

A STUDY RELATED TO QUALITY OF SLEEP AMONG SHIFT WORKERS

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ABSTRACT

The purpose of this study was to analyze Quality of Sleep among day and night shift workers. To serve the purpose of the present study 1000 adults (i.e. 18 to 35 years) employed in multiple shifts at private sector in Chandigarh (UT) were selected by random sampling technique. Further, the total sample was equally comprised of 500 day shift workers (i.e. 250 male and 250 female) and 500 night shift workers (i.e. 250 male and 250 female). Keeping in view the suitability and validity of Adults, The Pittsburgh Sleep Quality Index (Buysse, Reynolds, Monk, Berman, Kupfer, 1989) was used to measure the quality of sleep among the multiple shift workers. It shows that night shift workers having significantly higher mean score in both cases i.e. male and female. Analysis of variance ANOVA was used to know the quality of sleep of IT workers those are working in day and night shifts. Mean, SD and t-values were also calculated to find out the direction of differences. The result of the present study found significant differences.

KEY WORDS: Quality of Sleep, Shift Workers (Night shift workers and Day Shift workers)

INTRODUCTION

Over a period of time, it has been noticed that the health of an employee is proportionate to his productivity. Those employed under shifts have often had the need to address various health issues and adverse behavioral changes related to food habits and sleep. Success can be achieved by maintaining a balance between the above aspects, without raising the adverse health effects of an employee. Hence, it has been recognized that numerous factors put impact on healthy work force including emotional, mental, social, physical and intellectual health.

Kerkhof (2018) targeted to present and analyze the data of sleep disorders with the help of 971 workers who had permanent jobs and 250 workers who worked in shifts by nationally representative sample. The analyses also involved the supplementary data including family/social variables, daytime functioning, quality, timing, and duration of sleep. The conclusions displayed that workers who had shifts showed critical problems related to the noted more nap timings and frequency, expressed that they had poor sleep in comparison to day workers and had uncertain sleep timings. Comparatively, shift work in contrast with day work displayed an association with a majorly more frequency of clinical, International Classification of Sleep Disorders' determined symptoms of almost all the major disorders relate to sleeping (along with shift work disorder). The frequency of disturbance of general sleep was accounted as 39.0% (95%CI 33.2 – 45.2) for the shift workers. It was observed that it was unquestionably greater (24.6%, 95%CI 22.0 – 27.4) for day workers. In

addition to that, there was more level of comorbidity associated with sleep disorders in the shift workers. The frequency of systematically disordered sleep reduced across the years of life and notably more for partnered versus single for the shift workers exclusively. The respective study sums up the observation to the connecting factors which further regulate coping of shift work and might be a major part of the occupational health interventions which target at lessening the problems related to sleeping which may further improve the strength and endurance of the shift workers.

STATEMENT OF THE PROBLEM

This study was focused on the problem with quality of sleep among shift workers engaged in Day and Night shifts in IT companies. The title is entitled as“ A STUDY RELATED TO QUALITY OF SLEEP AMONG SHIFT WORKERS”

OBJECTIVES OF THE STUDIES

The study had the following objectives:

1. To find out the significance of difference between day shift workers and night shift workers on the quality of sleep.
2. To make suggestions on the basis of the result for the shift workers with regard to quality of sleep.

HYPOTHESIS OF THE STUDY

The following hypothesis was tested within the context of investigation.

There would be a significant difference between day shift workers and night shift workers on the variable quality of sleep.

DELIMITATIONS OF THE STUDY

1. The study was delimited by the researcher to the selected variable quality of sleep.
2. The study was delimited to 1000 adults between the age group of 18 to 35 years working in multiple shifts. 500male and 500 female from each shift (day and night) were chosen.
3. The study was restricted to the workers of Chandigarh (UT)
4. The study was delimited to the subjects employed in private sectors of the UT.

LIMITATIONS OF THE STUDY

1. A key limitation was a variation of occupation and assessment of personal reasons.
2. Factors such as physical environment, genetic makeup, metabolic factors, sleep habits etc. were beyond the control of researcher, which can be the limitation for the study.

3. Since the subjects belong to a cross section of the society representing various socio - economic, religious and cultural background, there factor may influence the data.

METHOD AND PROCEDURE

To serve the purpose of the present study 1000 subjects were selected by random sampling technique. 500 male and 500 female from each shift (day and night) were chosen. The subjects belonged to the IT companies of Chandigarh (UT). All subjects were in between the age of 18-35 years. The Pittsburgh Sleep Quality Index (Buysse, Reynolds, Monk, Berman, Kupfer, 1989) has been used to measure the quality of sleep among shift workers. Higher the mean score on shift shows poor quality of sleep.

RESULT AND DISCUSSION

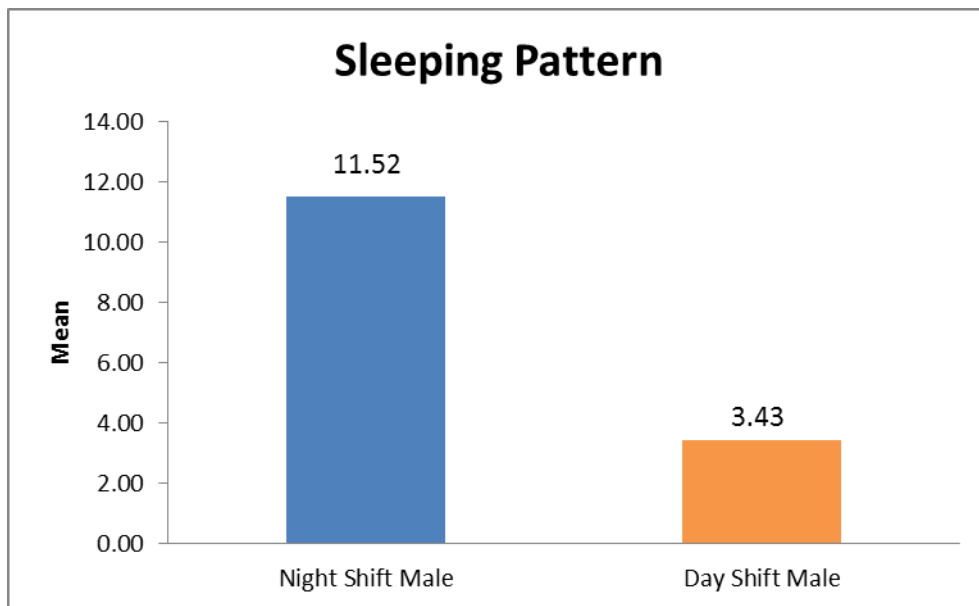
In the present research work the main hypothesis was, there would be significant difference between Night shift workers and Day shift workers in terms of quality of sleep. It is evident from the Table-1 that the night shift male workers have the relatively higher mean (11.52) as compared to day shift male workers (3.43). The higher mean score on the inventory shows poor quality of sleep among night shift male workers. Table-2 shows that the night shift female workers have the relatively higher mean (13.40) as compared to day shift female workers (8.18). The higher mean score on the inventory shows poor quality of sleep among night shift female workers.

TABLE - 1

COMPARISON OF DAY SHIFT MALE WORKERS AND NIGHT SHIFT MALE WORKERS WITH REGARD TO VARIABLE QUALITY OF SLEEP

Variable	Night Shift Male			Day Shift Male			t-value	p-value
	N	Mean	SD	N	Mean	SD		
Quality of Sleep	250	11.52	2.23	250	3.43	2.22	40.71	.0001**

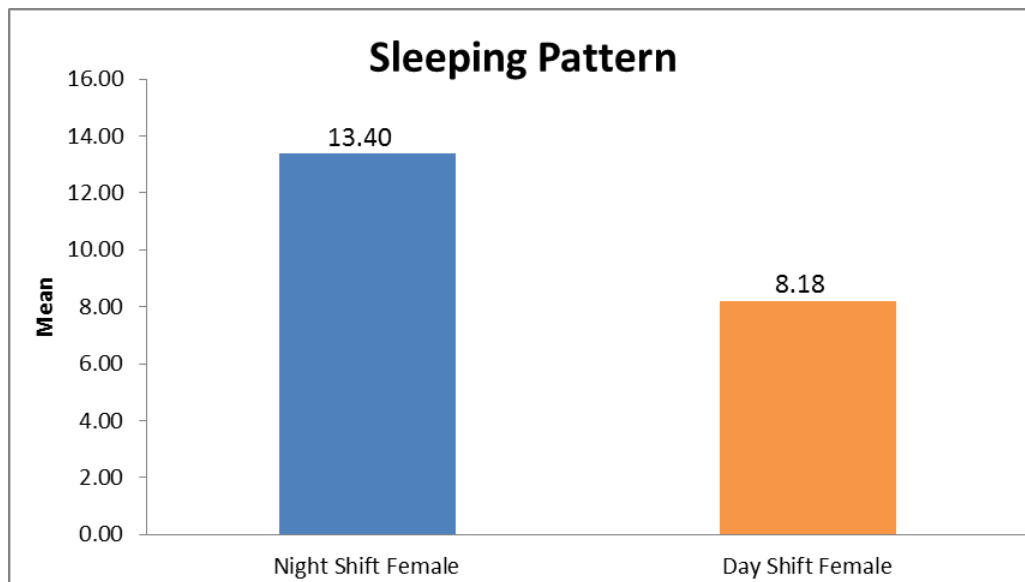
The t-ratio in the table 1 tests whether there exists a significant difference of means between day shift male workers and night shift male workers with regard to variable quality of sleep. As seen in the table, mean score of quality of sleep of night shift male workers (M=11.52, SD=2.23) are statistically higher than mean score of quality of sleep of day shift male workers (M=3.43, SD=2.22), $t(498)=40.71$, $p=0.0001$.

**TABLE - 2**

**COMPARISON OF DAY SHIFT FEMALE WORKERS AND NIGHT SHIFT FEMALE WORKERS
WITH REGARD TO VARIABLE QUALITY OF SLEEP**

Variable	Night Shift Female			Day Shift Female			t-value	p-value
	N	Mean	SD	N	Mean	SD		
Quality of Sleep	250	13.40	2.30	250	8.18	1.78	28.39	.0001**

The t-ratio in the table 2 tests whether there existed a significant difference of means between day shift female workers and night shift female workers with regard to variable quality of sleep. As seen in the table, mean score of quality of sleep of night shift female workers (M=13.40, SD=2.30) are statistically higher than mean score of quality of sleep of day shift female workers (M=8.18, SD=1.78), $t(498)=28.39$, $p=0.0001$.



CONCLUSION

Hence, it can be concluded from the results of the present study that shifts has solid impact on the quality of sleep of the masses. Night shift workers have been observed to have poor connection with the sleep, may have ill effects on their health in the long run. It is recommended to see that night shift workers take care of proper sleep to live healthy.

IMPLICATION OF THE STUDY

The significance of the study is to understand the nature of work hours and its effects on allspheres of life. It is an attempt to provide information regarding the outcomes of the study and its implication to various sectors of employment. This study will be help to understand therelationship among shift workers and quality of sleep. This will help to create positive attitude towards sleeping habits. These aspects should be known to everyone whether an employer is looking out for the safety of the employees or productivity or an employee seeking maximum benefit out of their job.

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