 1,000 people each year, with up to 25% of those having a recurrence. Around 5-15% of people with untreated deep vein thrombosis may die from pulmonary embolism. Male: female ratio = 1:2.A worldwide survey conducted by WHO shown that Deep vein thrombosis is a common disease with an average incidence rate of more than one per thousand populations, and in every year Deep vein thrombosis occurs in about 1 in 3000 population for those below the age of 40 and 1 in 500 population of those over 80 years of age.

Deep vein thrombosis is a common preventable cause of death; The patients who are at high risk for Deep vein thrombosis are Orthopedic patients , Stroke patients , Cardiac patients they should be identified and preventive measures should be instituted without delay. Systematic assessment, early detection, physical and pharmacological prophylaxis are some ways of preventing Deep vein thrombosis. Nursing is a balanced art of compassion and science of concern .When science gives up the art takes over the disease. Nurses should focus on prevention by the early recognition and adequate prophylaxis of those at increased risk. An awareness of diagnostic and treatment strategies will enable nurses to inform patients. This will help to improve both concordance with treatment and disease outcome. The nurse can observe and assess how the patient is managing her or his treatment and adapting to lifestyle changes, leading to an improved quality of life.

MATERIALS AND METHODS

- **Research approach** : Quantitative evaluative approach
- **Research design** : Preexperimental One group pretest and post test design
- **Setting :** Medical and surgical wards, Chettinad hospital & research institute.
- **Population :** Patients who were confined to bed.
- **Sample:** The patients who were confined to bed more than 48 hours.
- **Sample size :** 50 Patients.
- **Sampling technique**: Purposive technique.
- **Sampling criteria**

Inclusion criteria:

✓ Patients who were confined to bed more than 48 hours.
✓ Patients who were willing to participate.
✓ Patients who can able to communicate in English and Tamil.

Exclusion criteria

✓ Patients who have altered sensory deprivation.

- **Data collection instruments:**

✓ Demographic Performa
✓ Open and close ended questionnaire

- **Description of tool:**
- **SECTION A:** Structured questionnaire consists of open ended and closed ended questions to elicit the demographic data. It includes age, sex, gender, occupation, monthly in-

come, and any underlying risk factors of deep vein thrombosis.

- **SECTION B:** This consists of questions which consists of 20 multiple choice questions regarding the definition, causes, the signs and symptoms and the prophylactic measure in the prevention of deep vein thrombosis. Each consists of three choices and one which is the correct answer.

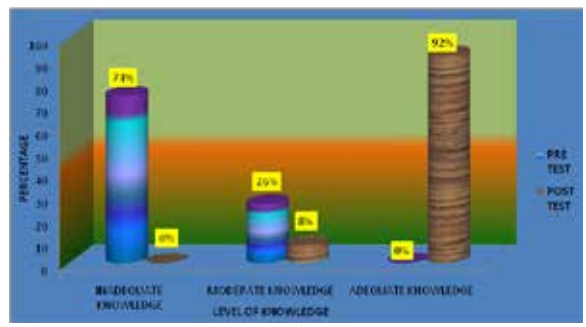
- **Data Collection Procedure**

After obtaining ethical committee clearance from Chettinad academy of research and education and written permission from the Dean ,Director of Cardiology and Nursing superintendent,the study was conducted in Chettinad hospital and research institute. The investigator introduced her to the respondents to ascertain their cooperation for the study. Later, the investigator collected data from the samples after obtaining their consent. Patients confined to bed were selected through purposive sampling technique. The pretest knowledge level was assessed by structured questionnaire. Each individual was given ten minutes to answer the questionnaire. Then STP on prophylaxis measures on prevention of DVT was given for 15-20 minutes. After ten days the post test knowledge was assessed with the same tool. The investigator thanked the samples for their co-operation & support.

RESULTS:

The study result shows that in pre-test 74% of patient had inadequate knowledge, 26% had moderate knowledge,0% had adequate knowledge and in post-test 92% of adequate knowledge and only 8% had moderate knowledge. The study result also reveals that the mean post test knowledge score (17.7) was higher than the mean pre test score (8.36). The t value shows that there was a significant difference between the two mean knowledge score. The calculated t value (21.76) is greater than the table value at 0.01 level. The study shows a tremendous difference in the knowledge of subjects regarding selected aspects after the structured teaching programme. On the basis of this result, the null hypothesis was rejected and the research hypothesis was accepted. This indicates that structured teaching is effective in increasing the knowledge score of the patients confined to bed on the prophylactic measure in the prevention of deep vein thrombosis. There was a significant association of post test knowledge on prophylactic measure in the prevention of deep vein thrombosis in the patients confined to bed score with the selected demographic variables such as occupation (X^2=8.341) and history of blood clotting disorders (X^2=5.945) at 0.05 level.

Figure 1: Percentage distribution of sample according to their Pre test and post test level of knowledge on prophylactic measure in the prevention of deep vein thrombosis



DISCUSSION

The study result reveals that the mean post test knowledge score (17.7) was higher than the mean pre test score (8.36). The t value shows that there was a significant difference between the two mean knowledge score. The calculated t value (21.76) is greater than the table value at 0.01 level. The similar study was conducted in Bangalore also revealed that the mean post test knowledge score of 25.20 of the subject was higher than the mean pre test of score of 19.68 and was significant (t=17.99, P= 0.001) and there was no association between the post test knowledge with the demographic variables. The patients have shown improvement in their knowledge and practice of exercise after administration of the structured teaching on the prevention of deep vein thrombosis. Both the study result insisting the importance of nurse led teaching programme for the bed confined patients to minimize the risk of DVT.

CONCLUSION

The result from this study reveals that the knowledge on prevention of Deep vein thrombosis among patients confined to bed was inadequate. This has to be taken into consideration. The findings of the study revealed a significant increase in the post test knowledge scores after structure teaching programme. Structured teaching programme is one of the effective method in increasing the knowledge regarding prevention of Deep vein thrombosis among patients confined to bed.

REFERENCE

1. World Health Organization. WHO Research Into Global Hazards of Travel (WRIGHT) project: final report of phase I. Geneva: World Health Organization; 2007 [cited 2010 Nov9].Availablefrom: http://www.who.int/cardiovascular_diseases/wright_project/phase1_report/en/index.htm. | 2. Gerotziafas GT, Samama MM.2004. Prophylaxis of venous thromboembolism in medical patients. CurrOpinPulmMed.10(5):356-65. | 3. M.Sakan. Y.Maehara, H.Yoshikawa and H.Akaza.2006. Incidence of venous thrombo embolism following major orthopedic surgery. International journal of thrombosis and homeostasis. 4(3) : 581-586. | 4. Jana Urbankova, Rene Quiroz, Nils Kucher, Samuel Z. Goldhaber, Intermittent pneumatic compression and deep vein thrombosis prevention, A meta-analysis in postoperative patients, ThrombHaemost 2005; 94: 1181–5. | 5. Rhys .J.Morris, John.P.Wood cook.2004.Prevention of stasis and deep vein thrombosis, evidence – based compression, annals of surgery a monthly review of surgical science since 1885.239 (2):162-171. | 6. Indumathi .2005.R Effectiveness of structured teaching programme among orthopaedic client on prevention of DVT.,Rajiv Gandhi university of health science.