Journal of Neonatal Surgery
ISSN(Online): 2226-0439
Vol. 14, Issue 24s (2025)
https://www.jneonatalsurg.com

OPEN ACCESS

A Study to Assess the Impact of Role Play on Excessive Mobile Use and Its Ill Effects among Parents of School-Going Children in Selected Primary Schools at Karad Taluka, Maharashtra

Miss. Anuja More[1], Dr. Mrs. Rajashri B. Karale*[2], Dr.Prakash Naregal[3], Mr. Aatish Natekar[4]

[1]Krishna Institute of Nursing Sciences, Karad.

[2*]Associate Professor, Child Health Nursing, Krishna Institute of Nursing Sciences, Karad.

[3,4]2ND YEAR PB.BSc.N. student, Krishna Institute of Nursing Sciences, Karad.

***Corresponding Author:**

Dr. Mrs. Rajashri B. Karale

Associate Professor, Child Health Nursing, Krishna Institute of Nursing Sciences, Karad.

Cite this paper as: Miss. Anuja More, Dr. Mrs. Rajashri B. Karale, Dr.Prakash Naregal, Mr. Aatish Natekar, (2025) A Study to Assess the Impact of Role Play on Excessive Mobile Use and Its Ill Effects among Parents of School-Going Children in Selected Primary Schools at Karad Taluka, Maharashtra. *Journal of Neonatal Surgery*, 14 (24s), 867-870

ABSTRACT

Introduction: A major source of sedentary behavior in children's is excess use of Smartphone, results ill effect on health of children. Study conducted with aim was to increase awareness among parents related to ill effects of excess use of mobile on the health of the school going children.

Objectives: The study was conducted to assess the level of knowledge of parents about excess use of mobile before and after role play and Determine the relationship between socio-demographic factors and the baseline knowledge of parents with school-going children.

Methodology: A pre experimental research study approach and one group pre-test and post-test design was practiced to evaluate the effect of role play on knowledge about the excess use of mobile and its ill effect among 70 parents of school going children. Samples selected by convenient sampling technique. A self-structured questionnaire was prepared to assess knowledge and awareness among parents prior and later role play.

Results: Study findings suggests that, there was significant improvement in knowledge score and awareness score of parents , in pre test mean score of knowledge was 4.98 and in post test 6.58 (<0.0001) and in pre test mean score of awareness was 3.7 and in post test 7.24 (<0.0001). There was no significant association showed between demographic variables and pre-test score of knowledge except source of information and the average time spend on the smart phone by the children.

Conclusion: The research study drawn the inference that the impact of role play on excessive use of mobile and its ill effects was an effective method for enhance knowledge and awareness among parents of school going children.

Keywords: *Impact, Role play, Excess use of Smartphone, Ill effect, school going children.*

1. INTRODUCTION

In the today's technical world mobile phone plays crucial role in the making life more easy. A significant portion of these users comprises students and children, drawn to social media, gaming, video watching, and internet surfing for leisure. [1]

The Smartphone, a modern invention, has significantly reduced the distance between individuals, bringing the world closer together. During the COVID-19 pandemic, mobile phones became essential tools for children, enabling communication with parents, recreation, and educational purposes. However, the increased use during the COVID-19 pandemic period done adverse effects on children's health, including vision, hearing, and attention problems, in addition behavioral disturbances, ultimately impacting academic performance. [2]

According to a study in India published in the Indian Express, Smartphone usage among children aged 6-12 years is at 51% in urban areas and ranges around 36% in rural areas for the year 2020-2021. [3]

The magnitude of Smartphone addiction in India ranges from 39% to 44%, as per fixed effects calculations. This addiction not only harms children's interpersonal skills but also poses significant negative health risks and detrimental psychological effects. School-going children who abuse their Smartphone's exhibit increased restlessness and experience sleep

disturbances. [4]

Radiation emitted by Smartphone adversely affects sleeping patterns. Electromagnetic fields from Smartphone use in bed significantly increase brain activity during early non-rapid eye movement sleep. The enormous increase in electromagnetic and radio wave radiation has lead to a rise in illnesses such as allergies, neurodermatitis, fatigue, asthma, heart disease, brain tumors, depression, sleep disorders, and irritability. [5]

The operation of Smartphone‘s exposes children to the habit of jumping from one option to another, that trains them to gather small portions of information instead of concentrating and getting complete information. This habit is harmful for development of brain. [6]

It was observed that impact of mobile on one’s life is very high and it can be negative as well as positive. [7]

the impact of these devices on one‟s life was very high. The impacts

Role play is a traditional teaching method widely practiced worldwide, familiar for its significant impact on learners' minds. It involves the enactment of different roles, facilitating a change in behavior and perspective. Researchers commonly employ role-playing techniques to study interpersonal behavior by evaluating research participants' responses and interactions. [6] Hence, researchers decided to utilize this method to enhance parental awareness by imparting knowledge through role-play sessions.

2. METHODOLOGY

A pre experimental research study approach and one group pre-test and post-test study design was utilized to see the result of role play on knowledge about the excess use of mobile and its bad effect among parents of school going children. After getting ethical clearance from ethical committee of Krishna Vishwa Vidyapeeth (Deemed To Be University), Karad and permission from the Principal of respected school, data collection initiated. Total 70 parents of school going children in Zilha Parishad Primary School, Vishramnagar, Malkapur, Karad selected by using convenient sampling technique. A self-constructed questionnaire was used of mobile and its ill effects’.

Tool: A self-structured questionnaire including,

Section-I: Socio-Demographic data of the participants

Section-II: Structured Knowledge questionnaire

Section-III: Structured awareness questionnaire

Statistical analysis used: Data analysis was done by using SPSS software. Frequency & percentage described by using descriptive statistics. Means, standard deviation and ‘t’ test was calculated by using inferential statistics. Chi- Square test ($\chi 2$) was used to see the association between impact of role play and demographic variables.

3. RESULTS

Description of sample characteristics:

Majority of samples were from age 31-35 years i.e. 27 (41.42%) and gender wise predominantly samples were females 55 (78.57%). Most of the father had completed primary education 34(48.57%) and majority of the mothers 29(41.42%) were completed secondary education. According to the fathers occupation majority of participants were doing their own business 30(42.85%) and majority of mothers were housewives 61(87.14%). Major part of the samples 29(41.42%) belongs to income slab between Rs.11000/- to Rs.15000. predominantly the samples 36(51.42%) were from joint family. Most of the samples had their primary source of information was television 61(87.14%). Total time spend on Smartphone by the children was 2 hrs (44.28%), 4 hrs (19%), 6 hrs is 11(15.71%), and 8hrs and more was 9(12.85%).

Table no- 1 Mean pre and post test knowledge score of the Parents.

Knowledge score of the parents	Mean	SD	P value	T value
pre-test	4.98	1.83	<0.0001	5.560
post-test	6.58	1.565		

The table 1 shows the mean pre-test knowledge score was 4.98±1.83, and the mean post-test knowledge score was 6.58±1.56. The t-value was 5.560 ($p < 0.0001$), indicating a significant increase in the knowledge scores of the participants.

Table no.2: Mean pre -test and post-test awareness score of the Parents.

Awareness Score	Mean	SD	P value	T value
pre-test	3.7	1.48	< 0.0001	16.111
post-test	7.24	1.08		

Table no.2 shows that the means pre-test awareness score was 3.7±1.48 and means post-test awareness score was 7.24±1.08. The t-value was 16.111(P is <0.0001) indicating significant improvement in awareness score of the participants.

Table no- 4 Showing the association of total Pre-test score with the total post test Score

Knowledge and Awareness Score	Mean	SD	P value	T value	Result
pre-test	8.68	2.31	<0.0001	13.736	S*
post-test	13.82	2.11			

Table No.1 Mean knowledge and awareness score of parents

Fig.No.1 depicts that there was significant improvement in knowledge and awareness among parents, t= 13.736 (P is <0.0001).

There was a significant association seen between pre-test scores and demographic variables, namely the source of information and the average time spent on Smartphone by the children.

There was no significant association found between pre-test score and socio-demographic variables such as Age, Sex, father education, mother education, father & mother's occupation, family income, size of family, type of family and number of phones in family.

4. DISCUSSION

In current research, mean pre-test knowledge score was 4.98±1.83, and the mean post-test knowledge score was 6.58±1.56. The t-value was 5.560 ($p < 0.0001$), indicating a significant improvement in the knowledge scores of the participants, the mean pretest awareness score was 3.7±1.48 and mean posttest awareness score was 7.24±1.08. The t-value was 16.111 (<0.0001) indicating significant improvement in awareness score of the participants. Present study findings supported by Study conducted by Laila shows that less than two thirds mothers had unsatisfactory level of knowledge about misuse of Smartphone by their children. [7] Another study conducted by Mr. Sarvendra Pratap to see the knowledge of student 10-18 years regarding Health impact of cell phone, result showed that most of the students had inadequate knowledge that is 43.611%. Only 18 % students having adequate knowledge regarding Health impact of cell phone. [8]

International Journal of Trend in Scientific Research and Development (IJTSRD)

Volume 5 Issue 4, May-June 2021 Another Quasi Experimental Study conducted by Jibanlata Devi to study the result of planned teaching programe on excess use of mobile phone and its effect in children among the parents found that in pre test, majority of 55% of parents had average knowledge and 5% of them had good knowledge and 14% of them having poor knowledge where as in post test after planned teaching, the parents had 67.5% of good knowledge and 27.5% had average knowledge and 5% of them having poor knowledge. Research revealed that there was marked improvement in knowledge regarding excess exposure of mobile phone and its ill effects. [9] A considerable number of adolescents demonstrated limited knowledge about the harmful effects of cell phone use. Therefore, the researcher came to inference that there is a need to focus on implementing various awareness programs to educate adolescents about the negative impacts of cell phone usage.

The descriptive cross-sectional survey aimed to assess the knowledge of adolescents residing in an urban community. The adolescents were selected through non-probability convenience sampling, and data was collected using a pre-tested structured questionnaire. The analysis was performed using SPSS version 16, with results presented as proportions. A total of 50 adolescents participated in the study. The findings revealed that 46% of the adolescents had a low level of knowledge, 48% had an average understanding, and 6% demonstrated a good level of knowledge. None of the participants achieved a very

good knowledge level. Based on the results, an informational booklet was developed and distributed to the adolescents. The relationship between demographic factors and the adolescents' knowledge was examined using the Chi-square test, which showed no significant association between knowledge levels and demographic variables. [10]

Almost all of the participants (118/120, 98.3%) were aware that the overuse of SPs could lead to their children becoming addicted to the devices; they were also aware that there could be side effects on their children's health (117/120, 97.5%). Although the participants, mostly the mothers, supervised their children's use of SPs closely (106/120, 88.3%), the majority could not control their children's length of time using SPs, as the children considered this a deprivation of their rights. Eye-related problems, headaches, and anger were the most common side effects experienced by the children. [11]

The findings after the test showed that the mean post knowledge is average (60%) regarding ill-effects of excessive usages of computer and mobile phone on the health. (32%) adolescents have good knowledge and (6%) have excellent knowledge and only (2%) have poor knowledge regarding ill-effects of excessive usages of mobile phones and computers. [12]

Summary and Conclusion

Research supports that role-playing is an effective educational tool for parents to understand the ill results of excessive mobile phone use. Role-playing helps improve knowledge, awareness among parents and this will be helpful to take appropriate care of their children's effectively.

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