



## A study to assess the health problems faced by night duty staff nurses at AH & RC. B.G. Nagara

Mr. Hemanth C K<sup>1</sup>, Mrs. Arathi T V<sup>2</sup>, Mrs. Shilpa P M<sup>3</sup>, Mr. P G N Swamy<sup>4</sup>

<sup>1</sup>\*Department of Child health nursing, Adichunchanagiri College of nursing, Adichunchanagiri University, B G Nagara, India

<sup>2</sup> Department of Child health nursing, Adichunchanagiri College of nursing, Adichunchanagiri University, B G Nagara, India

<sup>3</sup> Department of Child health nursing, Adichunchanagiri College of nursing, Adichunchanagiri University, B G Nagara, India

<sup>4</sup>Department of Community health nursing, Adichunchanagiri College of nursing, Adichunchanagiri University, B G Nagara, India

**Abstract :** *Night shift work in nursing is really a risk factor for nurse's health and patient safety. But being a nurse, night shift is an essential factor. Such work schedule have been related to numerous health problems among which are sleep loss, fatigue, CVD, social problems and some psychological problems. One of the main problems faced by the night duty staff nurses is sleep loss which has lead to difficulty in concentration, headaches etc. Night work health problems are treated by regulation of shift work and enough rest and sleep. Aim of study to was to assess the common health problems faced by night duty staff nurses. Quantitative descriptive research design with survey approach using non probability sampling technique was used. 8% of sample had no adjustment problems, 54% of them had mild adjustment problems & 38% staff nurses had mild adjustment problems. Based on findings of the study it has been concluded that there are several disease which affect the night duty staff nurse. Insomnia, head ache, back ache, acidity, and stress over the body, depression, muscular strain are some of the diseases faced by night duty staff nurses.*

**Keywords :** *Health problems, night duty, Assess.*

### 1. INTRODUCTION:

Nursing is a lifesaving profession and nurse play a pivotal role in the health care industry If nurses who are the symbol of "service and humanity" are troubled by their own ill health or other stressful circumstance, then they will not be able to give their full attention to this demanding task .no hospital can function effectively if there is high incidence of ill health among Nurses.

About one third of the Nurses in our population showed symptoms indicatives of shift work disease with highest prevalence in schedule involving night shift. However out of the 768 who reported symptoms of shift work disorder, 146 were not working night shift .Hence some non-night work schedules also may in increased risk of shift work disorder.

Prevalence rate of symptoms of shift work disorder varied from depending on assessment method. The prevalence of symptoms indicative of shift work disorders was high. According to the adjusted analysis symptoms indicative of shift work disorders was associated with age.

### 2. LITERATURE REVIEW:

In 2020 the international agency of research cancer classified shift work that involves circadian disruption as probably carcinogenic to humans. Depression and anxiety disease are highly prevalent at shift work accompanied by sleeping, fatigue and cognitive disorder including memory and concentration impairment. Shift work can have an impact on sleep, wellbeing performance and organizational out comes.

Rotating shift work affects the amount of sleep, but not the rate of errors among workers on a three shift schedules found that professional mistakes such as drug administration errors, incorrect operation of medical equipment in hospital by nurses and needle stick injuries were associated with the complaints of excessive sleepiness. There is no



association between shift work and occupational accidents. But rather found an association between mental health and medical errors.

National institute of occupational safety and health working more than 40 hours per week, working extended shift and working both extended shift and over time can have adverse effect on worker health. Accident risk is also higher than day shift. Night work in nursing, it is really a risk factor for nurses health and patient safety. Such work schedule has been related to Nemours health problems among nurses such as sleep loss, depression, anxiety, irritable mood, working against a person's natural sleep cycle causes such sleep disorders as well as fatigue. The study focusing night shift and health risk and this study would give an opportunity for the nursing staff to express their difficulty in professional life especially during the staff work.

From the above literature, Researcher has realized that staff those who are executing night shift duty are in much needed of care in their health aspects. So the researcher has chosen this study to assess the knowledge regarding common health problems among night duty staff nurses

### 3. MATERIALS:

**Research approach:** Survey approach

**Research design:** Quantitative descriptive design

**Variables:**

**Dependent variables:** Health problems.

**Independent variables:** Staff nurses

**Setting of the study:** The study was conducted in Adichunchanagiri hospital and research center, B.G Nagara.

**Population :** The target populations in this study were all the night duty staff nurses in AH & RC.

**Sampling and sampling size:** The sampling size for the present study was 60 night duty staff at AH & RC who full fill the sampling criteria.

**Criteria for selection of samples**

**Inclusion criteria**

The person who are working as a nurse

The staff nurse who all are working in night duty

The nurses who were available at the time of data collection

The staff nurses who were willing to participate in this study

**Sampling technique:** Non probability sampling technique

### 4. METHOD:

**Description of the tool**

Checklist consists of 3 sections covering the following areas.

**Section A:** It consists of eight items seeking information on demographic data which includes age of the staff nurses, family of the staff nurses, educational qualification of the parents, dietary pattern of the staff nurses, marital status of the staff nurses, previous history of medical illness, previous history of surgical illness and present placement.

**Section B:** Checklist was used to assess the health problems faced by the night duty staff nurses.

**Section C:** Magnitude of health problems faced by the night duty staff nurses on differential aspects

**Data collection procedure:**

A prior permission was obtained from the medical officer at AH & RC.

The data collection was carried out in the month of august 2021 in AH & RC. The night duty staffs were selected based on inclusion criteria.

On the first day purpose of the study was explained to the sample and informed consent was taken before starting the study.

Using checklist assessed the health problems among night duty staff nurses.

### 5. DISCUSSION:

The frequency and percentage distribution of health problems among night duty staff nurses by age, type of the family, educational qualification of the parents and diet patterns of the staff nurses. With regard the age of the staff



nurses 13 (21.6%) were between the age group of 20-25, 19 (31.6%) between 25-30, 22 (36.6%) between the age of 30-35 and 6 (10%) belongs to the age between 35-40 years. Regarding the type of family 36 (60%) from nuclear family, 23 (38%) from joint family, 1 (1.6%) from extended family. With regard the educational qualification of the parents 13 (21.6%) are uneducated or illiterate, 31 (51.6%) parents belongs to secondary level and 16 (26.6%) belongs to degree level. With regarding the diet 3 (5%) staff nurses are vegetarian, 6 (10%) are non-vegetarian and 51 (85%) following the mixed diet.

The frequency and percentage distribution of health problems among night duty staff nurses by the marital status, previous history of medical illness, previous history of surgical illness and present placement. With regard the marital status 49 (81%) of staff nurses were married and 11 (18.3%) were unmarried. With regard the previous history of medical illness 9 (15%) having previous medical history, 51 (85%) not having any previous medical history. With regarding the previous surgical history 5 (83%) having previous surgical illness, 55 (91%) not having previous surgical history. Regarding the present placement 12 (20%) were in ICU, 18 (31.6%) were in medical unit, 9 (15%) were in surgical unit, 6 (10%) were in OBG department, 2 (3.3%) were in pediatric unit and 13 (21.6%) were working in other unit

## 6. ANALYSIS:

### Organization and presentation of data

**Section 1:** Assess the health problems faced by night duty staff nurses.

Frequency and Percentage based on different aspects of Health Problems.							
Sl. No	Aspects of Problems	Never		Some times		Always	
		f	%	f	%	f	%
<b>1.</b>	<b>Social problems</b>						
a)	Negative attitude towards nursing	24	40%	33	55%	3	5%
b)	Interpersonal conflict	19	31.6%	38	63.3%	3	5%
c)	Ever felt shouldn't take this profession	29	48.3%	20	33.3%	11	18.3%
d)	Difficulty for the communication	38	63.3%	22	36.6%	---	---
e)	Occupational accidents and incidence damage to equipment	33	55%	25	41.6%	2	3.3%
<b>2.</b>	<b>Health related problems</b>						
a)	Head ache	11	18.3%	31	51.6%	18	30%
b)	Muscular strain	12	20%	33	55%	15	25%
c)	Loos of sleep	11	18.3%	29	48.3%	20	33.3%
d)	Back ache	12	20%	29	48.3%	19	31.6
e)	Feet ailment	15	25%	31	51.6%	14	23.3%
f)	Other	---	---	4	6.6%	---	---
g)	Heart problems	40	66.6%	20	33.3%	---	---



h)	Acidity	11	18.3%	35	58.3%	14	23.3%
i)	Acidity tablets	19	31.6%	41	68.3%	---	---
j)	Difficulty for spinal movements	32	53.3%	24	40%	4	6.6%
<b>3.</b>	<b>Psychological problems</b>						
a)	Development of stress on the body	4	6.6%	47	78.3%	9	15%
b)	Shift work affected your mood	20	33.3%	29	48.3%	11	18.3%
c)	Angry during night shift	20	33.3%	31	51.6%	9	15%
d)	Ever get depression	27	45%	24	40%	9	15%
e)	Alter level of concentration	23	38.3%	30	50%	7	11.6%
<b>4.</b>	<b>Sleep related problems</b>						
a)	Insomnia	15	25%	23	38.3%	22	36.6%
b)	Ever use sedatives	54	90%	5	8.3%	1	1.6%
c)	Ever experienced migraine	27	45%	26	43.3%	7	11.6%
d)	Weakness during night duty	10	16.6%	39	65%	11	18.3%
e)	Experienced fatigue	13	21.6%	36	60%	11	18.3%

**Section 2:** Magnitude of health problems faced by night duty staff nurses:

Sl. No	Aspects of problem	Never		Sometimes		Always	
		Mean	SD	Mean	SD	Mean	SD
1.	Social problems	2.38	7.8	2.3	7.6	0.31	1.49
2.	Health related problems	2.71	7.1	4.61	10.2	1.73	1.9
3.	Psychological problems	1.56	5.49	2.68	8.8	0.75	2.42
4.	Sleep related problem	1.98	7.8	2.15	7.7	0.8	3.42

**7. FINDINGS:**

**Social problems** Illustrate the distribution of check list among 60 staff nurse. Regarding the negative attitude towards nursing 24 (40%) of staff nurse never experienced, 33 (55%) sometimes experienced and 3 (5%) always experienced. Regarding interpersonal conflict 19 (31.6%) never experienced, but 38 (63.3%) of staff nurses sometimes experienced interpersonal conflict in their family and 3 (5%) always experienced. Regarding the profession 29 (48.3%) never felt they shouldn't take this profession, but 20 (33.3%) of staff nurses sometimes felt and 11 (18.3%) always felt.

Regarding the communication with patients 38 (63.3%) staff nurses not having any difficulties to communicate patients during night duty, but 22 (36.6%) of staff nurses sometimes they experienced difficulties during communication.



Regarding the occupational accidents and incidence damage to equipment's 33 (55%) of staff nurse never have any problems, 25 (41.6%) are sometimes experienced, 2 (1.2%) always experienced occupational accidents and incidence damage to equipment's

#### **Health related problems**

Regarding the health problems of night duty staff nurses 11 (18.3%) never experienced frequent head ache, but 31(51.6%) sometimes experienced with head ache and 17 (28.3%) always experienced with frequents headaches. 12 (20%) never experienced muscular strain 33 (55%) of staff nurses sometimes experienced with muscular strain and 14 (23.3%) always experienced muscular strain. In case of los of sleep 11 (18.3%) never experienced 29 (48.3%) sometimes experienced and 15 (25%) always experienced with loos of sleep. 12 (20%) never experienced with back ache 29 (48.3%) sometimes experienced with back ache and 14 (23.3%) always experienced. 20 (33.3%) not having any feet ailment problems 31 (51.6%) sometimes having and 14 (23.3%) are always facing feet ailment problems. 4 (6.6%) are sometimes they are facing other health problems.

40 (66.6%) of staff nurses are never experience with heart problems but 21 (35%) are sometimes having heart problems. 11 (18.3%) are never having acidity 35 (58.3%) sometimes having acidity and 14 (23.3%) always having acidity during their night duty time. 19 (31.6%) of staff nurses never taking acidity tablets but 35 (58.3%) sometimes using acidity tablets. 32 (53.3%) of staff nurses never having any difficulty for their spinal movements 24 (40%) sometimes having difficult 4 (6.6%) of nurses are always experiencing difficulty for the spinal movements.

#### **Psychological problems**

Regarding the psychological problems of night duty staff nurses 4 (6.6%) never not experienced development of stress over their body 47 (78.3%) are sometimes experienced stress over their body during night duty time 9 (15%) always experienced stress over their body.20 (33.3%)of staff nurses that shift work never affect their mood 29 (48.3%) sometimes shift work affect their mood,11 (18.3%) always experienced that shift work affect their mood. 20 (33.3%) of staff nurses never get any angry during their night duty time,31 (51.6%) sometimes having angry during their night duty time and 9 (15%)always having angry during their night duty time.

27 (45%) of nurses never get depression after doing night duty 24 (40%) of nurses experienced depression after doing night duty 8 (13.3%) always having depression after night duty.23 (38.3%) of staff nurses never having alter level of concentration during their night duty time 30 (50%) of staff nurses sometimes only alter their level of concentration and 7 (11.6%) always change their level of concentration.

#### **Sleep related problems**

Regarding sleep related problems which includes 15 (25%) of staff nurses never experienced insomnia 23 (38.3%) sometimes experienced insomnia 22 (36.6%) always experienced insomnia after their night duty. 54 (90%) of staff nurses never using sedatives, 5 (8.3%) sometimes using and 1 (1.6%) are always using sedatives. 27 (45%) of staff nurses never experienced migraine 26 (43.3%).7 (11.6%) sometimes experienced migraine after their night duty 7 (11.6%) always experienced migraine after night duty.

10 (16.6%) of staff nurses never get any weakness after their night duty, 39 (65%) are having weakness after their night duty, 11 (18.3%) always having weakness.13 (21.6%) never experienced fatigue, 36 (60%) of nurses sometimes experienced fatigue 11 (18.3%) are always having fatigue after doing their night duty

### **8. RESULT:**

Present study was conducted to assess the health problems faced by the night duty staff nurses at selected hospital. The findings of the study revealed that regarding the social problems 33 (55%) of people sometimes felt negative attitude towards their nursing profession 11 (18.3%) always felt shouldn't take this profession. Regarding the health problems faced by the night duty staff nurses 18 (30%) of staff nurse always having head ache, 20 (33.3%) always having sleep loss, 19 (31.6%) of staff nurse always suffer from back ache, 14 (23.3%) are having acidity in night duty and 41 (68.3%) sometimes using acidity tablets and 24 (40%) having difficulty for the spinal movement during their night duty time. Regarding the psychological problems faced by the night duty staff nurse 47 (78.3%) sometimes felt development of stress over their body during the night duty time, 11 (18.3%) of staff nurse shift work always affect their mood and 9 (15%) may fell angry .Regarding the sleep related problem 22 (36.6%) always having insomnia and 11 (18.3%) always experienced fatigue during their night duty. Insomnia, headache, back ache, acidity, stress over the body, occupational accidents these are the common health problem faced by the night duty staff nurse.



## 9. RECOMMENDATIONS:

The investigator has drawn the following implications from the studies which are of vital concern to the field of nursing practice, nursing education, nursing administration and nursing research.

### **Nursing practice:**

Nurses are the key persons of a health team, who play a major role in the health promotion and maintenance; it is a practicing that the researchers generally integrate findings in to practice.

- Medical officers can conduct a session on health problems among staff nurses, which will help in improvement of knowledge for the staff nurses.
- Nursing superintendent can create awareness among staff nurses through the health education.
- For the management of health problems during night duty, for this nurses need to adequate knowledge regarding common health problems of night duty nursing professionals working in the hospital should educate regarding common health problems of night duty. So that nurses can manage common health problems of night duty.

### **Nursing education**

As a nurse educator, there are abundant opportunities for nursing professionals to educate common health problems faced by the night duty staff nurses.

The concept of prevention is better than cure need to be concentrated among staff nurses. The staff nurses itself needed special and care full concentration regarding the health.

Nursing superintendent should come forward and provide adequate facilities and create some awareness regarding the health. Peripheral health workers also can educate for nurses regarding common health problems of night duty.

### **Nursing administration:**

The nursing administrator can mobilize the available resource personnel towards the health education of night duty nurses regarding common health problems of night shift.

The nurse administrators should plan and organize continuing education program for health workers to motivate them in conducting teaching program. The nurse administrator should explore their potentials and encourage innovative ideas in the preparation of appropriate teaching material.

### **Nursing research:**

Nursing research can focused on selected aspects of health problems faced by the staff nurses. Tools are available to assess the health problems faced by the staff nurses who could help to improve the continuing care towards their health and more successful management.

Nurses should come forward to carry out studies on common health problems of night duty staff nurses and publish them for the benefit of public and nursing. This study will serve as a valuable reference material for future investigation.

## 10. CONCLUSION :

The present study was conducted to assess the health problems faced by the night duty staff nurses at selected hospital. The findings of the study revealed that regarding the social problems 33 (55%) of people sometimes felt negative attitude towards their nursing profession 11 (18.3%) always felt shouldn't take this profession. Regarding the health problems faced by the night duty staff nurses 18 (30%) of staff nurse always having head ache, 20 (33.3%) always having sleep loss, 19 (31.6%) of staff nurse always suffer from back ache, 14 (23.3%) are having acidity in night duty and 41 (68.3%) sometimes using acidity tablets and 24 (40%) having difficulty for the spinal movement during their night duty time. Regarding the psychological problems faced by the night duty staff nurse 47 (78.3%) sometimes felt development of stress over their body during the night duty time, 11 (18.3%) of staff nurse shift work always affect their mood and 9 (15%) may fell angry .Regarding the sleep related problem 22 (36.6%) always having insomnia and 11 (18.3%) always experienced fatigue during their night duty. Insomnia, head ache, back ache, acidity, stress over the body, occupational accidents these are the common health problem faced by the night duty staff nurse.

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