



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICES TO PREVENT NEEDLESTICK INJURIES AMONG THE STAFF NURSES WORKING IN VPIMS, LUCKNOW

Nursing

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ABSTRACT

Everyday health care workers are exposed to dangerous and deadly blood borne pathogens through contaminated needles and sharps. It is one of the greatest risks faced by frontline health workers. Yet these exposures have often been considered "part of the job". The present study was undertaken to assess the effectiveness of structured teaching Programme on knowledge and practices to prevent needlestick injuries among the staff nurses working in VPIMS, Lucknow. The objective of this study was to determine the existing knowledge and practices of staff nurses regarding Prevention of needlestick injury. Quasi experimental one group pretest-posttest design was used. 20 staff nurses were selected by convenient sampling techniques. The knowledge regarding needle stick injury was assessed by using structured knowledge questionnaire. The result of the study revealed that 60% staff nurses had inadequate knowledge, 25% had moderate knowledge and 15% had adequate knowledge.

KEYWORDS

knowledge, practice, needlestick injury, structured teaching programme.

INTRODUCTION

Needle stick injury means parenteral introduction in the body of health care worker, during the performance of his or her duties, of blood or other potentially infectious material by a hollow bore needles¹. Needlestick injury present the single greatest occupational hazard of health care workers, there are more than 20 blood borne diseases, but those of primary significance to the health care workers are hepatitis B (HBV), hepatitis C (HCV), & human immunodeficiency virus (HIV) because of the environment in which they work, many of the nurses and health care workers are at an increased risk of accidental needlestick injury (NSI)². Needlestick injury is caused by recapping of needle, improper disposal, during sharp disposal, while manipulating needle in patients, while accessing IV line, hand to hand passing of uncapped needles, malpractices, distraction during work, uncooperative patients and may have serious complications like Blast mycosis, Brucellosis, Cryptococcosis Diphtheria, Cutaneous Gonorrhoea, Herpes, Malaria, Mycobacteriosis Syphilis, Tuberculosis, Toxoplasmosis, Rocky Mountain Spotted Fever.

MATERIALS AND METHOD

A quasi experimental study was conducted to assess the effectiveness of structured teaching programme on knowledge and practices to prevent needlestick injuries among the staff nurses, 20 staff nurses were selected by convenient sampling techniques. Structured knowledge questionnaire 20 items and 10 item of practice checklist were used to collect data from the participants. Tools were validated by subject experts and reliability of tool was found 0.80 and calculated by split half method.

Written permission was obtained from the hospital superintendent and written consent was obtained from the participants, after giving assurance to the study participants regarding the confidentiality of the collected data. Structured questionnaires were administered and practice was assessed by using checklist, same day structured teaching programme was administered. After 7 days, same questionnaires were administered and practice was reassessed. The collected data was analyzed by using descriptive and inferential statistics.

RESULT AND DISCUSSION

Out of 20 samples distributed according to age group, 60% staff nurses were in the age group of 20-30 years, 25% were 31-40 years, 10% were 41-50 years & 5% were in the age group of 51-60 years. According to gender, 75% were female staff nurses and 25% were male staff nurses. According to professional qualification, 75% staff nurses were GNM and 25% were B Sc. Nursing.

Table-1.1: Frequency & Percentage distribution of level of knowledge regarding prevention of Needlestick injury among staff nurse

SL. NO	ASPECTS	RESPONSE KNOWLEDGE LEVEL					
		INADEQUATE		MODERATE		ADEQUATE	
		f	%	f	%	f	%
1.	Pre-test score	12	60	5	25	3	15
2.	Post-test score	0	0	9	45	11	55

The data in table shows pre and post test knowledge scores regarding prevention of needlestick injury. Where the 15% of staff nurses have adequate knowledge, 25% of staff nurses have moderate knowledge and 60% of staff nurses having inadequate knowledge before video teaching programme. The post-test score after video teaching programme shows 55% of staff nurses have gained adequate knowledge, 45% of staff nurses gained moderate knowledge regarding prevention of needlestick injury.

Table No. 1.2: Frequency & Percentage distribution of practice regarding prevention of Needlestick injury among staff nurse

N=20

SL. NO	ASPECTS	RESPONSE PRACTICE LEVEL					
		INADEQUATE		MODERATE		ADEQUATE	
		f	%	f	%	f	%
1.	Pre-test score	17	85	3	15	0	0
2.	Post-test score	0	0	6	30	14	70

The data in table shows practices regarding prevention of needlestick injury among staff nurses where as none of staff nurses have adequate practices regarding prevention of needlestick injury & 15% of staff nurses have moderate practices regarding prevention of needlestick injury, & 85% have inadequate practices regarding prevention of needlestick injury, as per pretest score. The post-test score after STP shows that none of the staff nurses have inadequate practice regarding prevention of needlestick injury & 30% of staff nurses have moderate practices regarding prevention of needlestick injury & 70% of staff nurses having adequate practices regarding prevention of needlestick injury.

A chi square test was used to find out the association between the level of knowledge and the age at 5% level of significant with 3 degree of freedom. The calculated value of the chi square (2.611) is more than the table value of chi square (2.366). Hence there is a significant association between knowledge level and age of the respondent's. Thus H_1 was found to be true.

A chi square test was used to find out the association between the level of knowledge and the gender at 5% level of significant with 1 degree of freedom. The calculated value of the chi square (3.26) is more than the table value of chi square (0.455). Hence there is a significant association between knowledge level and age of the respondent's. Thus H_1 was found to be true.

There was no significant association between knowledge and other selected demographic variable like religion, professional qualification, previous knowledge and source of information as it was expected in the hypotheses of study the investigator found there was a significant improvement in the knowledge regarding prevention of Needlestick injury, who received structured teaching programme.

CONCLUSION

There is much room for improvement in protecting the health care workers from needlestick injuries in which nurses are at high risk. So greater collaborative and educational efforts should be made to improve the knowledge, practices and attitude of nurses. The staff nurses knowledge and practices in preventing needlestick injury were inadequate. The structured teaching programme significantly increased the knowledge and level of practices in staff nurses in preventing NSI.

Implications of the study

The findings of the study have mark able implications in nursing services, nursing administration, nursing education and nursing research. The findings of the study can play an important role in educating the staff nurses, as there is gross inadequacy in knowledge and practices regarding NSI. The findings of the study by all the way will enable to make significant contributions to improve the efficiency and working of the staff nurses in the hospital setting.

Staff nurses can make use of this Video teaching programme in several wards to prevent further incidences of NSI and also further complications.

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ETHICAL CLEARENCE

The proposed study will be conducted after the approval of research committee of the college. Permission will be obtained from the Managing director of each private hospital. The consent of each staff nurses will be obtained before data collection. Assurance will be given to the study participants regarding the confidentiality of the data collected.

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