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Review Article

A STUDY TO ASSESS THE EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE AND ATTITUDE REGARDING THE USE OF PERSONAL PROTECTIVE EQUIPMENT AMONG THE STAFF NURSES IN SELECTED HOSPITALS OF DISTRICT HISAR (HARYANA)

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ABSTRACT

Introduction: Personal protective equipment are designed to protect health care providers from serious workplace injuries or illnesses. Personal protective equipment (PPE) includes gloves, protective eye wear goggles, mask, apron, gown, shoe cover, hair cover.

Material &Method: conceptual framework : the study was based on modified Ludwing model.Approach:convienient approach was adopted for the study. Design Quasi-experimental (non randomised control group design). The sample size was 60 staff nurses 30 each from separate hospital for experimental and control group. The tools of data collection are Self-Structured questionnaire & likert scale The collected data were tabulated and analysed by descriptive and inferential statistics.

RESULT: Result that shown self stuructured module was effective in improving the knowledge and attitude of staff nurses regarding personal protective equipment in the hospitals. In experimental group of knowledge score the (t-7.658) significant and in control group (t-1.385) non significant. In experimental group of attitude score the (t-4.221) significant and in control group (t-1.361) non significant.

Conclusion: This study was concluded that self instructional module was effective in improving the knowledge and attitude of staff nurses regarding the use of personal protective equipments in hospitals.

INTRODUCTION Personal protective equipment (PPE) includes gloves, protective eye wear goggles, mask, apron, gown, shoe cover, hair cover. PPE should be used by all health care providers, supporting staffs, laboratory staffs, and family members who provide care to patients in situations where they have contact with blood, body fluids, secretions or excretions

Personal protective equipment are designed to protect health care providers from serious workplace injuries or illnesses. It offers protection by preventing microorganism from contaminating hands, eyes, clothing, hair and shoes. There exist various kinds of physical, chemical, and biological hazards in the workplace.

METHODOLOGY

A quasi-experimental study was conducted in study the experimental group staff nurses were take from Aadhar Hospital staff nurses and control group sample taken from Maharaja Agrasen Hospital Agroha staff nurses Hisar Haryana. Structured questionnaire and Likert scale was developed and validated by experts in the field of nursing and medical surgical nursing. The research tools consisted of following parts: part 1: sociodemographic profile sheet; part 2: structured questionnaire to assess the knowledge of staff nurses regarding the use of personal protective equipments 3:likert scale assess the attitude of staff nurses regarding the use of personal protective equipments. The study is limited to staff nurses of Aadhar Hospital and Maharaja Agrasen Hospital Agroha. The collected data was compiled and analysed by descriptive and inferential statistics.

RESULT

The results showed the greater percentage Majority of staff nurses were in the age of (20-25) (36-40) in experimental group or in (20-25) in control group of staff nurses. In **pre-test** level of control group **knowledge** of staff nurses showed that (43.3%)staff nurses have inadequate knowledge (56.7%) staff nurses have moderate knowledge (0%) staff nurses have adequate knowledge. In **pre-test** level of experimental group (16.7%) staff nurses have good attitude,(83.3%) staff nurses have average attitude and (0%) staff nurses have poor attitude.

In **pre-test** level of control group **attitude** of staff nurses showed that (43.3%)staff nurses have inadequate knowledge (56.7%) staff nurses have moderate knowledge (0%) staff nurses have adequate knowledge. In **pre-test** level of control group (16.7%) staff nurses have good attitude,(83.3%) staff nurses have average attitude and (0%) staff nurses have poor attitude.

In **post-test** level of experimental group **knowledge** of staff nurses showed that (13.3%)staff nurses have inadequate knowledge (60%) staff nurses have moderate knowledge (26.7%) staff nurses have adequate knowledge. In **post-test** level of experimental group (3.3%) staff nurses have good attitude,(86.7%) staff nurses have average attitude and (10%) staff nurses have poor attitude.

In **post-test** level of control group **knowledge** of staff nurses showed that (30%)staff nurses have inadequate knowledge (70%) staff nurses have moderate knowledge (0%) staff nurses have adequate knowledge. In **post-test** level of control group (10%) staff nurses have good attitude,(90%) staff nurses have average attitude and (0%) staff nurses have poorattitude.

ANALYSIS

TABLE:-1 Association of ATTITUDE Score with Demographic variables (Post ATTITUDE)Experimental Group

Demographic Variables		Association of ATTITUDE Score with Demographic variables (Post ATTITUDE)Experimental Group							
Variables	**Opts**	**GOOD**	**AVERAGE**	**POOR**	**Chi Test**	**P Value**	**df**	**Table Value**	**Result**
AGE	20–25 year	0	7	2	5.475	0.484	6	12.592	Not Significant
	26–30 year	0	4	0					
	31–35 year	1	7	0					
	36–40 year	0	8	1					
GENDER	Male	0	5	0	0.923	0.630	2	5.991	Not Significant
	Female	1	21	3					
PROFESSIONAL QUALIFICATION	Diploma in nursing	1	9	0	3.519	0.172	2	5.991	Not Significant
	Bachelor of nursing	0	17	3					
	Master of nursing	0	0	0					
EXPERIENCE	Below–5 years	0	14	2	7.555	0.273	6	12.592	Not Significant
	6–7 years	0	3	0					
	8-10 years	0	6	1					
	Above than–10 years	1	3	0					
AREA OF PRACTICE	Medical	1	9	0	4.821	0.567	6	12.592	Not Significant
	Surgical	0	5	1					
	ICU	0	0	0					
	Emergency	0	8	2					
	O.T	0	4	0					

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TABLE:-2 Association of ATTITUDE Score with Demographic variables (Post ATTITUDE) Control Group

Demographic Variables		Association of ATTITUDE Score with Demographic variables (Post ATTITUDE) Control Group							
Variables	Opts	GOOD	AVERAGE	POOR	Chi Test	P Value	df	Table Value	Result
AGE	20 – 25 year	0	20	3	1.014	0.602	2	5.991	Not Significant
	26 – 30 year	0	5	0					
	31 – 35 year	0	0	0					
	36 – 40 year	0	2	0					
GENDER	Male	0	20	3	1.014	0.314	1	3.841	Not Significant
	Female	0	7	0					
PROFESSIONAL QUALIFICATION	Diploma in nursing	0	7	0	1.014	0.314	1	3.841	Not Significant
	Bachelor of nursing	0	20	3					
	Master of nursing	0	0	0					
EXPERIENCE	Below – 5 years	0	20	3	1.014	0.602	2	5.991	Not Significant
	6 – 7 years	0	5	0					
	8 -10 years	0	0	0					
	Above than – 10 years	0	2	0					
AREA OF PRACTICE	Medical	0	0	0	0.667	0.414	1	3.841	Not Significant
	Surgical	0	22	3					
	ICU	0	5	0					
	Emergency	0	0	0					
	O.T	0	0	0					

TABLE :-3 Association of KNOWLEDGE Score with Demographic variables (Post KNOWLEDGE)Experimental Group

Demographic Variables		Association of KNOWLEDGE Score with Demographic variables (Pre KNOWLEDGE) Experimental Group							
Variables	Opts	Adequate knowledge	Moderate knowledge	Inadequate knowledge	Chi Test	P Value	df	Table Value	Result
AGE	20 – 25 year		4	5	3.744	0.290	3	7.815	Not Significant
	26 – 30 year		4	0					
	31 – 35 year		5	3					
	36 – 40 year		6	3					
GENDER	Male		5	0	3.474	0.062	1	3.841	Not Significant
	Female		14	11					
PROFESSIONAL QUALIFICATION	Diploma in nursing		9	1	4.593	0.032	1	3.841	Significant
	Bachelor of nursing		10	10					
	Master of nursing		0	0					
EXPERIENCE	Below – 5 years		9	7	0.792	0.851	3	7.815	Not Significant
	6 – 7 years		2	1					
	8 -10 years		5	2					
	Above than – 10 years		3	1					
AREA OF PRACTICE	Medical		9	1	5.742	0.125	3	7.815	Not Significant
	Surgical		4	2					
	ICU		0	0					
	Emergency		4	6					
	O.T		2	2					

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TABLE :-4 Association of KNOWLEDGE Score with Demographic variables (Pre KNOWLEDGE) Control Group

Demographic Variables		Association of KNOWLEDGE Score with Demographic variables (Pre KNOWLEDGE) Control Group							
Variables	Opts	Adequate knowledge	Moderate knowledge	Inadequate knowledge	Chi Test	P Value	df	Table Value	Result
AGE	20 – 25 year		14	9	0.767	0.681	2	5.991	Not Significant
	26 – 30 year		2	3					
	31 – 35 year		0	0					
	36 – 40 year		1	1					
GENDER	Male		14	9	0.709	0.400	1	3.841	Not Significant
	Female		3	4					
PROFESSIONAL QUALIFICATION	Diploma in nursing		3	4	0.709	0.400	1	3.841	Not Significant
	Bachelor of nursing		14	9					
	Master of nursing		0	0					
EXPERIENCE	Below – 5 years		14	9	0.767	0.681	2	5.991	Not Significant
	6 – 7 years		2	3					
	8 -10 years		0	0					
	Above than – 10 years		1	1					
AREA OF PRACTICE	Medical		0	0	0.679	0.410	1	3.841	Not Significant

TABLE :-5 **Comparison of pre-test and post-test knowledge of staff nurses**.

CRITERIA MEASURE OF KNOWLEDGE SCORE				
Score Level	Pre Experimental	Pre Control	Post Experimental	Post Control
Adequate knowledge(15-20)	0(0%)	0(0%)	8(26.7%)	0(0%)
Moderate knowledge(8-14)	19(63.3%)	17(56.7%)	18(60%)	21(70%)
Inadequate knowledge(0-7)	11(36.7%)	13(43.3%)	4(13.3%)	9(30%)

Maximum=20 Minimum =0

TABLE:-6 Comparision of pre-test and post test attitude of staff nurses.

CRITERIA MEASURE OF ATTITUDE SCORE				
Score Level	Pre Experimental	Pre Control	Post Experimental	Post Control
GOOD(64-85)	0(0%)	0(0%)	1(3.3%)	0(0%)
AVERAGE(41-63)	25(83.3%)	25(83.3%)	26(86.7%)	27(90%)
POOR(17-40)	5(16.7%)	5(16.7%)	3(10%)	3(10%)

Maximum=85 Minimum =17

DISCUSSION AND CONCLUSION The results showed the greater percentage Majority of staff nurses were in the age of (20-25) (36-40) in experimental group or in (20-25) in control group of staff nurses. In **pre-test** level of control group **knowledge** of staff nurses showed that (43.3%)staff nurses have inadequate knowledge (56.7%) staff nurses have moderate knowledge (0%) staff nurses have adequate knowledge. In **pre-test** level of experimental group (16.7%) staff nurses have good attitude,(83.3%) staff nurses have average attitude and (0%) staff nurses have poor attitude.

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