JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A QUASI-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF SELF-INSTRUCTION MODULE ON KNOWLEDGE REGARDING DEEP VEIN THROMBOSIS AND ITS PREVENTION AMONG NURSING INTERNS AT SELECTED NURSING COLLEGES OF UDAIPUR CITY

Mr. Pranav Choubisa, Mr. Kamlesh Menaria,
M.Sc. Medical surgical nursing, M.Sc. Medical surgical nursing,
,
Geetanjali College of Nursing, Udaipur, Rajasthan, India

ABSTRACT

Background and objectives*:*

Deep vein thrombosis is a serious as well as preventable complication just by not delaying the intervention of preventive measures for the high-risk individuals. Nursing is an art of increasing quality of patient care, by increasing knowledge of nursing interns using some preventive measures during early stage of treatment deep vein thrombosis can be prevented. The goal of this study is to assess the effectiveness of self-instructional module on knowledge of nursing interns regarding deep vein thrombosis and its prevention.

Statement of the problem:

"A quasi-experimental study to evaluate the effectiveness of self-instruction module on knowledge regarding deep vein thrombosis and its prevention among nursing interns in selected nursing colleges at Udaipur city."

Objectives*:*

1. To assess the knowledge regarding deep venous thrombosis and it's prevention among nursing interns.
2. To evaluate the effectiveness of self-instructional module on knowledge regarding deep venous thrombosis and its prevention among nursing interns.
3. To find out the association between pre-test knowledge score with their selected socio demographic variables.

Method*:*

The method adopted for the present study was evaluative approach as the study aimed at development of an intervention (self-instruction module) for assessing the knowledge of 80 nursing interns in Sanjeevani college of nursing and Udaipur college of nursing at Udaipur. This approach would help the investigator to evaluate the effect of specific intervention that is "self-instructional module" on the variable that is "knowledge" of the nursing interns regarding deep vein thrombosis and its prevention. In this study the samples were selected by using simple random sampling (lottery method). Data was collected by using structured knowledge questionnaire.

Results*:*

The knowledge of deep vein thrombosis and its prevention among nursing interns was assessed. The calculated value is greater than the table value at 0.05 levels. Hence the research hypothesis (H_1) is accepted that there is a significant difference between

pre-test and post-testknowledge score. There is an association between pre-test knowledge score with selected sociodemographic variables; hence the hypothesis (H_2) is accepted.

Conclusion:

This study concludes that there is improvement in the level of knowledge of nursing interns which indicates that the self-instructional module is effective. The demographic variables of nursing interns significantly associated with the pretest knowledge score. This will help the nursing interns to enhance their knowledge.

Keywords: Assess, effectiveness, self-instructional module, nursing interns, deep vein thrombosis

---

I. INTRODUCTION

There are a number of problems that a bedridden patient face in hospital during hospitalization, the major problems include muscle spasm, constipation, pressure ulcer and deep vein thrombosis. It is seen that lack of movement is the patient leads to formation of clot in the veins which further leads to condition like deep vein thrombosis. It also affects the normal individuals that are not hospitalized but have a condition of lack of movement due to any cause like unhealthy lifestyle aur occupational situations. Deep vein thrombosis is a serious problem that affects millions of people annually. On the basis of literature and news media researchers realized the urgent need to plan and conduct a study on knowledge regarding prevention of deep vein thrombosis among the nursing interns. The study finding might be beneficial for the nursing interns to improve their knowledge about the prevention of deep vein thrombosis.

I. RESEARCH METHODOLOGY

3.1Population and Sample

Population refers to the entire aggregate of individuals or objects having common characteristics. In the present study the population consist of nursing interns in different nursing college at Udaipur.

SAMPLE AND SAMPLE SIZE- Sample consist of a subset of a population selected on a research study. The samples selected for the present study comprises of 80 nursing interns from Sanjeevani College of Nursing and Udaipur College of Nursing.

3.2 Data and Sources of Data

The investigator conducted the main study in Sanjeevani College of Nursing and Udaipur College of Nursing at Udaipur. The sample size was 80. Written permission was obtained from Mr. Yugal Swarnkar, principal Sanjeevani College of Nursing and Mr. Vipin Pillai, principal Udaipur College of Nursing. The purpose of the study was explained to the samples prior to the study. After obtaining informed consent y the participants, the pre-test questionnaire was administered on 29th January 2024 to assess the knowledge level of the nursing interns regarding deep vein thrombosis and its prevention. On the same day self-instructional module was administered. Post-test was done on 5th February 2024 with the same questionnaire to assess the knowledge level of nursing interns regarding deep vein thrombosis and its prevention.

3.3 Theoretical framework

Conceptual framework deals with the interrelated concept that assembles together in some rational schemes by virtue of their relevance to a common theme. The development of conceptual framework is a fundamental process required before conducting actual research, because guides each stage. The Conceptual framework of the study is based on concepts of J.W. Kenny's Open system modal. In 1990.According to J.W. Kenny's all living system are open, they are in a continuous exchange of matter, energy and information, which results in varying degree of interaction with the environment from which the system receives Input and gives Output in the form of matter, energy and information.

Input -Input can be matter energy and information from the environment. In Present study Environment refers to nursing interns, and Input refers to the collection of demographic data from samples and assessing the level of nursing interns by using self-structure Questionnaire.

Throughput - The matter energy and Information are continuously processed through the system which is also called complex transformation, known as throughout process is used for Input energy and Information for the maintenance of homeostasis of the system. In present study it refers to self-instructional module.

Output - After processing the Input and throughout, the system returns to the output matter, energy and information to the Environment in an altered change in features of the process that is observable and measurable as output, which should be different from that which is entered into the system. In this present study gain the level of knowledge is considered as output and measured by post-test.

Feedback-Feedback gives information of environmental responses to the system; output is utilized by the system in adjustment, correction and accommodation to the interaction with the environment. In this study it refers to analysis of the post-test.

3.4Statistical tools and econometric models

This section elaborates the proper statistical/econometric/financial models which are being used to forward the study from data towards inferences. The detail of methodology is given as follows.

3.4.1 Descriptive Statistics

- Mean, median, SD and mean percentage are used to describe the area wise pre-test and post- test knowledge score of the

respondents on deep vein thrombosis and its prevention.

INFERENTIAL STATISTICS

- Paired "t" test is used to find the effectiveness of self-instructional module by comparing pre and post-test knowledge score of the respondents.
- Chi-square is used to find the association between pre-test knowledge score of the respondents and certain socio-demographic variable.

IV. RESULTS AND DISCUSSION

4.1 Results of Descriptive Statics of Study Variables

Age group: The majority of the respondents 61.25% belongs to the age group of 19-20 years, 21.25% respondent to age groups of 19-20 years, 17.50% respondents to age group of 20-21 years and 0% respondents to age group of <19 years.
Gender: The majority of the respondents 62.50% were male while 37.50% were female.
Habitat: The majority of the respondents 77.50% respondents belong to urban habitat and 22.50% respondents belong to rural habitat.
Type of family: The majority of the respondents 71.25% belong to nuclear family, 17.50% respondents belong to joint family and 11.25% respondents belong to extended family.
Attended any workshop on DVT previously: The majority of the respondents 77.50% belongs to not attended any workshop on DVT previously and 22.50% respondents belongs to attended any workshop on DVT previously

4.2 Assessment of Pre-test knowledge scores of nursing interns on deep vein thrombosis and its prevention.

The level of knowledge among nursing interns regarding deep vein thrombosis and its prevention in pre-test were assessed, out of 80 respondents 52.50% respondents had inadequate knowledge, 47.50% respondents had moderately adequate knowledge and no nursing interns had adequate knowledge on deep vein thrombosis and its prevention. The overall mean percentage of pre- test was 49.46% with SD 2.48

4.3 Assessment of post-test knowledge of nursing interns on deep vein thrombosis and its prevention.

The level of knowledge among nursing interns regarding deep vein thrombosis and its prevention in post-test were assessed, out of 80 respondents 70% respondents had adequate knowledge, 30% respondents had moderately adequate knowledge and no respondents had inadequate knowledge on deep vein thrombosis and its prevention. The overall mean percentage post- test was 81.20% with SD 2.45.

4.4 Comparison between pre-test and post-test knowledge scores of nursing interns on deep vein thrombosis and its prevention.

The mean score of post-test knowledge 24.36 was apparently higher than the mean score of pre-test knowledge 14.84, suggesting that the self-instructional module was effective on increasing the knowledge of the nursing interns regarding deep vein thrombosis and its prevention. The mean difference 9.52 between pre-test and post-test knowledge score nursing interns was found to be significant.

4.5 Association between pre-test knowledge scores with selected socio- demographic variable of nursing interns.

There was a significant association between knowledge of nursing interns and demographic variable such as age group (chi-square = 14.08), habitat (chi-square = 6.88), type of family (chi- square = 10.59) and attended any workshop on DVT previously (chi-square = 8.55) and there was no significant association between knowledge of nursing interns and demographic variable such as gender (chi-square = 1.96).

.References

1. Park J E. Textbook of Preventive and Social medicine, Jabalpur; Bharat Publishers, 2000, p.137-8.
2. Smeltzer C.Suzzare, Textbook of Medical-Surgical Nursing, Philadelphia; Lippincott Company; 2003, p. 1530.
3. Rose and Wilson. Textbook of Anatomy and physiology in health and illness, 10th edition, p. 106-107.
4. National library of medicine, national centre for biotechnology information, treatment and management strategies for deep vein thrombosis reviewed on November 2022, available on https://www.ncbi.nlm.nih.gov/books/NBK507708
5. Ricky Autar. The Management of Deep vein thrombosis; The Autar DVT Risk Assessment Scale. Available on http://bjhltx.com/learning/themanagementofdvt_theautar.pdf
6. Manual of nursing practice. Lippincott Philadelphia 10th edition, p. 119-120.
7. http://openmed.nic.in/751/01/Document1.pdf
8. T Hohlt. Deep-vein thrombosis prevention in orthopaedic patients affecting outcome through interdisciplinary education. Orthopaedic nursing, 2000,19: p. 73-78.

9. Web med medical journal, early strategies to prevent onset of deep vein thrombosis, available on https://www.webmed.com/dvt/prevent-dvt

10. Donna D et.al, Textbook of Medical Surgical Nursing, Volume, 2nd ed. Philadelphia; p. 955- 9

11. Brady L P, A multifaceted approach to prevention of thromboembolism: a report of529 cases. South med, J.1977, May: 70(5): p. 546.

12. Prevention of deep vein thrombosis and Pulmonary embolism, NIH consents conference 1986 Mar 24-26; 6(2): p. 1-8

13. Agrawala S, Bhagwat A.S, Modhe J. Deep Vein Thrombosis in Indian patients undergoing major limb surgery India. 2003,65: p. 159-62

14. Tamir S. Sequential foot compression reduces lower limb swelling and pain after knee arthroplasty, Journal of Arthroplasty, 14(3); p. 338

15. Lewis S.M et. A, Medical Surgical Nursing, 6th ed. 2004, Mosby's publisher; USA; p.912-44; 927-33.

16. Suzanee C.S, Brenda G.B, Textbook of Medical Surgical Nursing, 10th ed. 2005. Lippincott publication; St. Louis: p. 819-20; 842-5

17. Burns N, Grove SK. Understanding Nursing Research, 2nd ed. Philadelphia: Saunders; 2004,

p. 742-58.

18. Tomey Ann Marina. Nursing theorist and their work, 3rd ed. Elseiver: Sterling, 3(9), 2012, p. 87-90.

19. Burns N, Grove SK. Understanding Nursing Research, 2nd ed. Philadelphia: saunders; 2004,

p. 742-58

20. IOSR. Journal of Nursing and Health Science, Volume 6, Issue 5 Ver. (Sep-Oct. 2017), p 21- 26, available at www.iosrjournals.org

21. BMJ/ Post graduate medical journal, 2016, Available at https://pmj.bmj.com/content/82/964/136