# **Research Article**

# An observational study of effect of use of smart phones on sleep – a pilot study.

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# ABSTRACT

Smart phones have become inevitable in today's era. Excess use of smart phones is affecting generalised health by disturbing circadian rhythm. So present study was intended to find out effect of use of smart phones on sleep. An observational pilot study was done to check the time of use of smart phones. Its effect on sleep was assessed with the help of Epworth sleepiness scale. There is relation between time of use of smart phones and ESS as p value is 0.000 (p < 0.05). thus, present pilot study concludes that use of smart phones affects sleep.

Keywords: smart phone, sleep, use of smart phones

# INTRODUCTION

Smart phones have become inevitable in today's era. Excess use of smart phones is acting as slow poison. It hampers energy, productivity and concentration of an individual. As well as it damages eyes. Simultaneously it is affecting generalised health by disturbing circadian rhythm. Continuous use of smart phones becomes an addiction thereby causing compromise towards body needs like food, sleep, level of energy.

## Need for the study

Excess use of smart phones affects eyes. Also indulging in smart phones alters sleep in terms of total sleep duration and its soundness. So here is an attempt to highlight the impact of use of smart phones on sleep of an individual.

#### **Research** question

Is there any effect of use of smart phones on sleep?

## **Hypothesis**

H1 – use of smart phones affects sleep.

H0 – use of smart phones does not affect sleep.

## Aim

To observe the effect of use of smart phones on sleep.

## Objectives

- To observe time duration of use of smart phones.
- To assess sleep with the help of ESS (Epworth sleepiness scale).
- To assess relation between use of smart phones and sleep.

## MATERIAL AND METHODS

Review of literature was done with the help of -

- Previous work done<sup>1</sup> Research findings indicate that the use of mobile phones may lead to a number of symptoms such as headache, impaired concentration and memory, and also fatigue. The findings of the present study indicate that mobile phones play a large part in the daily life of medical students. Therefore, its impact on psychology and health should be discussed among the students to prevent the harmful effects of mobile phone use.
- Review related to Epworth Sleepiness Scale<sup>2</sup> –
- The ESS is a 8-item questionnaire that assesses subjective daytime sleepiness. The ESS assesses the likelihood of dozing in different common situations using a 4-point Likert response format (scored from 0 to 3 with higher scores indicate more severe sleepiness). Item responses are summed to obtain a total score ranging from 0 to 24, with a score greater than 10 indicating excessive daytime sleepiness. The ESS is routinely used in research and clinical practice to evaluate the presence and severity of excessive daytime sleepiness in older adults.
- Dr Johns first developed the ESS for adults in 1990 and subsequently modified it slightly in 1997. He developed it so he could assess the 'daytime sleepiness' of the patients in his own private practice of Sleep Medicine. He named the questionnaire aer Epworth Hospital in Melbourne, where he established the Epworth Sleep Centre in 1988. The ESS is a self-

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