



EFFECTIVENESS OF MULTI INTERVENTIONAL PROGRAMME ON MOBILE PHONE DEPENDENT PRACTICES AMONG HIGH SCHOOL STUDENTS

Nursing

Ms. Neethu Yoosuf M.Sc Nursing, Govt. College of Nursing, Kottayam

Dr. Mary Joseph Assistant Professor, Govt. College of Nursing, Kottayam

Mrs. Divya Devakumar Assistant Professor, Govt. College of Nursing, Kottayam

ABSTRACT

The present study investigated the effectiveness of multi interventional programme on mobile phone dependent practice among high school students of selected schools at Kottayam district. A quantitative research approach was used for the study. The study was theoretically supported by Betty Newman's System model. Screening was done to the entire 8th and 9th class students of selected schools and 45 students were selected from among them according to the inclusion criteria using multistage random sampling technique. Pretest was done on the first day using socio personal data sheet and Problematic Use of Mobile Phones (PUMP) scale. Multi-interventional programme was given on the second day which included introduction to digital detox challenge and demonstration of mindfulness based exercises. Students were instructed to take digital detox challenge and complete each week's task. Study subjects also practiced mindfulness exercises twice daily for 4 weeks. Post test was done on 29th day after multi-interventional programme using same tools. The results of the study revealed that multi-interventional programme reduced the mobile phone dependency level ($p < 0.01$) among the study samples which indicated that the multi interventional programme was effective in reducing mobile phone dependent practices.

KEYWORDS

effectiveness; mobile phone dependency; digital detox challenge; mindfulness exercises.

1. INTRODUCTION

The COVID-19 pandemic has collapsed the normal functioning of mankind and led to worldwide lockdown in order to break the chain of community transmission of this notorious virus.¹ Home confinement and other infection control measures, such as social distancing, closure of schools and shift to online education led to the exponential increase in the use of smart phones.² Mobile phone has become inevitable to students for accessing educational materials, for social interactions, and for entertainment purposes.³ In this scenario, the increasing acceptance, free and unlimited access to internet has led to the development of dependence on mobile phones, especially in school aged adolescents.

Adolescence is a crucial period with increased vulnerability for developing mobile phone addiction. Various research studies showed that teenagers are far more likely to become dependent on mobile phones when compared to adults.⁴ Studies also concluded that mobile phone dependency in adolescents interfered with their school and personal activities, and led to social and relationship problems.⁵ Studies have found that social anxiety and loneliness are associated with excessive use of mobile phones.⁶ Problematic mobile phone use is also associated with increased interpersonal conflicts, as well as lowered social skills and emotional intelligence.⁷ At the same time it is absolutely impossible to completely abstain them from mobile phone use. This emphasizes on the need for developing a healthy mobile phone usage practices in high school students.

As the restrictions due to COVID 19 have been relaxed, it is high time to identify adolescents who might have problematic use of mobile phones and take necessary actions to minimize this problem through preventive techniques.

2. OBJECTIVES

1. To assess the mobile phone dependent practices among high school students.
2. To evaluate the effectiveness of multi-interventional programme on practice regarding mobile phone dependency among high school students.

3. MATERIALS AND METHODS

The quantitative approach was adopted for the study. Research design selected for the study was pre experimental one group pre test, post test design was used. A total of 45 samples were selected by multistage random sampling technique from the high school students of selected government secondary schools in Kottayam district, who satisfied the inclusion criteria for the study. Inclusion criteria of the present study was high school students, who were present at the time of data

collection and were willing to take part in the study, who had parent's consent and were willing to give assent and were having mild, moderate and severe mobile phone dependency in the screening test. The students who excluded from the study were differently abled and who had undergone treatment or sought professional assistance for mobile phone dependency. Tools and techniques used to collect data in the present study were the following: Socio personal data sheet and Problematic Use of Mobile Phones (PUMP) scale. Screening was done for all the students in 8th and 9th classes of the selected schools using PUMP scale to find the proportion of students with no, mild, moderate and severe mobile phone dependency. The sample size of 45 students selected, followed the same distribution of mild and moderate mobile phone dependency as observed in the subjects screened. All students with severe mobile phone dependency were included based on ethical consideration. Simple random sampling (lottery method) was used in their selection. Since it was identified from the screening test that 93.81% of students were having varying degrees of mobile phone dependency, multi interventional programme which consisted of digital detox challenge and mindfulness based exercises was given for all the screened students on the second day. Students were instructed to follow digital detox challenge and mindfulness exercises for 4 consecutive weeks. An audio recorded specific instruction was also provided to the students to help them to do the mindful breathing and motivated them to repeat it twice on a daily basis for 4 weeks. The students who found difficulty in doing mindful breathing were given instructions individually. Follow up of the study subjects was ensured by contacting the parents weekly through mobile phones. Post test assessment was done on 29th day after intervention. The obtained data was tabulated and analysed in terms of objectives of the study using descriptive and inferential statistics.

4. RESULTS

4.1 Socio personal data of high school students

Among the study participants 66.7% of students were boys and 53.3% of students were from 8th standard and the rest from 9th standard. Majority of students (88.9%) were residing in village area and most of the students (53.3%) belonged to nuclear family. About 55.6% of students were having only one sibling and 8.8% were single child in the family. Data from the study depicted that fathers' of 40% of students had high school education while 11.1% had an educational status of degree and above. Considering the mothers' educational status, 35.6% of mothers studied up to higher secondary, 13.3% went for degree and above and 2.2% attained a professional qualification. With regard to the working status of parents, 60% of students had both of their parents working while 4.4% of students' mother was the only working member in their family. Major portion (77.8%) of the students belonged to BPL category. Among the students, 91.1% had previous knowledge

regarding mobile phone dependency. Regarding duration of owning a mobile phone, 95.6% of the students owned mobile phone for more than 6 months. Data from the study depicted that 86.7% of the students were using mobile phone for more than 2 hours per day and except one student, all of them were using mobile phone for multiple activities like education, entertainment and social media. The study results revealed that 93.3% of students were using only one gadget and 84.4% of the students were using their parents' phone together with their own device and all of them had limited internet access on their phone.

4.2 Practice of high school students regarding mobile phone dependency

Table 1 Frequency distribution and percentage of high school students' based on practice regarding mobile phone dependency during pre test (n=45)

Practice regarding mobile phone dependency	f	%
Mild (41-60)	5	11.1
Moderate (61-80)	36	80.0
Severe (81-100)	4	8.9

Table 1 depicts that majority (80.0%) of the students had moderate mobile phone dependency and 8.9% had severe dependency.

4.3 Effectiveness of multi-interventional programme on practice scores of high school students regarding mobile phone dependency

H_{01} : There is no significant difference in pre test and post test practice scores of high school students regarding mobile phone dependency.

Table 2 Frequency distribution and percentage of high school students' based on pre test and post test practice scores regarding mobile phone dependency (n=45)

Practice	Pre test scores		Post test scores	
	f	%	f	%
No	0	0	5	11.1
Mild	5	11.1	21	46.7
Moderate	36	80.0	18	40.0
Severe	4	8.9	1	2.2

Table 2 reveals that in the pre test 8.9% of students were having severe mobile phone dependency which reduced to 2.2% of students with severe dependency after multi-interventional programme. Samples with moderate dependency level also reduced to mild dependency level. Hence multi-interventional programme was found to be beneficial in reducing mobile phone dependent practices among high school students.

Table 3 Mean, standard deviation and 't' value of pre test and post test practice scores of high school students' regarding mobile phone dependency. (n=45)

Group	Practice		t	p
	Mean	SD		
Pre test	69.53	9.41	10.58	0.000
Post test	57.27	12.01		

Table 3 depicts that the mean pre test score was 69.53 and after multi interventional programme mean score reduced to 57.27. The obtained 't' value was statistically significant at 0.01 level. This shows that multi-interventional programme reduced the mobile phone dependent practices among high school students. Hence H_{01} was rejected.

CONCLUSION

Multi interventional programme was effective in reducing mobile phone dependent practices among high school students. Digital detox challenge and mindfulness exercises proved to be beneficial in controlling the development of dependency to mobile phones in adolescents. By challenging themselves, students remained aware of their digital consumption and attained healthy and safe mobile phone usage pattern.

Practicing mindfulness exercises helped students to focus their attention on the present moment and on their own feelings, emotions and thoughts, thus reducing the risk of mobile phone addiction.

Nurses who are working in paediatric and psychiatric ward can incorporate the multi-interventional programme in their clinical practice and use the digital detox challenge and mindfulness exercises

as a group approach for primary prevention of mobile phone dependency and addiction in children and adolescents.

REFERENCES

1. World Health Organization. (2020). Responding to community spread of COVID-19: interim guidance, 7 March 2020 (No. WHO/COVID-19/Community_Transmission/2020.1). World Health Organization.
2. Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry research*, 293, 113429.
3. Wiederhold, B. K. (2020). Children's screen time during the COVID-19 pandemic: boundaries and etiquette. *Cyberpsychology, Behavior, and Social Networking*, 23(6), 359-360.
4. Bhise, A. T., Ghatule, A. A., & Ghatule, A. P. (2014). Study of mobile addiction among students wRT Gender and education. *Indian journal of research in management, business and social sciences*, 2(1), 17-21.
5. Leung, L. (2008). Linking psychological attributes to addiction and improper use of the mobile phone among adolescents in Hong Kong. *Journal of children and media*, 2(2), 93-113.
6. Laramie, D. J. (2007). Emotional and behavioral aspects of mobile phone use. Alliant International University, Los Angeles.
7. Lucas-Thompson, R. G., Broderick, P. C., Coatsworth, J. D., & Smyth, J. M. (2019). New avenues for promoting mindfulness in adolescence using mHealth. *Journal of Child and Family Studies*, 28(1), 131-139.