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## Research Article

### SLEEPING QUALITY AMONG THE PERSONS SUFFERING FROM DIFFERENT PSYCHOSOMATIC DISORDER

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#### ABSTRACT

The purpose of the study was to find out the "Sleeping quality among the persons suffering from different psychosomatic disorders". To achieve the purpose of the present study the researcher purposively selected a total number of 60 subjects of both sexes (15 patients of each selected disease i.e. diabetes, asthma, arthritis and cancer) suffering from different selected psychosomatic disorders from Bharati Hospitals, Siddhi Hospital and Integrated Cancer Treatment and Research Centre Ayurved, Wagholi in Pune, Maharashtra. The age of the subjects was ranged from 40-60 years. To measure the sleeping quality among the Patients suffering from different psychosomatic disorders, Pittsburgh Sleeping Quality Index constructed by Dr. Daniel J. Buysese and cowker was used. The questionnaire was comprises of 10 questions related to the quality of sleep. The data collected on the subjects was analyzed by applying Analysis of Variance (ANOVA) and the level of significance was set at 0.05 level. The results of the study showed that there was no significant difference observed among the patients suffering from diabetes, asthma, arthritis and cancer in relation to sleep quality.

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## INTRODUCTION

Disease is an abnormal physiological function of the body due to the external and internal environmental factors. The diseases which are due to damage or destruction of the brain, spinal cord or the nerves are termed as Organic. Most of these are born with mental deficiency from the very birth while some acquire it as a result of brain injury or a defect which impairs the brain. These people are classified as mentally defective or mentally restarted. Any injury to the brain or the spinal cord due to any cause may lead to disability or to death. Mental injury may result in shock, convulsion, motor disabilities, respiratory difficulties, and bleeding and infection. Many deaths occur due to cerebral haemorrhage. This is due to bursting of the blood vessels in the brain or on its surface. The main cause is high blood pressure and hardening of the vessel walls. The immediate cause is mental or physical exertion (Ajmer Singh *et al.*, 2003).

Mental illness is highly disturbing that, as we advance, there is rise in mental illness. In more advanced countries, the number of patients suffering from this illness is nearly as large as the other patients put together. The reason for many of the physical

ailments is emotional disturbance. It is rather difficult to draw a line between the two. In many cases, ulcers, high blood pressure, asthma, headache, may be due to emotional disturbance. It includes all cases of behaviour disturbance though neurosis and psychosis are its acute forms. The initial forms of emotional disturbances are discouragement, depression, suspicion, fear, and other form of behaviour which is defeating in nature. There can be observed by the family members and friends and he can be corrected or treated. Even if the illness because serious, the patient can be treated (AgamPrakash *et al.*, 1996).

Cancer, a major killer the most dreaded among diseases, is fast engulfing the globe posing the real challenge to the ingenuity of human beings. If stress and stress induced psychosomatic ailments and psychiatric problems are essentially slow killer barring heart attacks, cancer often can be the fastest killer. Expensive and extensive cancer research has been pointing to the same culprit namely stress as one of the major etiological factors in its causation. Like stress, cancer is also multi-dimensional, complex process posing a major challenge to mankind to move further to understand the secrets of the subtler dimensions of the universe around. Hence, cancer is in a

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way, abloom to understanding the subtler dimensions of the universe.

Sleep is defined on the basis of behavioural and physiological criteria dividing it into two states: non rapid eye movement (NREM) sleep which is subdivided into three stages (N1, N2, N3); and rapid eye movement (REM) sleep characterized by rapid eye movements, muscle atonia and desynchronized EEG. Circadian rhythm of sleep-wakefulness is controlled by the master clock located in the suprachiasmatic nuclei of the hypothalamus. The neuroanatomical substrates of the NREM sleep are located principally in the ventrolateral pre Sleep is defined on the basis of behavioural and physiological criteria dividing it into two states: non rapid eye movement (NREM) sleep which is subdivided into three stages (N1, N2, N3); and rapid eye movement (REM) sleep characterized by rapid eye movements, muscle atonia and desynchronized EEG. Circadian rhythm of sleep-wakefulness is controlled by the master clock located in the suprachiasmatic nuclei of the hypothalamus. The neuroanatomical substrates of the NREM sleep are located principally in the ventrolateral peptic nucleus of the hypothalamus and those of REM sleep are located in Pons. A variety of significant physiological changes occur in all body systems and organs during sleep as a result of functional alterations in the autonomic and somatic nervous systems. The international classification of sleep disorders (ICSD, ed 2) lists eight categories of sleep disorders along with appendix A and appendix B. The four major sleep complaints include excessive daytime sleepiness, insomnia, abnormal movements or behaviour during sleep and inability to sleep at the desired time. The most important step in assessing a patient with a sleep complaint is obtaining a detailed history including family and previous histories, medical, psychiatric, neurological, drug, and alcohol substance abuse disorders. Some important laboratory tests for investigating sleep disorders consist of an overnight polysomnography, multiple sleep latency and maintenance of wakefulness tests as well as actigraphy. General physicians should have a basic knowledge of the salient clinical features of common sleep disorders, such as insomnia, obstructive sleep apnoea syndrome, narcolepsy-cataplexy syndrome, circadian rhythm sleep disorders (e.g., jet leg, shift work disorder, etc.) and parasomnias (e.g., partial arousal disorders, REM behaviour disorder, etc.) and these are briefly described in this chapter. The principle of treatment of sleep disorders is first to find cause of the sleep disturbance and vigorously treat the co-morbid conditions causing the sleep disturbance. If a satisfactory treatment is not available for the primary condition or does not resolve the problem, the treatment should be directed at the specific sleep disturbance. Most sleep disorders, once diagnosed, can be managed with limited consultations. The treatment of primary sleep disorders, however, is best handled by a sleep specialist. An overview of sleep and sleep disorders viz., Basic science; international classification and approach; and phenomenology of common sleep disorders are presented (S. Chokroverty et al, 2009).

Optic nucleus of the hypothalamus and those of REM sleep are located in Pons. A variety of significant physiological changes occur in all body systems and organs during sleep as a result of functional alterations in the autonomic and somatic nervous systems. The international classification of sleep disorders (ICSD, ed 2) lists eight categories of sleep disorders along with

appendix A and appendix B. The four major sleep complaints include excessive daytime sleepiness, insomnia, abnormal movements or behaviour during sleep and inability to sleep at the desired time. The most important step in assessing a patient with a sleep complaint is obtaining a detailed history including family and previous histories, medical, psychiatric, neurological, drug, and alcohol and substance abuse disorders. Some important laboratory tests for investigating sleep disorders consist of an overnight polysomnography, multiple sleep latency and maintenance of wakefulness tests as well as actigraphy. General physicians should have a basic knowledge of the salient clinical features of common sleep disorders, such as insomnia, obstructive sleep apnoea syndrome, narcolepsy-cataplexy syndrome, circadian rhythm sleep disorders (e.g., jet leg, shift work disorder, etc.) and parasomnias (e.g., partial arousal disorders, REM behaviour disorder, etc.) and these are briefly described in this chapter. The principle of treatment of sleep disorders is first to find cause of the sleep disturbance and vigorously treat the co-morbid conditions causing the sleep disturbance. If a satisfactory treatment is not available for the primary condition or does not resolve the problem, the treatment should be directed at the specific sleep disturbance. Most sleep disorders, once diagnosed, can be managed with limited consultations. The treatment of primary sleep disorders, however, is best handled by a sleep specialist. An overview of sleep and sleep disorders viz., Basic science; international classification and approach; and phenomenology of common sleep disorders are presented.

Psychosomatic disorders are frequently misunderstood. The term is used when a psychiatric problem, such as depression, anxiety or another disturbance, manifests itself as seemingly unrelated physical symptoms.

To make a diagnosis of a psychosomatic disorder, there must be no other medical explanation for the symptoms. This is not unusual. In fact, one survey has suggested that as many as 5% of complaints in the primary care setting are those that can't be explained by a known medical condition, toxin, or medication. While not all of these cases are psychosomatic, it is certainly not uncommon for problems with stress, mood, or other psychiatric disturbances to appear in seemingly unusual ways.

## METHODS AND MATERIAL

For the purpose of the present study the researcher purposively selected 60 subjects of both sexes (15 for each selected disease i.e. diabetes, asthma, arthritis and cancer) suffering from different selected psychosomatic disorders from Bharati Hospitals, Siddhi Hospital and Integrated Cancer Treatment and Research Centre Ayurved, wagholi in pune, Maharashtra. The age of the subjects was range from 40-60 years.

### *Variables and Criterion Measures*

#### *Inclusion Criteria*

1. 60 patients of both sexes (15 for each selected disease i.e. diabetes, asthma, arthritis and cancer) suffering from different selected psychosomatic disorders were included.
2. The persons above 40 years and below 60 years were included.

- Sleeping quality was the only variable which was included in the present study.

**Exclusion Criteria**

- Other than 60 persons (15 for each selected disease i.e. diabetes, asthma, arthritis and cancer) suffering from different selected psychosomatic disorders were excluded.
- The persons below 40 years and above 60 years were excluded.
- Other variables than Sleeping quality was excluded.

Variable	Criterion Measure
Sleeping Quality	Pittsburg Sleeping Quality Index constructed by Dr.DanielJ.Buysese and cowker.

**RESULT AND DISCUSSION**

The analysis of data collected on 60 persons (15 for each selected disease i.e. diabetes, asthma, arthritis and cancer) suffering from different selected psychosomatic disorders from Bharati Hospitals, Siddhi Hospital and Integrated Cancer Treatment and Research Centre Ayurved, wagholi in pune, Maharashtra is presented in this chapter. The statistical analysis of data was done by using Analysis of Variance (ANOVA). When the Analysis of Variance found significant, the LSD post hoc test will be administered to find out the paired means significant difference.

**Table-1** Analysis of variance among the patients suffering from diabetes, asthma, arthritis and cancer In relation to sleep quality

Source of variance	df	SS	MSS	f- Value
Treatment	3	363.12	121.04	1.048
Error	56	6462.02	125.39	

Level Significant at 0.05  
df (3,56) 2.78

**Table – 1** reveals that the calculated f – vale 1.048 is lesser than the tabulated f – value 2.78 at the degree of freedom (3, 56) and the level of significance was set at 0.05. Hence it was insignificant and LSD Post Hoc test was not applied.

**Mean difference among the patients suffering from diabetes, asthma, arthritis and cancer In relation to sleep quality**

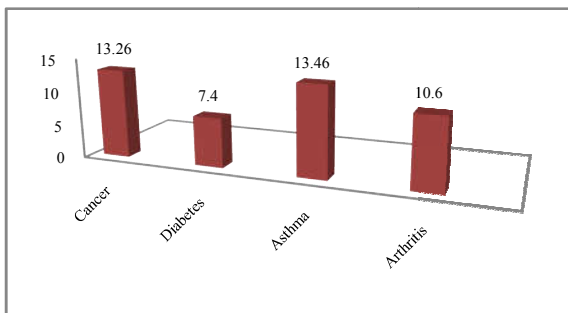


Fig. 1

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The results of the study showed that there was no significant difference observed among the patients suffering from diabetes, asthma, arthritis and cancer in relation to sleep quality. The appearance of this type of result may be due to the following facts:

- Sleeping environment:-Good environmental factor such as care of patients, no noise, good hygienic hospital etc.
- Current drug use:-administration of drug like pain killer, sedative drug and related medicine and drug which reduced pain and make a patients cause good sleep.
- Stage of treatment:-every disease is different level of stage and according this stage the treatment is different.
- Psychological satisfaction:-all the doctors and nurses had good care of their patients and so patients psychologically satisfactions of their doctors.

**CONCLUSIONS**

On the basis of the findings following conclusion may be drawn:

The results of the study showed that there was no significant difference observed among the persons suffering from diabetes, asthma, arthritis and cancer in relation to sleep quality.

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