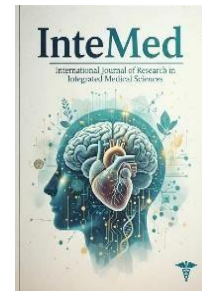




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Research Article

An Assesment Of *Nidra* In Different *Deha Prakriti* In Shift Duty Hospital Workers W.S.R. To Pittsburgh Sleep Quality Index.

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Abstract: *Nidra (sleep) is one of the three Trayopastambha (three pillars of life) described in Ayurveda and is essential for maintaining physical health, mental well-being, strength, immunity, and longevity. Disturbance of Nidra leads to impairment of bodily and psychological functions. Shift duty disrupts the natural circadian rhythm and may result in Nidra Vaigunya. According to Ayurveda, Deha Prakriti (constitutional type) influences an individual's physiological and psychological responses. Persons with Vata-predominant Prakriti are considered more prone to disturbed sleep due to the inherent qualities of Vata, whereas Kapha-predominant Prakriti is associated with sound and adequate sleep.*

Ayurveda science is an ancient medical science dispensing knowledge of status of living body and measure of life span. As Acharya Charak a mentioned definition of Ayurveda as follows:⁽¹⁾

Main aim of Ayurveda is to preserve the healthy state and to treat the diseased humanity. Ayurveda concentrates more on prevention of disease than to cure it.⁽²⁾

That means Ayurveda firstly deals with maintaining normal physiology of body.⁽³⁾

Ayurveda is a science of life dealing with a healthy lifestyle, health upgrades, sustenance, disease prevention, diagnosis, and treatment.⁽⁴⁾ Ayurveda defines healthy individual as a state of physical, physiological, social and spiritual well being.⁽⁵⁾ Ayurveda is based on the principle of maintaining a Balance between the interrelated relationships within the body and mind.

Aahar, Nidra and Brahmacharya which are three supportive pillars of life called trayopstambha out of which Nidra is a very important factor.⁽⁶⁾ Nidra plays important role in development, sustenance, reproduction and termination of life.⁽⁷⁾

INTRODUCTION

Ayurveda is a comprehensive medical system that provides a holistic approach to living in harmony with nature. It is a science that has evolved through centuries of observation, discussion, and research since ancient times. The term Ayurveda is derived from two Sanskrit words: Ayu, meaning "life" or "span of life," and Veda, meaning "knowledge" or "science." Thus, Ayurveda literally translates to "the science of life."

Nidra is also considered under Adharniya Vega.⁽⁸⁾ It has been rightly stated by Charak that happiness and misery, proper and improper growth, good strength and weakness, potency and sterility, knowledge and ignorance and life and demise of an individual depend upon appropriate and inappropriate sleep. Hence, Nidra (Sleep) is one of the important factors to lead a healthy life.⁽⁹⁾ Suppression of natural urges (Adharniya Vega) related to urine, faeces, hunger, thirst, flatus, hiccup, sneezing, yawning, vomiting, sleep etc; either willingly or forced has been considered to be harmful in Ayurveda and is likely to induce vitiation of Doshas, causing several diseases.

Prakriti means manifestation of special characteristics due to predominance of Doshas (Vata, Pitta & Kapha, the functional components of body). According to Ayurveda Prakriti is nothing but the expression of one's constitution⁽⁶⁾ which is specific for every individual. At the time of Shukra 4 (sperm) and Shonita (ovum) fusion the predominant Dosha decides Prakriti of fetus.⁽⁷⁾ All the physiological processes are controlled by Vata, Pitta & Kapha. Healthy status can be maintained by maintaining normality of Prakriti.

AIM AND OBJECTIVES

AIM –

To assess the effect of Nidra in different Deha Prakriti of shift duty hospital workers.

OBJECTIVES –

- To study the relation between Nidra and different Deha Prakriti in shift duty hospital workers.
- To study the Nidra in ayurvedic and modern point of view.
- To study the concept of Deha Prakriti in detail.

MATERIAL AND METHODS

Materials-

Literary review of Deha Prakriti and Nidra were taken from various Samhita including Bruhatrayis and Laghutrayis and their concerned commentaries. Literary review on sleep from various modern literature, internate and articles

Methodology -

• STUDY TYPE :

The present study is an observational study.

• STUDY SETTING:

- Plan for study design

Selection of volunteer as per inclusive criteria

Written inform consent was taken

Prakriti assessment was done according to CCRAS

Prakriti proforma

Assessment of Nidra was done according to Nidra Vega Dharana lakshana and PSQI

Correlation was done between Prakriti and Nidra

Observed data was analysed and ANOVA test was applied according to data

Interpretation

Discussion

Result

• SAMPLE SIZE: 100 volunteers

• METHOD OF SELECTION OF STUDY SUBJECT:

i) Inclusion criteria :

- Hospital workers-doctors, nurses, helpers, laboratory technicians, medical waste handler's
- Age group between 25 to 45 years

-subject ready to give informed consent

-those who have minimum 5yr experience of shift duty

- those who does minimum 2 night duties in a week .

ii) Exclusion criteria

-Individuals with present history of any major illness.

-Those with age less than 25 years and more than 45 years was excluded.

-Those with insomnia, depression, anxiety , psychological disorders was excluded.

iii) Withdrawal criteria

-Those who are not willing for participation in this study could withdraw.

• STUDY PARAMETERS :

Assessment of Deha Prakriti was done with the help of CCRAS approved Deha Prakriti assessment proforma .

Assesment of Nidra was done as per Nidra Vegadharana lakshanas mentioned in Ayurvedic literature in the form of questionnaire with grading manner. ⁽¹⁰⁾

Assessment of Nidra in shift duty hospital workers according Nidra Vegadharan lakshanana:

1. Moha – As feeling confused state of mind after night shift.
2. Akshigauravam – Feeling heaviness in eyes.
3. Alasya – Feeling often laziness, not feeling fresh.
4. Jrumbha – Often feeling yawning in day to day life.

5. Angamarda – Whole body ache.

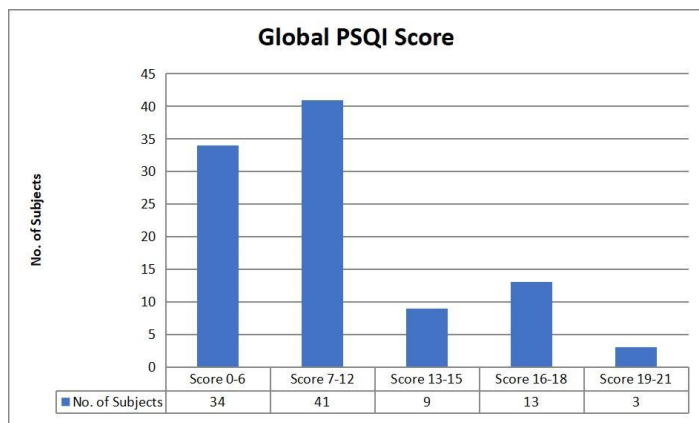
6. Shirogauravam – Feeling heaviness in head.

7. Tandra – Feeling sleepy, incomplete sleep

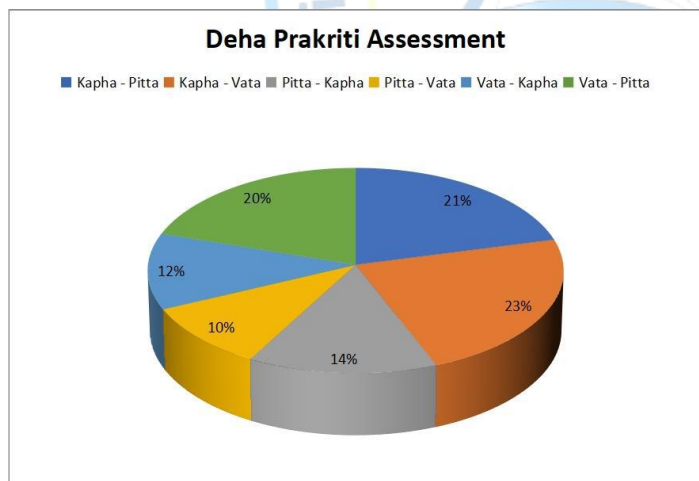
Assessment of Nidra was done with the help of Pittsburgh Sleep Quality Index (PSQI). ⁽¹¹⁾

OBSERVATIONS AND RESULT

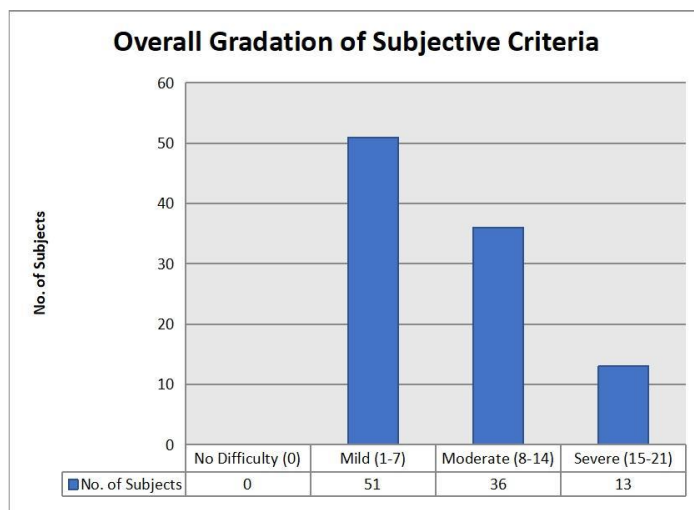
A) Global PSQI Score-



B) Deha Prakriti Assessment



Overall Gradation of Subjective Criteria (Nidra VegaDharana Questionnaire)

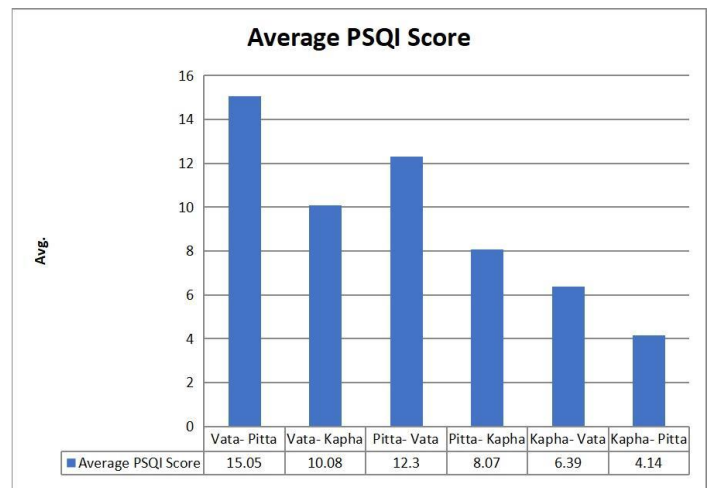
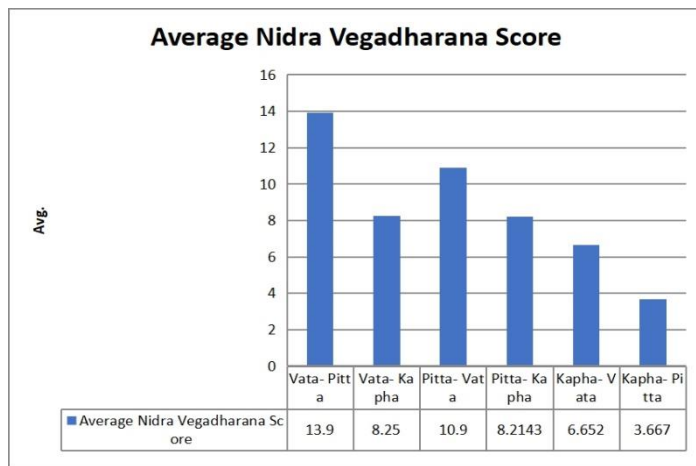


Objective Parameters by Analysis of Variance (ANOVA)

A) Nidra Vega Dharana Score according to different Prakriti-

Nidra VegaDharana Score	Prakriti					
	Vat a - Pitt a	Vata - Kap ha	Pitt a - Vat a	Pitta - Kap ha	Kap ha - Vata	Kap ha - Pitta
N	20	12	10	14	23	21
Mean	13.9	8.25	10.9	8.2143	6.652	3.667
SD	3.768	3.67	3.604	1.18	1.774	2.689

Source	Df	Sum of square	Mean Square	F-ratio	P
Between Group	5	1208.19	241.638	29.606	0
Within Group	94	767.1927	8.161		
Total	99	1975.38			



The value of p is 0

B) PSQI Score according to different Prakriti

PSQI Score	Prakriti					
	Vat a - Pitt a	Vat a - Ka pha	Pitt a - Vat a	Pitt a - Kap ha	Kap ha - Vat a	Kap ha - Pitta
N	20	12	10	14	23	21
Mean	15.05	10.08	12.3	8.07	6.39	4.14
SD	4.058	3.53	3.26	0.828	1.87	2.03

Source	dF	Sum square	Mean Square	F-ratio	P
Between Group	5	1518.41	303.68	39.9274	0
Within Group	94	714.948	7.605		
Total	99	2233.355			

As the p value was less than .05 so there is a significant difference was observed between the percentage results by PSQI Score according to different Prakriti. Therefore we should reject the null hypothesis and accept the alternative hypothesis that there is correlation of PSQI with different Deha Prakriti .

Sr. No.	Parameter	By Analysis of Variance (ANOVA) according to different Prakriti
1	Nidra VegaDharana Score	Significant
2	PSQI Score	Significant

Statistical Analysis

This study was aimed to study the relation between Nidra and Deha Prakriti .

Ho – There is no correlation between Nidra and Deha Prakriti .i.e Ho is null hypothesis

H1 – There is correlation between Nidra and Deha Prakriti . i.e H1 is alternative hypothesis

Further to find the relation between Nidra and Deha Prakriti , Anova Test was applied.

For every statistical analysis, significance level accepted at 5% at 95% confidence limit.

Interpretation-

As value of p is less than 0.05, significant difference was observed between mean of Nidra Vega Dharana lakshanas and PSQI . Hence there is correlation between Nidra and Deha Prakriti .

Figure No.18: Shows Average PSQI Score according to different Prakriti

We should reject the null hypothesis H_0 and accept the alternate hypothesis H_1 i.e. there is correlation between Nidra and Deha Prakriti .

DISCUSSION

The present study entitled “An assesment of Nidra in different Deha prakriti in shift duty hospital workers w.s.r.to Pittsburgh sleep quality index” was undertaken after a detailed review of conceptual and literary sources.

In the present study, a total of 100 individuals were selected from the study area based on the inclusion criteria. For the evaluation of results, Nidra in different Deha Prakriti were assessed using parameters such as Nidra vegadharana Lakshanas and PSQI . The Deha Prakriti of each participant was determined using a standardized Prakriti Assessment Tool. The data obtained from these assessments were statistically analyzed, and the results derived from this analysis are discussed below.

Vata pradhana Pitta anubandhi prikriti shows highest mean Nidra Vega Dharana 13.9 with SD 3.768, whereas Kapha pradhana Pitta anubandhi Prakriti shows lowest mean Nidra Vega Dharana 3.667 with SD 2.689.

Vata pradhana Pitta anubandhi prikriti shows highest mean PSQI 15.05 with SD 4.058 , whereas Kapha pradhana Pitta anubandhi Prakriti shows lowest mean PSQI 4.14 with SD 2.03.

These findings are consistent with Ayurvedic theory, which states that imbalance in Vata and Pitta manifest as sleep disturbances, particularly in shift duty hospital workers exposed to irregular work hours and environmental stressors. This suggests that Nidra patterns are closely linked to an individual's Deha Prakriti , and Prakriti-based assessment is useful in identifying individuals at higher risk for sleep disturbances and in planning personalized interventions. Hence there is effect of Nidra in different Deha Prakriti of shift duty hospital workers.

CONCLUSION

There is significant association was observed between Nidra and Deha Prakriti in present study. Thus it is concluded that, Vata - Pitta Prakriti individuals shows more difficulty in Nidra & Kapha - Pitta Prakriti individuals shows least difficulty in Nidra in shift duty hospital workers.

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