



EFFECTIVENESS OF TEACHING PROGRAM REGARDING THROMBOLYTIC DRUG THERAPY IN TERMS OF KNOWLEDGE AND PRACTICE OF STAFF NURSES

Medicine

Mrs. Mamta Toppo	Msc Nursing, Medical Surgical Nursing, Assistant Professor, College of nursing, RIMS., Bariyatu, Ranchi, Jharkhand – 834009
Dr Ajit Ddungung*	MD, Medicine, Associate Professor, Department of Medicine, RIMS, Bariyatu, Ranchi, Jharkhand – 834009. *Corresponding Author
Dr. Ajay Kumar Bakhla	M.B.B.S., M.D, DPM., Associate Professor of Psychiatry, Department of Psychiatry, RIMS, Bariyatu, Ranchi, Jharkhand, India-834009

ABSTRACT

Aims: The aim of present study was to compare the knowledge and practice of staff nurses pre and post teaching about thrombolytic drug therapy.

Materials and Methods: This cross sectional, observational study consisted of consenting subjects attending Out Patients department for routine antenatal checkup. Data was collected with all subjects in respect to socio demographic information and structured knowledge questionnaire, observational checklist and opinionnaire was applied.

Results: Sample size of staff nurses were 30 with 93.3% of females and professional qualification of G.N.M. were included for the study. 53.3% of the staff nurses had 2-6 yrs of experience and 70% had administered thrombolytic drug therapy in past. The overall pre-test knowledge mean score was 25.8% whereas in post test knowledge mean score was 38.33%.

Conclusions: This study finds a significant improvement in knowledge and practice of thrombolytic drug therapy by staff nurses following teaching and training program.

KEYWORDS

Teaching Program; Thrombolytic Drug Therapy; Practice of Staff Nurses

INTRODUCTION

Cardiovascular diseases (CVD) are the leading cause of death and disability in the developing world. Coronary heart disease (CHD) incidence is also very high in India, the prevalence of CVD in India has risen over the past 2 decades due to population growth, aging, and a stable age-adjusted CVD mortality rate [1] The global burden of disease is shifting from infectious disease to non-communicable disease and approximately 24.8% of all deaths in India are attributable to CVD [2].

Nurses in all care setting are crucial to effective delivery of medicine management. In a study Katty et al [3] reported that studies have confirmed the value of specialist nursing-led input in preventing patient having further coronary disease, event, and interventions, targeted at effecting patient's lifestyle changes, have been shown to be particularly successful, reducing the incidence of subsequent event and mortality [4]. It was noted in the study that nurses were good at taking histories but less good at exploring patient's perception and understanding of heart disease and medication.

Nurses are accountable for their practice. Scientific advancement and sophisticated technology have been brought a great revolution in the field of human endeavor. So the professionals are obliged to study continuously in order to pace their knowledge with advancement and to make necessary adaptation for effective and quality care of the patient. Lack of knowledge about medicine can hamper their practice, however a patient's recovery is unpredictable and requires flexible nursing strategies for each stage of recovery [5]. The nurses' role is extremely important because the expert nurse cognitively manipulates many variables over a continuum of care and, if such tasks are skillfully and successfully performed, the incidence mortality and morbidity is reduced [6].

Hence this study was planned with aim to develop Planned Teaching Program (PTP) for staff nurses on thrombolytic drug therapy, to assess the effectiveness of PTP on the knowledge and practice of staff nurses and to determine the relationship between knowledge and practice of staff nurses before and after the administration of PTP.

METHODOLOGY

This study is a part of an experimental research with one group pre-test and post test design and quantitative approach was selected to carry out the study. The study population comprised of staff nurses working in critical care units. The sample size for the study was 30 staff nurses, who satisfied the inclusion criteria for the study and consented, were recruited for this study.

Purposive sampling technique was used for selecting the sample of the study.

The tools used for the study were:

1. Socio-demographic Data Sheet: The socio demographic data sheet included age, religion, occupation, education and experience to cardiology care.
2. Structured knowledge questionnaire
3. Observational checklist

Procedure: All consenting participants were rated with pre-intervention assessment followed by teaching program regarding thrombolytic drug therapy in terms of knowledge and practice of staff nurses and finally post teaching assessment and analyzed.

Statistical Analysis: The collected data of all subjects was statistically analyzed, using Statistical Package for Social Sciences (SPSS, Inc., Chicago, Illinois) version 10.0.

Data analysis included means and standard deviations for complete sample. Data analysis included means and standard deviations for complete sample. The parametric paired t-test was used to determine if differences existed between pre and post intervention knowledge. Statistically significant levels are reported for p values less than or equal to 0.05. Highly significant levels are p values less than .001.

RESULT

The frequency and distribution of demographic variables of staff nurses revealed that maximum numbers of staff nurses were in age group of 31-34 yrs (50%), whereas majority of the staffs were female n=28 (93.3%) and there was only 2 male staff nurse.

93.3% were having G.N.M. as their professional qualification, and two were having post basic BSc degree. Most of the staff nurses had 2-6 yrs of experience (53.3%) and 33.3% had more than 6yrs and only 13.3% had less than 2yrs of total experience. Regarding the experience of nursing personnel in critical care unit 53.3% had <2yrs and 26.7% had 2-6yrs and 20% had >6yrs of experience. Majority had administered thrombolytic drug therapy in past (70%) and 80% of the staff nurses had not attended any in-service education program on any drug therapy. (Table – 1)

The evaluation of the effectiveness of PTP In terms of knowledge and practice of staff nurses revealed pre-test knowledge mean score was 25.8% whereas in post test knowledge mean score was 38.33% revealing the effectiveness of PTP regarding thrombolytic drug

therapy. The mean post practice scores were significantly higher than mean pre-test practice scores. There was a significant positive correlation between post test knowledge and post test practice scores at level of $p < 0.05$ regarding thrombolytic drug therapy. The mean scores of staff nurses about acceptability and utility of PTP was very high and it showed that there was not much variation in the opinion of staff nurses. (Table 2, 3).

DISCUSSION

The staff nurses' development program is crucial element in the area of nursing administration in the event of growing challenges in field of nursing. In-service sessions, refresher courses and awareness programs should be held to regularly up-date knowledge and practice regarding various drug therapies. Standard of nursing practice related to different drug therapies should be established and time to time nursing audit may be conducted to monitor the quality of care. Skill development programs have a positive influence on employee job satisfaction in addition to improving performance [7].

In the present study post test knowledge scores and practice scores of staff nurses was significantly higher than the pre-test knowledge and practice scores after PTP. The PTP was found effective strategy in increasing the knowledge and skill of the staff nurses. The findings were consistent with the findings of various other studies [8-13], in which studies found significant improvement and benefit of PTP in knowledge and practice of nursing staff in various clinical situations. There was a positive association between gain in post test knowledge and practice scores and pre-test knowledge and practice.

The implication for nursing practice includes that staff nurses should be able to demonstrate their ability hence play an important role in an emergency situation either in specialist units or in general wards to save the life of patients. Staff nurses accountability towards identifying, interpreting, managing and documenting of thrombolytic drug therapy would foster individualized quality care and ensure positive outcome.

The nursing educators can integrate the knowledge of pharmacology

Table 2: Mean, Mean difference, Standard Deviation Of Difference , Standard Error Of Mean Difference and 't' value of Pretest And Posttest Knowledge Scores and Practice score of Staff Nurses

		Mean	Mean difference	Standard Deviation Of Difference	Standard error	't' value
Knowledge test	Pretest	26.6	13.8	3.88	0.71	19.15*
	Posttest	40.2				
Practice scores	Pretest	15.37	11.66	1.42	0.28	44.88*
	Posttest	27.03				

't'(29) at 0.05 level=2.04

*Significant at 0.05 level

Table 3 – Coefficient Of Correlation between Post-Test Knowledge Scores and Post –Test Practice Scores of Staff Nurses

Variables	Mean	Standard deviation	“r”
Post test knowledge scores	40.2	4.52	0.58
Post test practice scores	27.03	1.19	

It indicated a significant positive relationship between post-test knowledge scores and post –test practice scores of staff nurses regarding thrombolytic drug therapy.

REFERENCES:

- Prabhakaran D, Singh K, Roth GA, Banerjee A, Pagidipati NJ, Huffman MD. Cardiovascular Diseases in India Compared With the United States. *J Am Coll Cardiol*. 2018 Jul 3;72(1):79-95.
- Institute of Health Metrics and Evaluation. GBD Compare 2010. <http://vizhub.healthdata.org/gbd-compare/>. Accessed April 30,
- Joss Katty,Lindsay. Nurse-led interventions contribute to cutting he risk for heart disease. *Professional Nurse* 2003;18(11):649
- Swapna MA, Parvathy M. Effect of Structured Teaching Programme on Levels of Knowledge regarding Narcotic Policy among Staff Nurses in Selected Hospitals of Bangalore. *Nurs J India*. 2014 Nov-Dec;105(6):274-7.
- Alverzo J. The use of aesthetic knowledge in the management of brain injury patients. *Journal of Rehabilitation nursing*. 2004 May-June; 29(3); 85-9.
- Chamberlain DJ. The critical care nurse's role in preventing secondary brain injury in severe head trauma: achieving the balance. *Journal of Australian Critical Care*. 1998 Dec; 11(4): 123-9
- Johnson, Reiser. (2006). Rural and remote suitability score: A review. Available from the University of Northern British Columbia/ University of British Columbia Northern Medical Program, 3333 University Way, Prince George, B.C. V2N 4Z9.
- Sharma R. " A Pre Experimental Study To Assess The Effectiveness of Planned Teaching Programme Through Booklet On Knowledge Regarding Defibrillation Among The Staff Nurses Working At Selected Hospital Bhopal (M.P.) " *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* 6; Issue 6 (VI):Nov.- Dec .2017, Pg 01-07.
- Swapna MA, Parvathy M. Effect of Structured Teaching Programme on Levels of Knowledge regarding Narcotic Policy among Staff Nurses in Selected Hospitals of

into medical surgical nursing curriculum to keep abreast the nursing students of different drug therapies used in clinical settings. There is a need to adopt different strategies and media such as demonstration in real setting, slides and audio visual aids to train staff nurses. There should be adequate guidance, supervision and evaluation of staff nurses in clinical areas. In future, studies can be planned with larger sample size for conducting research and involving different drug therapies and using different teaching strategies.

CONCLUSION

Thus for this study one can conclude that Teaching Programme Regarding Thrombolytic Drug Therapy In Terms Of Knowledge And Practice Of Staff Nurses could be an effective strategy to improve the knowledge and functioning of staff nurses.

Table 1. Sample socio demographic clinical Characteristics and findings:

		n	%
Age	25 -30 Years	6	20
	31 -34 Years	15	50
	35 and above	9	30
Gender	Female	28	93.3
	Male	2	6.7
Qualification	GNM	28	93.3
	Post Basic BSc	2	6.7
Experience	upto 2 years	4	13.3
	2-6 years	16	53.3
	over 6 years	10	33.3
Experience in Critical Care	upto 2 years	16	53.3
	2-6 years	8	26.7
	over 6 years	6	20
administered thrombolytic drug therapy	Yes	21	70
	No	9	30
In-service education programme	Attended	6	20
	Not attended	24	80

Bangalore. *Nurs J India*. 2014 Nov-Dec;105(6):274-7.

- Heath S.M. et.al. Nurse initiated thrombolysis in accident and emergency department: safe, accurate and faster than fast track. *Emergency Medical Journal* 2003;20(1):418-420.
- Holland, Emma Is nurse-led thrombolysis clinically safe, beneficial and acceptable? *Nursing Times Research* 2000;5(3):227-234.
- Qasim A, Malpass K, O'Gorman DJ, Heber ME . Safety and efficacy of nurse initiated thrombolysis in patients with acute myocardial infarction *BMJ* 2002; 324:1328-1331.
- Kremser AK, Lyneham J. Can Australian nurses safely assess for thrombolysis on EKG criteria?. *J Emerg Nurs*. 2007 Apr;33(2):102-9.