



## “A CROSS SECTIONAL STUDY TO ASSESS THE KNOWLEDGE REGARDING SLEEP AND ITS FACTORS ASSOCIATED WITH DEPRIVED SLEEP AMONG WOMEN WORKING IN INDUSTRIAL AREA OF SELAQUIE DEHRADUN”.

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*Abstract Sleep Knowledge is considered to be an effective method to treat sleep disturbances, especially among Industrial working women. A cross-sectional study was conducted on 70 Industrial working women to assess the knowledge regarding sleep and its factors associated with deprived sleep among women working in industrial area of Selaquie Dehradun. The sample were selected through convenience sampling technique. Data was collected through self-structured socio demographic and knowledge questionnaire tool. The study found that 16% women having good knowledge regarding sleep hygiene, 61% women having average knowledge and 23% women having poor knowledge of sleep hygiene.*

### I. INTRODUCTION

sleep is a natural recurring state of mind and body, characterized by altered consciousness relatively inhibited sensory activity, reduce muscle activity an inhibition of nearly all voluntary muscle. studies show that women tends to sleep approximately 11 minutes more than men, despite having less time for sleep due differences in paid and unpaid work, increased caregiving responsibilities, and family and social roles. Insomnia is a common sleep disorder that can make it hard to fall asleep, or cause to wake up too early and not be able to get back to sleep. as it is known that insomnia is the most common sleep disorder but 40% women are more likely to suffer from it than man.

according to the researchers at duke university medical center led by Edward , an associate professor in the department of psychiatry and behavioral sciences , found that women who reported unhealthy sleep are at an elevated risk for heart disease , type 2 diabetes, and depression a 2007 survey done and found that two-thirds of the women polled say that they have sleep problems . those people who sleep less than six hours per night are 20% to 30% more likely to develop hypertension than people who get seven and eight hours of sleep per night. between 9% and 21% women have obstructive sleep apnea. the sleep disorder restless leg syndrome is more common among women than among men. about 40% of women and 57% of men in American snore.

a study in south Chennai found that both working women and housewives face a similar amount of stress women experiences physical and psychological stress due to multitasking in their daily lives, which including standing in a static posture for long periods of time , long working hours that stretch throughout the day , multiple household chores etc. has a negative impact on sleep and lead to sleeping difficulties and sleep issues at night. women have a lifetime risk of insomnia that is as much as 40% higher than that of men. (2)about 46% of women report having sleeping problems almost every night [national sleep foundation 2007]. (7) in the national sleep foundation 2007 sleep in America poll, around 80% of women said they just accept it and power through when they are sleepy during the day.

## REVIEW OF LITERATURE

**Yuan-yung Lai (2018)**.... has conducted the study on prevalence and associated factors of sleep quality, among adults in Jimma Town, southwest Ethiopia. Method cross sectional study was conducted on 422 randomly selected adults. The overall prevalence sleep quality (SPQI score >5) was 65.4% with higher proportion among males (79 (63.0%) and age group 40-49 years (174 (28.6%). A multivariable logistic regression analysis indicated that age category of 40-49 years (AOR=2 (95% CI 1.1, 2.6).) CP =0.03, monthly income <1000 ETB (AOR=2.2 (95% CI [1.4,3.5] CP=0.01). (17)

**Osamu Itani (2018) et al.**...has conducted the study on Sleep-related factors associated with industrial accidents among factory workers and sleep hygiene education intervention. Method cross sectional study was conducted on 714 factory workers were included in the study. A baseline survey was conducted using a self-administered questionnaire in December 2013. The questionnaire included items for the evaluation of sleep status (containing PSQI and ESS), sleep-related lifestyle habits, and experience of industrial accidents. Among the participants aged 40 years or older, the percentage of those who did not drink an alcoholic beverage before going to sleep increased significantly in the intervention group.(18)

**Risa kagan (2018)**.... has conducted the study on impact of sleep disturbances on employment and work productivity among midlife women in the US SWAN database: a brief report. Method cross sectional study was collected data from the US study of women's Health across the nation (SWAN) database of women age 42-52 years at enrollment. Risk of unemployment was 31% higher for women with versus without new-onset sleep disturbances (P=0.0474). Using the more conservative reduction (0.44h), sleep problems were associated with an annual loss of \$517 to \$524 per woman and \$2.2 billion/yr in lost productivity among women age 42-64 nationwide.(19)

### PROBLEM STATEMENT: -“A CROSS SECTIONAL STUDY TO ASSESS THE KNOWLEDGE REGARDING SLEEP AND ITS FACTORS ASSOCIATED WITH DEPRIVED SLEEP AMONG WOMEN WORKING IN INDUSTRIAL AREA OF SELAQUIE”.

#### OBJECTIVES

- To assess the level of knowledge regarding sleep awareness and factor associated with poor sleep.
- To find out the significant association of knowledge with these selected socio demographic data.

#### HYPOTHESIS

H1 There will be significant association between knowledge regarding sleep and its factor association with deprived sleep with their selected demographical variables.

**RESEARCH METHODOLOGY:**-The research group comprises of total 70 samples of working women in industrial area of Dehradun Uttarakhand. The study was conducted at industrial area of Selaqui Dehradun. The samples were selected through convenience sampling (Non probability sampling) technique. After taking permission from the authority. The data was collected through self structured knowledge questionnaire on sleep knowledge and associated factor with deprived sleep. The research approach opted for the study was quantitative approach with cross sectional design.

## FREQUENCY AND PERCENTAGE DISTRIBUTION OF WOMEN 1.1 ACCORDING TO THEIR SELECTED DEMOGRAPHIC VARIABLES.

S.No.	Demographic Variable	Frequency	%	
1.	Age	21-25 years	31	43%
		26-30 years	23	33%
		31-35 years	09	13%
		36-40 years	07	11%
2.	Education	High school	26	37%
		Intermediate	17	24%
		Graduate	11	15%
		Post graduate	09	13%
		Illiterate	07	11%
3.	Religion	Hindu	37	53%
		Muslim	31	45%
		Sikh	00	00%
		Christian	02	02%
4.	Marrital status	Married	43	61%
		Unmarried	26	37%
		Divorce	00	00%
		Widow	01	01%
5.	Substance Abuse	Alcohol	00	00%
		Smoking	00	00%
		Coffiene	06	09%
		Other	55	78%
		No use	09	13%
6.	Duty Hour	5hr or < 5hr	07	10%
		6hr	16	23%
		7hr	21	30%
		8hr and > 8 hr	26	37%
7.	Use of leisure time	Book reading	09	13%
		Cooking	32	46%
		Meditation	05	07%
		Other	24	34%
8.	Sleeping Hours	1-2 hr	00	00%
		5-7 hr	08	11%
		5-7 hr	44	63%
		>07 hr	18	26%
9.	Source of Information	Mass Media	09	13%
		Radio	03	04%
		Newspaper	11	16%
		Internet	33	47%
		Other	14	20%
10.	Sleep Medicine	Yes	00	00%
		No	70	100%

The data presented in table 1.1 show the demographic profile of the respondents. It shows that 43% working women were within the age group of 21-25 years, and other 33% were within the age group of 26-30 years, and 13% were within the age group of 31-35 years, while remaining 11% were within the age group of 36-40 years. The study shows that 37% of women are high school and 24% of women are intermediate and 15% of women are graduate and 13% of women are postgraduate and 11% of women are illiterate. Religion of women: 53% of women are Hindu and 45% of women are Muslim and 2% of women are Christian. Marital status of women: 61% of women are married and 37% of women are unmarried and 1% of women are widows. Substance abuse uses of women: 9% of women use alcohol, 9% of women use smoking, 78% of women use caffeine and 13% of women do not use. Duty hour of women: 10% of women are working 5hr < 5hr and 23% of women are working 6hr and 30% of women are working 7hr and 37% of women are working 8hr > 8hr. Use of leisure time of women: 13% of women use book reading and 46% of women use cooking and 7% of women use meditation and 34% of women use others. Sleeping hours of women: 11% of women are 3 to 4hr sleep and 63% of women are 5 to 7hr sleep and 26% of women are >7hr. Source of information of women: 13% of women use mass media and 4% of women use radio and 16% of women use newspaper and 47% of women use internet and 20% of women use other. 100% of women do not use sleep medicine.

**Finding as per the objective and hypothesis of study.**

**Objective 1:** To assess prevalence of internet among working Women of industrial area in selaqui dehradun.

Level of knowledge regarding sleep	Score range	Knowledge:	
		Frequency (n=70)	Percentage (%)
Good	25-12	11	16%
Average	9-17	43	61%
Poor	0-8	16	23%

There is association between knowledge regarding sleep and selected demographic variables.

**Objective 2:** to find out the association between knowledge regarding sleep and selected demographic variables.

**Table: 4.2.1 Association among the knowledge regarding sleep with selected demographic variables.**

S.No.	Demographic Variable		Chi Square		Yates $\chi^2$ formula		Degree of Freedom	Level of Significance
			Calculated T-value	Tabulated T-Value	Calculated T-Value	Tabulated T-Value		
1.	Age	20-25	7.92	2.45			6	Significant
		26-30						
		31-35						
		36-40						
2.	Education	High school			7.22	2.78	4	Not Significant
		Intermediate						
		Graduate						
		Post Graduate						
3.	Religion	Hindu			3.62	3.18	3	Not Significant
		Muslim						
		Sikh						
		Christian						
4.	Marrital status	Married			2.18	3.18	3	Not Significant
		UnMarried						
		Divorced						
		Widow						
5.	Substance Abuse	No use			6.18	3.18	3	Not Significant
		Alchol						
		Smoking						
		Caffiene						
6.	Duty Hour	5hrs or <5hrs	10.11	2.45			6	Significant
		6hrs						
		7hrs						
		8hrs>						
7.	Use of leisure time	Book reading	5.73	2.45			6	Significant
		cooking						
		Meditation						
		Others						
8.	Sleeping Hours	1-2hrs			1.14	3.18	3	Not Significant
		3-4hrs						
		5-7hrs						
		>7hrs						
9.	Source of information	Mass media			7.78	2.78	4	Not Significant
		Radio						
		Newspaper						
		Internet						
10.	Sleep medicine	Yes			0.01	12.71	1	Not Significant
		No						

**CONCLUSION**

The conclusion was drawn on the basis of findings of the study includes.

\*43% women were within the age group of 20-25 years 33% women were within the age group of 26-30 years 13% women were within the age group of 31-35 years 11% women were within the age of 36-40years.

\*37% women were high school 24% women were intermediate 15% women were graduate 13% post graduated and 11% women were illiterate .

\*10% women working were 5hours ,23% women working hours were 6 hours , 30% women working hours 7 hours and 37% women working hours 34%.

\*10% women getting 3-4 hours sleep 63% women getting 5-7 hours sleep and 26% women getting more than 7 hours sleep.

\* 4% women taking information from radio, 13% women taking information from mass media ,16% women taking information from newspaper , 47% taking information from internet and 20% women taking information from other sources.

\* 100% working women were no use of sleep medicine.

\* frequency and percentage distribution of knowledge regarding sleep and associated factors with deprived sleep show that 16% women have good knowledge ,61% women have average knowledge and 23% women have poor knowledge .

\*The association of age duty hours and use of leisure time with knowledge regarding sleep and factors associated with deprived sleep show that the chi square value was 7.92, 10.11 , 5.73 significant at  $p < 0.05$ .

\* The association of education , religion , marital status ,substance abuse , knowledge regarding sleep and factors associated with deprived sleep show that rates  $\chi^2$  value was 7.22, 3.62, 2.18, 2.18, 6.18 not significant  $p < 0.05$ .

\*The association of sleep hours , source of information and sleep medicine with knowledge regarding sleep and factors associated with deprived sleep show the rates  $\chi^2$  value was 1.14, 7.78, 0.01 np significant at  $p < 0.05$ .

**RECOMMENDATIONS FOR THE FUTURE STUDY**

Based on the results of the study following recommendation are made.

The study can be replicated on large sample for generation of finding

The study finding had thrown new light on implication of the future. It has implications in the Nursing Education, Nursing Administration, Nursing Practice and Nursing Research.

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