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A study to identify the Smartphone addiction and impact on sleep quality among selected nursing college students, Nagapattinam.

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Abstract:

Introduction: Smart phones have become part and parcel of everyday life and this is more so among the young adults and students as it is a convenient means of communication, education and entertainment. **Methodology:** The study adopted a non-experimental descriptive research design, which entails a descriptive research approach. The study was carried out on 100 BSc Nursing students (first year), DGNM, and ANM at Sir Isaac Newton College of Nursing, Nagapattinam. Simple random sampling was used in the selection of the participants. **Results:** The results indicated that most nursing students (82) were moderately addicted to smartphones with 10 and 8 percent of participants strongly and not addicted, respectively. Pearson correlation revealed a positive correlation of weak strength and not statistically significant between smartphone addiction and sleep patterns; ($r = 0.052$, $p = 0.611$). **Conclusion:** The research established that the addictive use of smartphones among nursing students is not uncommon, yet it did not have a significant impact on the sleep patterns of the sample group examined. The results highlight the necessity of the program of awareness about the wise use of smartphones and healthy sleeping patterns to enhance student wellbeing and academic performance.

Keywords: Smart phone, communication, sleep quality

INTRODUCTION

The internet and smart phones have transformed into permanent aspects of the contemporary lifestyle that provide large advantages in the domain of communication, education, and access to information. Smartphone usage has grown at a higher rate 2008, and almost 80 percent of the global population is projected to be using smartphones by 2020, having close to 6 billion subscriptions around the world, and projected to be 7.7 billion by the year 2027. People do not even realize how much time they spend on their gadgets, and research has found that people tend to spend almost three hours a day on their devices, and they do check their devices very often. Although smartphones have revolutionized communication and normal day operating, there have been issues over excessive use and addiction, especially among the youths. The lack of control over the use regardless of the consequences is also characteristic of smartphone addiction, which leads to the development of the behavioral dependence of such addiction.

Studies have shown that smartphones are mostly consumed in socializing, education, entertainment and information search processes, hence are becoming very entrenched in daily activities. Yet, there have been negative effects in the heavy and late-night smart phone usage like stress, anxiety, depression, sleeps issues, poor academic performance, and behavioral problems. Research indicates that women and teenagers can be more susceptible to addictive behavior and many young users stay active with the device even after going to bed, thus, compromising on sleep. Sleep is one of the essential physiological needs that aid in development, brain activity, emotional stability, immunity, and health. The problem of low quality of sleep especially following the rise in smartphone dependency is especially dangerous to nursing students as they belong to the young adult demographic and must meet the academic and clinical requirements. Though smartphones allow people to stay connected in the world, exchange information

efficiently, its overuse can be one of the factors in social dysfunction, obesity, anxiety, depression, and sleep disorders. Smartphone addiction consists of the internal, emotional, and social factors that are different in every person. It has been indicated that educational institutions can use the mental health screening and sleep quality assessment programs to promote the wellbeing of students. Adequate sleep is the fundamental to proper daytime performance, academic success and good health, and therefore, smartphone use management among young adults is a significant health concern of the population.

METHODOLOGY

Research methodology is the systematic processes and approaches employed to carry out a research study and these processes are the research design, population, sampling method, variables, and data collection process (C.R. Kothari). The study followed a descriptive research design of a non-experimental research design. The study was done in nursing students of Sir Issac Newton College of Nursing, Nagapattinam with the target population being composed of first-year BSc Nursing, DGNM, and ANM students. A sample population of 100 students was also chosen by a simple random sampling method (lottery method). The inclusion criteria comprised of nursing students between the ages of 17 and 20 years with those students who were not present during the data collection or those who did not want to take part being the exclusion criteria. Smartphone addiction took on the role of an independent variable and sleep pattern that of a dependent variable. A validated structured questionnaire was used to gather the data with institutional permission and informed consent of the study participants and the data collection exercise was conducted in two weeks in June.

RESULT

Table: 1 shows frequency and percentage wise distribution of identified smartphone addiction in the of nursing students.8(8%) nursing students had no addiction,82(82%) nursing students had Moderate addiction,10(10%) nursing students had Strongly addiction.

Table 2 presents the Frequency and percentage-wise distribution of the impact of smartphone addiction on sleep patterns among the nursing students.32(32%) nursing students had a good sleep quality,65(65%) nursing students had mild sleep disturbance, and 3(3%) nursing students had moderate sleep disturbance.

Table 3 presents the correlation result between smartphone addiction and sleep patterns in nursing students. Pearson correlation analysis showed a very weak positive correlation

($r = 0.052$, $p = 0.611$) which was not statistically significant so it can be said that there was no significant relationship between smartphone addiction and sleep patterns.

The chi-square analysis revealed that there was no significant association between the sleep patterns among nursing students and selected demographic variables. However, smartphone addiction was found to have significant association with some demographic variables, specifically course, age and areas of residence.

Table:1 Distribution of identified smartphone addiction among nursing students.

Smartphone addiction	Frequency	Percentage (%)
No addiction	8	8.0%
Moderate addiction	82	82.0%
Strongly addiction	10	10.0%
Total	100	100.0%

Table:2 Distribution of identified smartphone addiction among nursing students.

Smartphone addiction's impact on sleep patterns	Frequency	Percentage (%)
Good sleep quality	32	32.0%
Mild sleep disturbance	65	65.0%
Moderate sleep disturbance	3	3.0%
Total	100	100.0%

Table:2 Correlation between smartphone addiction and sleep patterns among nursing students.

Variables	Correlation(r)	P value
Smartphone addiction Vs sleep patterns	0.052	0.611 Very Weak Positive Correlation

DISCUSSION

The findings of the study showed that most of nursing students had moderate smartphone addiction problems and only small proportion of them revealed strong addictions. The results of the analysis revealed a very weak and statistically non-significant correlation between smartphone addiction and sleep patterns, meaning smartphone use did not significantly affect sleep patterns in this study. Further, the association of sleeping patterns with demographic variables was not significantly found, but when the students were considered in terms of smartphone addiction, it was significantly associated with subject factors like course, age, and place of residence of the nursing students.

CONCLUSION

The study concluded that moderate smartphone addiction was common in nursing students. There was no significant relationship between smartphone addiction and sleep patterns. Sleep patterns were not associated with any demographic variables and smartphone addiction was significantly correlated with course, age and area of residence.

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