A STUDY TO ASSESS THE KNOWLEDGE REGARDING RISK OF HEALTH PROBLEMS IN SHIFT DUTIES AMONG HEALTH CARE PROFESSIONALS IN SUBHARTI HOSPITAL AT MEERUT, UP.

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ABSTRACT

OBJECTIVES: The objective of the present study was to assess the knowledge regarding risk of health problems in shift duties among health care professionals and to find the association between the knowledge on risk of health problems in shift duties among health care professionals with their selected socio-demographic variables.

Material and method: Based on quantitative approach with descriptive design conducted on 60 health care professionals in selected Subharti hospital at Meerut UP. The students were selected by purposive sampling technique. The tools were prepared to assess the knowledge regarding risk of health problem in shift duties among health care professionals. Tools consists of two sections. Section I consists of demographic data and section II consists of questionnaire to assess the knowledge level regarding risk of health problem in shift duties among health care professionals. Tools were validated by 5 experts.

Results: The findings shows that, out of 60 samples 4 (6.66%) were having average knowledge followed by 30 (50%) were having good knowledge and 26(43.33%) were having very good knowledge The chi-square test shows that there was no significant association between knowledge of health care professional regarding risk of health problem in shift duties with their selected socio-demographic variables i.e nursing position.

Conclusion: It is concluded that majority of the samples have good knowledge regarding risk of health problems in shift duties among health care professionals.

Keywords: staff nurses, shift work, level of impact, health.

INTRODUCTION

"When you are working with ill patients and a stress filled job as a nurse, keeping healthy yourself becomes a priority".

At some point in life every individual becomes a caregiver's. A caregiver is someone who provides physical and emotional care to the person suffering with an illness. In many cases caregivers are family members, often spouses, parents or children or close friends, providing care to family members can be positive and rewarding experience. The role can be stressful with often overwhelming physical emotional and financial demands.

Caregivers spend an average of four and half years in providing care and about 12 hours per week engaged in tasks such as feeding, bathing dressing and shopping spending less time with their own children and giving up vacations, hobbies and other personally rewarding activities are common for caregivers who work long hours in this demanding role. Caregiver's tasks, such as driving a parent to a medical appointment interferes with his/her work schedule.

BACKGROUND OF THE STUDY

Shift work is considered necessary to ensure continuity of care in hospitals and residential facilities. In particular, the night shift is one of the most frequent reasons for the disruption of circadian rhythms, causing significant alterations of sleep and biological functions that can affect physical and psychological well-being and negatively impact work performance.

The objective of the present study was to assess the impact of shift work on health among staff nurse and to associate the level of impact of shift work on health with the selected demographic variables among staff nurses.

NEED OF THE STUDY

The aim of this study was to highlight if shift work with nights, as compared with day work only, is associated with risk factors predisposing nurses to poorer health conditions and lower job satisfaction.

The need of the current study is that researcher wants to assess the knowledge regarding risk of health problems in shift duties among health care professionals to identify and evaluate the latest development in assessing and managing the occupational risk and health of shift work disorder in shift health care workers.

HYPOTHESIS:H1: There is a significant association between knowledge of health care professionals regarding the risk of health problem in shift duties among health care professional with their selected socio-demographic variables.

OPERATIONAL DEFINITIONS:

ASSESS:

It refers to an activity to estimate awareness level about a study to assess the risk of health problems related shift duties among health care professionals.

KNOWLEDGE:

It refers to the ability of the health care professionals by correct response to a structured knowledge questionnaire responding to assess the risk of health problems related shift duties among health care professionals.

RISK OF HEALTH PROBLEMS:

Health problems refers to the problems faced by the health care professionals during their shift duties which are at risk to attain incomplete physical, mental and social well-being.

HEALTH CARE PROFESSIONALS:

Health care professionals include practitioners (Doctors, Nurses, Dentists) administrators and allied health professionals.

ASSUMPTIONS:

Health care professionals working in various departments may have some knowledge regarding health problems in shift duties.

DELIMITATIONS:

The study is delimited to:

- 60 samples working in various departments.
- Chhatrapati Shivaji Subharti Hospital.
- The data collection period is delimited to four weeks only.

REVIEW OF LITRATURE

Sometimes the smallest step in the right direction,

Ends up being the biggest step of your life,

Gabriele d'Ettorre, Vincenza Pellicani, Mariarita Greco (2021) has conducted a study to assess and manage the shift works disorder in healthcare workers. Shift-work represents a major concern for the safety and health of healthcare workers (HCWs) employed in twenty- four hours hospital wards. In fact, many shift-HCWs suffer from poor sleep and sleepiness, and a growing literature has been showing a relationship between shift-work, including night-shift, and the disruption of the circadian alerting sys- tem, resulting in sleep disorders. A total of 25 publications matched the inclusion criteria. The topics discussed, in order of frequency (from the highest to the lowest), were: "Risk Assessment" (84%), "Occurrence Rates" (64%) and "Risk Management" (48%). Number of nights worked per year, long night-time working hours, frequent missing of nap opportunities during night-shift, quick re- turns and unhealthy workplace were found as organizational determinants of SWD that should be prioritized in the risk assessment of shift work in the healthcare sector.

RESEARCH METHODOLOGY
"If you cannot do great things, Do small things in a great way.

The methodology of research indicates the general pattern for organizing the procedure to be used and analyses the data to accomplish the objectives of the research. This chapter is designed to present the brief description of methodology adopted for study.

RESEARCH APPROACH

The research approach adoptive for the study was quantitative research approach.

RESEARCH DESIGN

Descriptive research design was used in this study.

SETTING OF THE STUDY

The setting of the main study was conducted in Chhatrapati Shivaji Subharti Hospital in Meerut.

POPULATION:

Target population of study was health care professionals working at Chhatrapati Shivaji Subharti Hospital, Meerut**.**

SAMPLING:

SAMPLE:

Sample consists of health care professionals.

SAMPLIN TECHNIQUES: Purposive sampling technique was used for collecting the sample, which are fulfilling the inclusion criteria.

SAMPLE SIZE: Sample size include in the study was 60 from selected CSSH Hospital at Meerut.

CRITERIA FOR SAMPLE SELECTION-

Inclusion criteria:

1. Health professionals who are working in rotating shifts.
2. Health professionals who are willing to participate in the present study.
3. Health professionals who are able to read/write Hindi/English language.
4. Health professionals include only doctors, Nurses, paramedical staff and pharmaceutical staff.

Exclusion criteria:

1. Health professionals who are working in only one shift (General shift)
2. Health professionals who are on leave.
3. Health professionals who are having less than 6 months of shift work experience.
4. Health professionals who are not willing to participate in the present study.

RESEARCH TOOLS AND TECHNIQE

The data collection tool consist of two section.

SECTION-A : Demographic profile of health care professionals

It comprised if demographic data of the health care professionals such as age, gender, marital status, family type, qualification, duration of work, year of experience, shift schedule, work department, nursing position.

SECTION-B : Structured knowledge based Questionnaires

It consists of the knowledge based questions to assess the level of knowledge of health care professionals regarding risk of health problems in shift duties.

CONTENT VALIDITY

Structured knowledge based Questionnaire was developed by the investigator upon the review of literature and the content was evaluated by experts from the field of medicine and nursing .

METHOD OF DATA COLLECTION

Period of data collection: The period of data collection 17/11/2023 TO 20/11/2023

Data collection procedure: Before conducting the main study, the researcher met the concerned authorities in the Chhatrapati Shivaji Subharti Hospital in Meerut and obtained permission for the data collection. The data collection has done after explaining the procedure to the health care professionals, oral consent was obtained from samples and assured confidentiality and their responses. The health care professionals who met the inclusion criteria were selected by purposive sampling technique.

DATA ANALYSIS: Descriptive statistics- frequency and percentage distribution was used to analyse socio demographic variables. Mean, standard deviation, and mean percentage was used to analysis the knowledge scores. Inferential statistics- Chi square was used to determine the association between knowledge and score with the selected socio demographic variables.

ANALYSIS AND INTERPETATION OF DATA

"The best way to Predict your future is to create it.

This chapter deals with analysis and interpretation of data collected from 60 samples who were health care professionals of Chhatrapati Shivaji subharti hospital.

Table 1: Frequency and Percentage wise distribution of demographic data of health care professionals regarding risk of health problems in shift duties according to their demographic characteristics.

N-60

S.NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1.	**Age in Years**		
	(a) 20-30	25	41.5%
	(b) 31-40	21	34.86%
	(c) 41-50	9	14.94%
	(d) >50	5	8.3%
2.	**Gender**		
	(a) Male	24	39.84%
	(b) Female	36	59.76%
3.	**Marital Status**		
	(a) Married	30	49.8%
	(b) Unmarried	23	38.18%
	(c) Divorced	7	11.62%
4.	**Family type**		
	(a) Joint	18	29.88%
	(b) Nuclear	33	54.72%
	(c) Extended	9	13.28%
5.	**Qualification**		
	(a) GNM	24	39.84%
	(b) B.Sc (N)	19	31.54%
	(c) M.Sc (N)	9	14.94%

	(d) Others	8	13.28%
6.	**Duration of Work**		
	(a) 6 Hours	6	9.96%
	(b) 8 Hours	27	44.82%
	(c) 9-12 Hours	27	44.82%
7.	**Years of Experience**		
	(a) 1-3 Years	25	41.5%
	(b) 4-6 Years	22	36.52%
	(c) 7-9 Years	9	14.94%
	(d) >9 Years	4	6.64%
8.	**Shift Schedule**		
	(a) Morning	24	39.84%
	(b) Evening	9	14.94%
	(c) Night	14	23.24%
	(d) General	13	21.58%
9.	**Working Department**		
	(a) Emergency	14	23.24%
	(b) Intensive Care Unit	21	34.84%
	(c) Medical/ Surgical	13	21.58%
	(d) Others	12	19.92%
10.	**Nursing Position**		
	(a) Staff Nurses	39	64.74%
	(b) In-Charge Nurse	13	21.58%
	(c) Nursing Supervisor	8	13.28%

Result of Demographic variables: Regarding the age in years shows that (25) 41.5% of them were in age group of 20-30 years followed by (21) 34.86% between 31-40 years and only (9)14.94% between 41-50 years followed by (5) 8.3% >50 years. Considering the gender shows that (24) 39.84% of them were males and (36) 59.76% were females. Regarding the marital status shows that majority (30) 49.8% of them were married followed by (23) 38.18% were unmarried whereas on the other hand (7) 11.62% of them were divorced. Regarding the family type shows that majority of the samples (33) 54.72% were in nuclear family followed by (18) 29.88% of them were in joint family, and only (8) 13.28% were in extended family. Considering qualification status shows that (24) 39.84% of them were having GNM as their education qualification followed by (19) 31.54% of them were having B.Sc (N) as their qualification. Whereas only (9) 14.94% of them were M.Sc (N) and (8) 13.28% of them were from other qualification. Regarding the duration of work shows that equal number of samples (27) 44.82% have work duration of 8 hours and 9-12 hours whereas only (6) 9.96% of them have 6 hours of work duration, of nurses had woek experience shows that (25) 41.5% of them were having 1-3 years of experience, followed by (22) 36.52% were with 4-6 years of experience. On the other hand, only (9) 14.94% of them were having 7-9 years of experience and then (4) 6.64% of them were having >9 years of experience. Regarding shift schedule shows that majority of the samples (24) 39.84% were in morning shift whereas only (14) 23.58% of them were in night, followed by (13) 21.58% of them are in general shift and only (9) 14.94% of them were in evening shift, to their work department shows that majority of the samples (21) 34.84% were working in Intensive care unit and on the other hand (14) 23.24% of them were working in emergency followed by (13) 21.58% from Medical/Surgical departments and (12) 19.92% of them from the other departments. Regarding nursing position shows that majority (39) 64.74% of them were staff nurses.

Whereas only (13) 21.58% of them were incharge nurses, followed by (8) 13.28% of them were nursing superviso

Table 2: Frequency and percentage distribution of health care professionals by their knowledge scores related to risk of health problems in shift duties.

N=60

LEVEL OF KNOWLEDGE	SCORE RANGE	FREQUENCY	PERCENTAGE
Very Good Knowledge	21-25	26	43.33%
Good Knowledge	11-20	30	50%
Average Knowledge	0-10	4	6.66%

Data showed in table 2 demonstrates that out of 60 sample, 26 (43.33%) had very good knowledge followed by 30 (50%) good knowledge and 4 (6.66%) with average knowledge respectively related to risk of health problems in shift duties among health care professionals.
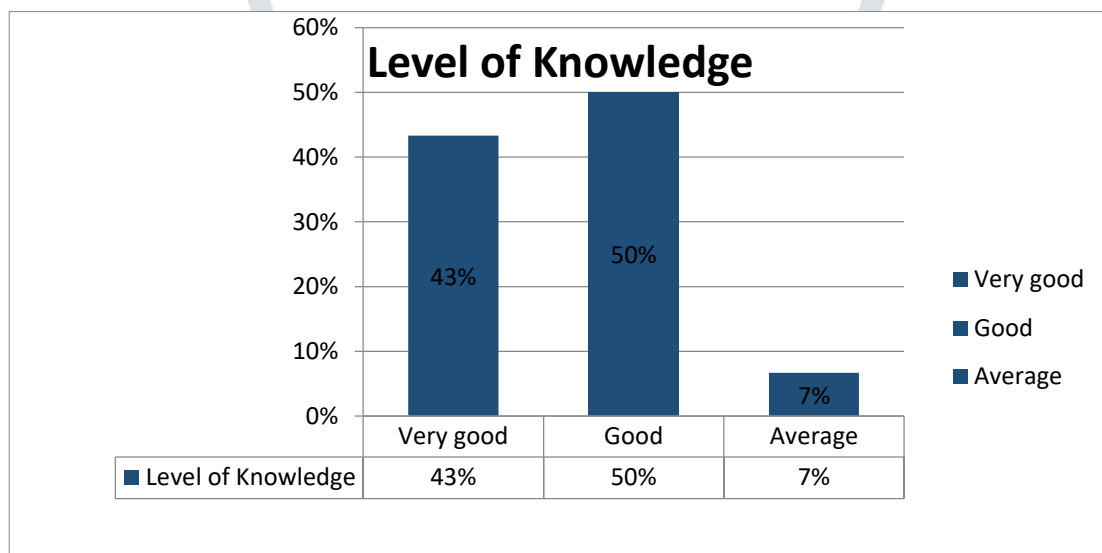

Table 3: Frequency and percentage distribution to assess the level of knowledge of health care professionals regarding risk of health problems in shift duties.

N=60

S.No	Variables	No of Items	Maximum Score	Mean	SD
1.	Level of Knowledge	25	60	18.166	4.042

The above table shows that the mean score of knowledge level was 18.166 with standard deviation (SD) was 4.042.

Table:4 - Association between the level of knowledge of health care professionals regarding risk of health problems in shift duties with their selected socio-demographic variables.

N=60

S.No	Demographic Variable	Level of Knowledge						Chi-Square	Table Value	DF	Not significant/ significant
		Average		Good		Very Good					
		F	%	F	%	F	%				
1.	Age in years										
	20-30	1	1.66%	9	14.9%	15	24.9%				
	31-40	1	1.6%	14	23.2%	6	9.96%	7.572	12.592	6	NS
	41-50	1	1.6%	4	6.64%	4	6.64%				
	>50	1	1.6%	3	4.98%	1	1.66%				
2.	Gender										
	Male	2	3.32%	11	18.26%	11	18.26%	0.3632	5.991	2	NS
	Female	2	3.32%	19	31.54%	15	24.9%				
3.	Marital status										
	Married	1	1.66%	14	23.2%	15	24.9%				
	Unmarried	2	3.32%	14	23.2%	7	11.62%	4.003	9.488	4	NS
	Divorced	1	1.66%	2	3.32%	4	6.64%				
4.	Family type										
	Joint	1	1.66%	8	13.28%	9	14.94%				
	Nuclear	2	3.32%	15	24.9%	16	26.56%	0.909	9.488	4	NS
	Extended	1	1.66%	5	8.3%	3	4.98%				

No.	Category										
5.	Qualification							8.133	12.592	6	NS
	DGNM	1	1.66%	9	14.94%	14	23.24%				
	B.SC (N)	1	1.66%	14	23.24%	4	6.64%				
	M.SC (N)	1	1.66%	3	4.98%	5	8.3%				
	Others	1	1.66%	4	6.64%	3	4.98%				
6.	Duration of work							1.935	5.991	4	NS
	6 Hours	1	1.66%	3	4.98%	2	3.32%				
	8 Hours	1	1.66%	15	24.9%	11	18.26%				
	8-12 Hours	2	3.32%	12	19.92%	13	19.92%				
7.	Years of experience							2.196	12.592	6	NS
	1-3 Years	1	1.66%	14	23.24%	10	16.6%				
	4-6 Years	1	1.66%	11	18.26%	10	16.6%				
	7-9 Years	1	1.66%	4	6.64%	5	8.3%				
	>9 Years	1	1.66%	1	1.66%	2	3.32%				
8.	Shift Schedule							4.418	12.592	6	NS
	Morning	1	1.65%	11	18.26%	12	19.92%%				
	Evening	1	1.6%	4	6.64%	4	6.62%				
	Night	1	1.6%	10	16.6%	3	4.98%				
	General	1	1.6%	5	8.3%	7	11.62%				

9.	Work Department										
	Emergency	1	1.6%	5	8.33%	8	13.33%				
	Intensive care unit	1	1.6%	14	23.33	6	10%				
	Medical/Surgical Nursing	1	1.6%	5	8.33%	7	11.66%	4.285	12.592	6	NS
	Other	1	1.6%	6	10%	5	8.33				
10.	Nursing Position										
	Staff Nurses	2	3.33%	25	41.66%	12	20%				
	In-charge Nurses	1	1.66%	2	3.33%	10	16.66%	10.371^{*}	9.488	4	S
	Nursing-Supervisor	1	1.66%	3	5%	4	6.66%				

SUMMARY:

This chapter dealt with the analysis and interpretation of data collected from 60 participants health care professional from selected subharti hospital meerut .Structured Questionnaire was used to assess the Knowledge. The data was tabulated and analyzed using descriptive statistics. Results showed that most of the people had good knowledge related to risk of health problem

DISCUSSION

Success is the sum of all efforts, repeated day-in and day out.

In this study the tools used were, section 1 of demographic data, section 2 of structured knowledge questionnaires, knowledge questionnaires consist of 25 questionnaires with the maximum score of 60, to assess the knowledge of health care professional.

1. To assess the knowledge regarding risk of health problem in shift duties among health care professional: In this study out of 60 samples, 26 (43.33%) had very good knowledge followed by 30 (50%) good knowledge and 4 (6.66%) with average knowledge respectively related to risk of health problems in shift duties among health care professionals.

2. To find out the association between the health problem in shift duties among health care professionals with their selected demographic variables: There is no significant association between the knowledge of health care professionals regarding risk of health problems in shift duties with their selected socio-demographic variables such as age (in years), gender, marital status, family type, qualification, duration of work, years of experience, shift schedule, work department except nursing position which was associated with the knowledge of staff nurses. The calculated values are more than the tabulated values at $P>0.05$ level of significance. Hence, the alternate hypothesis H_1 failed to accept and null hypothesis H_{01} is accepted.

Summary:

This study revealed the most of the health care professional having good knowledge regarding risk of health problems in shift duties among health care professionals.

SUMMARY, FINDINGS, IMPLICATIONS, LIMITIONS

RECOMMENDATION AND CONCLUSION.

"Punctuality is not about being on time, It's basically about respecting your own commitments.

MAJOR FINDINGS OF THE STUDY

The current study was conducted to assess the knowledge of health care professionals regarding risk of health problems in shift duties. Majority of the samples, 30 (50%) had good knowledge followed by 4 (6.66%) average knowledge and 26(43.33%) very good knowledge respectively related to risk of health problems in shift duties. The calculated knowledge mean score was 18.16 with standard deviation (SD) 4.042.

It shows that there is no significant association between the knowledge of health care professionals regarding risk of health problems in shift duties.

CONCLUSION:

The following conclusion were drawn on the basis of the findings of the study. The findings showed that health care professional in subharti hospital at Meerut (U.P), were having good knowledge regarding risk of health problems in shift duties among health professionals. The study showed that there was no significant association between knowledge scores and selected demographics variables like age, gender, marital status, family type, qualification, duration of work, year of experience, shift schedule, work department except nursing position.

Hence, it was concluded that health care professional had good knowledge regarding risk of health problems in shift duties. But providing the information to them will help to improve more insight and knowledge regarding risk of health problems in shift duties .

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