



“EFFECTIVENESS OF PLANNED TEACHING PROGRAM ON KNOWLEDGE REGARDING HAZARDOUS EFFECTS OF ELECTRONIC GADGETS AMONG NURSING STUDENTS IN SELECTED COLLEGE OF NURSING, BAREILLY(U.P.)”

Mental Health Nursing

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ABSTRACT

Introduction:- Electronic devices like smartphones, laptops, and tablets have become an integral part of everyday life, driving progress in communication, education, and entertainment. However, growing reliance on these technologies has sparked concerns about their potential harmful effects on both human health and the environment. As electronic gadgets become more prevalent in both urban and rural areas of India, it is essential to assess the risks associated with their extensive use. **Aim Of The Study:-** To assess the effectiveness of PTP on knowledge regarding Hazardous effect of electronic gadget among Nursing students. **Objectives Of The Study:-** To assess the pre-test and post test knowledge of nursing students regarding the hazardous effects of electronic gadgets.,To assess the effectiveness of a planned teaching program program on knowledge regarding hazardous effects of electronic gadgets. To determine the association between the pre-test knowledge scores of nursing students with their selected demographic variables. **Material And Methods:-** the study type was Quasi experimental. This study is conducted at Rohilkhand College of Nursing, Bareilly. 60 sample were collected by using convenient sampling technique. The conceptual framework used for this study, a General systems model approach is used that is given by Ludwig Von Bertalanffy in 1950's. The data was collected by Self structure knowledge questionnaire. The collected data were analysed by using Ms excel, descriptive and inferential statistics. **Result:-** Chi-square, and paired 't' test value was highly statistically significant at level of $p < 0.001$. **Conclusion:-** The result shows that the mean of post test get improved compared to pre test. Hence PTP is effective in imparting the knowledge and developing the awareness.

KEYWORDS

Effectiveness, Assess, planned teaching programme, knowledge, nursing students, electronic gadget.

INTRODUCTION

In the modern era, electronic devices have become integral to daily life, especially for students. Tools like smartphones, tablets, and laptops are indispensable for learning, communication, and leisure activities. Nevertheless, the overuse or misuse of these devices can result in significant health concerns, including physical, mental, and behavioral problems. For nursing students, who are expected to possess knowledge about health-related risks, understanding the detriment effects of electronic gadgets is vital both for protecting their own health and for educating others.¹

Electronic devices like smartphones, laptops, and tablets have become an integral part of everyday life, driving progress in communication, education, and entertainment. However, growing reliance on these technologies has sparked concerns about their potential harmful effects on both human health and the environment. As electronic gadgets become more prevalent in both urban and rural areas of India, it is essential to assess the risks associated with their extensive use.²

Rosen et al. (2014) indicate that prolonged screen time contributes to heightened stress levels, diminished quality of sleep, and a decline in the academic performance of nursing students.³

Likewise, Hale and Guan (2015) discovered that exposure to blue light emitted by screens interferes with melatonin production, which can result in sleep disturbances. Furthermore, extended use of electronic devices is associated with problems such as digital eye strain (**American Optometric Association, 2017**), discomfort in the musculoskeletal system (Straker et al., 2018),⁴ and the development of psychological dependence (Twenge et al., 2018).⁵ Nevertheless, a significant number of students remain unaware of the lasting impacts of excessive device usage. Implementing a well-structured educational initiative may be essential in increasing their awareness and encouraging healthier usage habits.

Yadav Rashmi (2021)⁶ conducted an experimental study on the impact of technological advancements on physical health in India. The study aimed to raise awareness about the harmful effects of electronic gadgets. Using a pre-designed and semi-structured method, a non-probability sampling technique was applied, with 40% of the sample consisting of school children. The findings revealed that 54% of students used smartphones and 40% used laptops daily, leading to health issues such as headaches (10%), migraines (17%), depression (16%), and sleep disturbances. The researcher concluded that excessive gadget use negatively affects health, emphasizing the need for awareness and preventive measures.

Need Of The Study

The worldwide overuse of electronic devices has emerged as a critical issue for public health. Research conducted in developed nations indicates a growing incidence of digital addiction among students, which is associated with various physical and mental health complications. A study published in ScienceDirect in 2023 found that extended periods of screen exposure are linked to sleep disturbances, visual impairments, and disorders affecting the musculoskeletal system. In addition, a review from the **American Optometric Association (2024)** noted that 58% of students experience digital eye strain due to their ongoing interaction with screens.⁷

In 2024, a study in Bangalore found that excessive use of mobile phones and headphones caused **70% of undergraduate students** to experience headaches, stress, and poor sleep. Also, a study from **Indian Journal of Community Medicine (2023)** found that nursing students' digital addiction has led to poorer academic performance and higher mental health issues like depression and anxiety. These results show that there is a big gap in awareness and that there is a need for organized training to teach nursing students about the harmful effects of excessive gadget use.⁸

In the modern technological era, overuse of electronic devices has become a significant health concern, especially among students. This study is crucial because it evaluates how effective a planned teaching program is in teaching nursing students about the dangerous effects of these devices.

Moreover, excessive use of technology weakens focus and memory recall, which has an adverse impact on academic achievement. Psychosocial consequences including addiction, anxiety, and social isolation emphasize the importance of awareness even more. Nursing students need to be knowledgeable in order to educate patients and communities how to use electronic devices safely as they prepare to become future healthcare professionals. According to research, planned teaching programs lower the health hazards associated with gadget use by promoting

behavioural adjustments and greatly increasing knowledge. In order to fill the knowledge gap and promote responsible device use among nursing students, this study was conducted.

REVIEW OF LITERATURE

1. Review of literature related to prevalence and patterns of electronic gadgets use among nursing students.

Zhou boet al. (2024)⁷ was conducted experimental study that provided

a scoping review focusing on the risk factors and harms associated with smartphone addiction among nursing students. The aim of the study is to identify associated harms and underlying risk factors based to established theoretical model. The review reported prevalence rates ranging from 19% to 72%, averaging between 40% and 50%. Physiological harms identified included sleep disturbances and vision problems, while psychological harms encompassed increased anxiety, depression, and decreased self-esteem. Social harms involved challenges in interpersonal relationships and career development. The study emphasized the multifactorial nature of smartphone addiction, suggesting that personal, affective, cognitive, and executive factors contribute to its development.

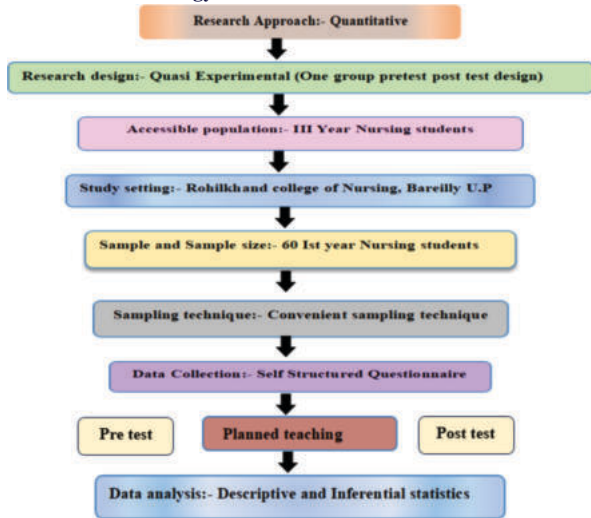
2.Review of literature related to hazardous effects of electronic Gadgets on health

N. White Sheeliya and Dr. Chicholkar Jitendra (2024)¹⁰ studied the effects of electronic gadgets on school students' health in Madhya Pradesh, India by using cross-sectional study.They surveyed 100 high school students using a semi-structured questionnaire.Results showed that 29% used devices for 5-6 hours daily, 23% for 3-4 hours, 19% for 7-8 hours, 14% for 1-2 hours, and 4% for over 10 hours. Device dependency was high in 4%, moderate in 44%, and slight in 52%. Students using gadgets for more than 8 hours had more sleep issues (80%), headaches, neck pain (60%), and migraines.The study found that excessive gadget use harms students' health. It recommended limiting screen time to encourage physical activity and social interaction.

3.Review of literature related to knowledge and awareness among Nursing students about gadget hazards

Endla Srinivasaraoet.al (2020)¹¹ aimed to assess the effectiveness of a planned teaching program on the health hazards of mobile phones among 50 student nurses using a pre-experimental design and a quantitative approach. Stratified random sampling was employed to select the sample. The results indicated a significant improvement in the student nurses' knowledge regarding mobile phone health hazards, with a paired 't' test value of 10.73, which was greater than the tabulated value of 2.01, signifying statistical significance at the p<0.05 level. This suggests that the planned teaching program was effective in enhancing the knowledge of student nurses about the health risks associated with mobile phone usage.

Research Methodology:-



RESULT

SECTION A:- Assess The Level Of Knowledge Regarding Hazardous Use Of Electronic Gadgets Among Nursing Students.



Level of knowledge	Score	Frequency
Adequate	21-30(60-100%)	0
Moderate	11-20 (30-60%)	28
Inadequate	0-10 (0-30%)	32

Section B :- Comparison Of Pre Test And Post Test Knowledge Score Regarding Hazardous Use Of Electronic Gadgets Among Nursing Students.

Test	Mean	S D	Mean difference	T value
Pre test	17.53	6.116	3.7	4.30
Post test	21.23	2.651		

Section C:- Association Between Pretest Knowledge Score With Their Selected Demographic Variables.

There is **no significant association between pre-test knowledge score with their demographic variable**(Age group, Gender, level of education, place of resident, do had any personal electronic gadget, what type of gadget do you use, time of daily usage, monthly pocket money, academic performance, source of information about hazardous use of electronic gadget) **except one demographic variable** (family type).

DISCUSSION

A present study was conducted to assess the Effectiveness of planned teaching program on knowledge regarding hazardous effects of electronic gadgets among nursing students in selected college of nursing, Bareilly U.P. in order to achieve the objectives of the study, Quasi experimental, pre-test & post-test research design was adopted, convenient sampling method was used to select the sample. The data was collected from the 60 participants by using a self-structured Questionnaire. The finding of the study had been discussed with reference to the objective and hypothesis.

The study attempted to test the following hypothesis:

H₁: There will be significant difference between pre-test and posttest knowledge score among nursing students regarding hazardous effects of electronic gadgets before and after planned teaching program.

H₂: There will be significant association between pre-test knowledge score of nursing students with their selected demographic variable.

RECOMMENDATION

On the basis of the study, it is recommended that: A Similar Study can be undertaken with a large number of samples. The present study can be replicated in Similar & different settings (like children, school age, cooperate worker etc). Various other interventional modalities, which vary in content and method, can be used to increase the knowledge regarding hazardous use of electronic gadget which is important to reduce the hazardous effect of electronic gadget.

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