

PRE-EXPERIMENTAL DESIGN ON THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME KNOWLEDGE REGARDING OCCUPATIONAL HEALTH HAZARDS AMONG OUTGOING NURSING STUDENTS

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Abstract

This research study was conducted with the aim to assess the effectiveness of structured teaching programme knowledge regarding occupational health hazards among outgoing nursing students. Conceptual framework of the study was based on modified Hildegard E. peplau Interpersonal Theory. Data collection tool consisted of 2 section namely demographic Performa, structured questionnaire. The gather data was analyzed by using descriptive and inferential statistics. After STP the Post-test knowledge score no one found with inadequate knowledge score, 12 (20%) had moderate level of knowledge, 48 (80%) had adequate level of knowledge regarding occupational health hazards and its prevention. The study shows that structured teaching programme is beneficial to improve the level of knowledge regarding occupational health hazards and its prevention among students of Mata Padmawati College of Nursing Nahan.

Keywords: Knowledge, structured teaching programme.

INTRODUCTION

“Occupational health services will help keep your employees [mentally and physically] healthy and safe whilst in work and manage any risks in the workplace that are likely to give rise to work-related ill health”

Occupational health issues are often given less attention than occupational safety issues because the former are generally more difficult to confront. Occupational Health is defined by the Joint Committee of International Labour Office and World Health Organization as “The promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations by preventing departures from health, controlling risks and the adaptation of work to people, and people to their jobs”. Occupational health is concerned with the control of occupational health hazards that arise as a result of or during work activities. Occupational hazards are a worldwide problems affecting both developed and developing countries. **As per WHO** (World Health Organization), Occupational hazards include physical, mechanical, biological, and psychological hazards. Biological hazards are mainly infections hazards such as bacteria, virus, fungi, parasites, which cause disease such as HIV/AIDS, tuberculosis hepatitis and other blood born infections. Physical hazards commonly found in health facilities include lifting of patients. This is the main and a common hazard in hospitals and health centre whereby lifting, turning, moving and adjusting beds by hand is routine activity of daily work. Health and safety of the workers within the workplace is the major concern of the millennium that has emerged with the rapid technological advancement in every field of the practice. As the workplace for medical treatment and health improvement, hospitals have high standards for safety and hygiene. However, healthcare workers are confronted by numerous occupational hazards due to the unique nature of their work. The occupational health services, provided by employers or governmental authorities in all countries

of the WHO European Region to address the health promotion, health protection and health care needs of working populations have been identified as an important component of the public health system. These services can make a significant contribution to essential governmental initiatives, such as increasing health equality, improving social cohesion, and reducing sickness absence. They help to reduce the overall burden of diseases.

OBJECTIVES

- To assess the pre test knowledge score regarding occupational health hazards among outgoing nursing students
- To develop and evaluate the effectiveness of the structured teaching programme on knowledge regarding occupational health hazards among outgoing nursing students
- To assess the post test knowledge score regarding occupational health hazards among outgoing nursing students
- To compare the pre test and post knowledge
- To find out association between post test knowledge score of selected socio demographic variables of occupational health hazards among outgoing nursing students

HYPOTHESIS

H0: There is no relationship between structured teaching programme (independent variable) and knowledge score (dependent variable) among the students

H1: There is relationship between structured teaching programme (independent variable) and knowledge score (dependent variable) among the students

REVIEW OF LITERATURE

- **Ndejjo Rawlance (2015)** conducted a research study on to assess the effectiveness of structured teaching programme on Occupational Health Hazards among Healthcare Workers in Kampala, Uganda. Total 200 respondents selected by using random sampling technique. Questionnaire used to collect the data from subjects. The results show that 50.0% of respondents reported experiencing an occupational health hazard. Among these, 39.5% experienced biological hazards. Predictors for experiencing hazards included not wearing the necessary personal protective equipment (PPE), working overtime, job related pressures, and working in multiple health facilities. The study concluded that healthcare workers in this setting experience several hazards in their workplaces. Associated factors include not wearing all necessary protective equipment, working overtime, experiencing work related pressures, and working in multiple facilities. Interventions should be instituted to mitigate the hazards, Specifically PPE supply gaps, job related pressures, and complacency in adhering to mitigation measures should be addressed.
- **Prasanna Kumar D.R (2015)** conducted a research study to assess the knowledge of nurses regarding Occupational safety measures and to evaluate the effectiveness of planned teaching programme on Occupational safety measures at JSS Hospital, Mysore. The structured knowledge questionnaire on occupational hazards and safety measures was used to collect the data. Total 70 Staff Nurses selected by using convenient sampling technique. Findings of the study revealed that nurses in public health settings had low level of knowledge regarding occupational hazards, safety measures and self-care to prevent effects of hazards with overall pretest knowledge level being 17.72 and the overall posttest

knowledge of occupational safety measures of the nurses was 31.70 and there was a statistically significant difference found between the pretest and post test knowledge scores at the level of $p < 0.05$. From the study findings, it is revealed that there was significant increase in the knowledge scores of the school staff nurses after the planned teaching programme. It was concluded that planned teaching programme was highly effective in improving the knowledge of staff nurses regarding occupational safety measures.²¹

VARIABLES

Dependent variables:- Knowledge of outgoing nursing students.

Independent variables:- Structured teaching programme on knowledge regarding occupational health hazards among nursing students

Socio Demographic Variables: it refers to baseline characteristics such as Age, Sex, Religion,

Population: Outgoing Nursing Students.

Sample Size: 60 Outgoing Nursing Students.

Sampling Technique: Convenient Sampling Technique

SAMPLING CRITERIA

Inclusive Criteria

- Students who were willing to participate in study.
- Outgoing nursing students.
- Those who were present at the time of data collection.

Exclusive Criteria

- Those who were not willing to participate in study
- Those who were absent at the time of data collection.

DEVELOPMENT & DESCRIPTION OF TOOL

Data collection tool are the procedure or instruments used by the researcher to observe or measure key variables in the research problem.

The tool was divided into two sections.

SECTION -1 Socio-demographic variables.

This section consist of variables to collect socio-demographic information such as age, religion, marital status, residence, professional qualification, awareness about occupational health hazards and prevention, participation in service education program on occupational health hazards.

SECTION-2

Structured questionnaire based on knowledge regarding occupational health hazards.

SCORING CRITERIA

Maximum score- 38

Minimum score-0

Criteria measures

Level of knowledge score

- Adequate level of knowledge (27-38)
- Moderate level of knowledge (14-26)
- Inadequate level of knowledge (1-13)

Frequency & Percentage Distribution of Pre-Test of Knowledge Score N=60

Level of Knowledge	Frequency (f)	Percentage (%)
Inadequate knowledge (0-13)	36	60%
Moderate knowledge (14-26)	24	40%
Adequate knowledge (27-38)	0	0%

Frequency & Percentage Distribution of Post-Test of Knowledge N=60

Level of Knowledge	Frequency (f)	Percentage (%)
Inadequate knowledge (0-13)	0	0%
Moderate knowledge (14-26)	12	20%
Adequate knowledge (27-38)	48	80%

MEAN AND STANDERED DEVIATION OF PRE- TSET/POST- TEST LEVEL OF KNOWLEDGE SCORE

GROUP	MEAN	SD	t-Test Value
Pre- Test	13.83	±0.48	6.45
Post Test	25.83	± 5.1	

ASSOCIATION BETWEEN KNOWLEDGE SCORE OF POST TEST WITH SELECTED DEMOGROAHC VARABLESN=60

s	Demographic variables	Level of knowledge			Df	Table value	Chi square	Inferences
		Inadequate	Moderate	adequate				
1	Age							
	17- 20	0	1	12	5	11.07	6.59	NS
	Years	0	6	12				
	21-24years	0	0	6				
	25-28year	0	2	12				
29-35years	0	2	12					
2	Marital status							
	Married	0	1	34	6	12.59	0.91	NS
	Unmarried	0	2	8				
	Widow	0	0	0				
	Divorced	0	0	0				
	0	0	0					

3	Religion							
	Hindu	0	1	42	6	12.59	0	NS
			8					
	Muslim	0	0	0				
	Christian	0	0	0				
Sikh	0	0	0					
4	Residence							
	Rural	0	14	30	6	12.59	2.78	NS
	Urban	0	4	12				
	Semi urban	0	0	0				
	Slum	0	0	0				
5	Profession							
	ANM	0	0	0	2	5.99	1.49	NS
	GNM	0	8	26				
	BSc nursing	0	10	16				
	Post BSc	0	0	0				
Nursing								
6	Source of information							
	Internet	0	16	34	6	12.59	2.8	NS
	Peer group	0	0	4				
	Family	0	0	0				
	Magazines	0	2	4				
7	Awareness About Occupational Health hazards and Its prevention.							
	Yes	0	12	42	2	5.99	12.77*	S*
	No	0	6	0				

NS= non significant at p level ≤ 0.05

*= significant at p level ≤ 0.05

FINDINGS AND CONCLUSION

Pre test knowledge score was pre –test level of knowledge score of students i.e. 36 (60%) had inadequate knowledge 24(40%) had moderate knowledge, no one subjects had adequate knowledge regarding occupational health hazards

Post-test level of knowledge score of students, had no inadequate knowledge, 12 (20%) had moderate knowledge, 48 (80%) had adequate knowledge regarding occupational health hazards.

Pre and post test mean difference was 13.83 & 25.83 respectively and the calculated' test value was 6.45.

There was significant association of post test knowledge score with Awareness about occupational health hazards and its prevention and there was no significant association of post test knowledge

score with selected demographic variables such as education, areas of duty, age, religion and professional qualification etc.

The study revealed that structure teaching programme was effective in enhancing the knowledge of outgoing nursing students.

RECOMMENDATION

Based on findings of the present study recommended offered for the future study are:

1. The similar study can be replicated with large sample size.
2. A similar study can be conducted in different setting on different population to enhance the generalization of findings.
3. Qualitative study can be done to assess the occupational hazards and effect of those hazards on health of nursing officer.
4. A descriptive study can be done to assess level of knowledge among nursing students regarding prevention of occupational hazards.
5. The similar study can be conducted among physician.

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