



A descriptive study to assess the knowledge regarding adverse effects of problematic use of mobile phones among adolescents of selected school at karaikal

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Abstract

Background: The mobile phone is modern technological invention, which has reached all parts of the world enabling speedy telecommunications worldwide. Today there is about 3.5 billion users. The use of mobile phones among young children and adolescent also increasing dramatically likewise the adverse effects of problematic mobile phone usage also increasing enormously.

Objectives: The present study aimed to assess the knowledge regarding adverse effects of problematic use of mobile phones among adolescents.

Method: The Descriptive survey approach was adopted in this present study. A total 50 adolescent school students were selected by using simple random sampling method. The tool used for data collection was structured knowledge questionnaire.

Result: This study result shows that among 50 adolescent students, 30 (60%) students have average knowledge regarding adverse effects of problematic use of mobile phone, 16 (32%) students have good knowledge, 3 (6%) have poor knowledge, only 1 (2%) has very good knowledge and none of them have very poor knowledge regarding adverse effects of problematic use of mobile phone. There was no significant association between the knowledge of the students with the demographic variables such as age, gender, religion, occupation of parents, education of parents, type of family, monthly income etc.

Conclusion: This study helps nurse researchers to develop appropriate health education tools for educating the students regarding adverse effects of problematic use of mobile phone at community level and institutional level.

Keywords: problematic, worldwide, regarding, invention

Introduction

Communication is essential in every area of life. The cellular telephone system is a means of providing portable telephonic services. Each phone is connected to a base station by a radio link; in turn this is linked to the telephone network connecting the whole world together. The mobile phone is a modern technological invention, which has reached all parts of the world enabling telecommunications across the world. In the year 2020, there were an estimated 3.5 billion mobile phone users worldwide. The usage of mobile phones among young children and adolescents are increasing vividly.

The growing number of smartphones and smartphone owners raises a concern about adverse effects on human health and life. The usage of mobile phones can lead to Cancers like Glioma, Acoustic neuroma, Meningioma etc because of its radio frequency radiations. The common physical side effects of mobile phone over use include headaches, tinnitus, increased risk of vision problem, skin damages, increase risk for chronic pains like text claw, cell phone elbow, tendonitis and text neck. Scientists have reported that other deleterious effects of using mobile phones are memory loss, increased reaction time, insomnia etc. Over use of mobile phones can cause social and behavioural problems. Studies shows that cell phone makes person more prone to depression, anxiety and low self-esteem. Risky use of mobile phone while travelling and driving causes increased rate of accidents. The unhealthy use of mobile phones results in increased risk of infections as the mobile phones are proved carrier of numerous micro-organisms. The problematic over use of mobile phone even

leads to mobile phone addiction; Nomophobia, Phantom pocket vibration syndrome. Cyber bullying is also an untoward effect of internet over usage.

Continued use and exposure of smartphone can have harmful effects on children. Impact of smartphone usage on children health and development is enormous. Among adolescents the smartphone usage affects their health, development and academic performance as well, and the adolescents are more prone for smartphone addiction too.

It is a projected need which is essential to increase the awareness of the negative effects of problematic phone use on their sleep wake patterns, with serious health risks, as well as cognitive and attention problems. Hence it demands the assessment of knowledge regarding the adverse effect of problematic use of mobile phones among adolescents and children.

Materials and Methods

The research approach adopted for the present study was Descriptive Survey. The research design used is Non-Experimental Descriptive Research Design. For present study the setting was SRVS National Higher Secondary School, Karaikal. The population of the study was comprised of adolescent students who were studying at SRVS National Higher Secondary School, Karaikal. The researcher collected relevant data from research subjects by using structured knowledge questionnaire. The questionnaire includes closed ended questions, and respondents has to pick an answer from the given number of options. The questionnaire was pretested among similar population by pilot study among 10 students and

modifications were done according to experience of pilot study.

After getting official permission from the school authority, the researcher selected 50 samples from 10th standard using simple random sampling technique. The students were asked to assemble in a class room and the investigator explained about the purpose of research study. All students those who have consented to participate in study were administered with structured knowledge questionnaire. 30 minutes were allotted to each student to solve this questionnaire, after the completion of time solved questionnaire were collected. The obtained data from the respondents were tabulated and analysed with appropriate descriptive and inferential statistics. The descriptive statistics used are mean, percentage, and inferential statistics are Chi-square used to associate the demographic variables.

Result

The analysis and interpretation of the data collected from the sample of 50 adolescent school children was organized as followed.

Section I: Frequency and percentage distribution of socio demographic characteristics of sample.

The sample characteristics selected for analysis in the study were age, religion, gender, occupation, education status, family monthly income, type of the family etc.

- Majority of respondents (95%) were in the age of 15 years and a least percentage of the sample was in the age group of above 15 years (3%) and below 15 years (2%).

- More than three fourth of the respondents (88%) were Hindus followed by 5% Muslim, 3% Christian and 4% Others
- Majority of respondents (60%) were females and only 40% were males.
- Nearly three fourth of respondents (77%) were from nuclear family and remaining 23% were from joint family.
- The majority of respondent’s fathers (43%) were farmers and others were government employee (23%), private employee (15%) and business men (19%).
- 85% of respondent’s mothers were housewives, and others were government employees (11%), private employees (3%) and self-employees (1%).
- The education level of respondent’s father was informal education (21%), secondary education (21%), P.U.C (23%) and degree and above (35%).
- The education level of respondent’s mother was informal education (26%), secondary education (40%), P.U.C (22%) and degree and above (12%).
- The respondent’s monthly family income was below 10.000/- (41%), 10.001-20.000 (34%), 20.001-30.000 (9%) and above 30.000 (16%).
- Percentage distribution of awareness program of students shows that the majority of respondents (42%) were attend the program and 58% were not attend the program.

Section II: Assessment of knowledge on adverse effect of problematic use of mobile phones among Adolescents.

Table 1: Level of knowledge of adolescents regarding adverse effects of problematic use of mobile phone (N=50)

Level of Knowledge	Range of Score	Number of Study Subjects	Percentage %
Very Poor	0-4	0	0
Poor	5-8	3	6
Average	9-12	30	60
Good	13-16	16	32
Very Good	17-20	1	2

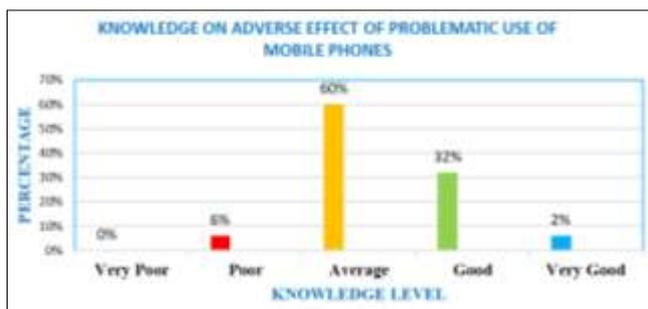


Fig 1

Table 1. depicts the findings of the knowledge of students on adverse effects of problematic use of mobile phone. 30 (60%) of the students have average knowledge about adverse effects of problematic use of mobile phone, 16 (32%) of the students have good knowledge, 3 (6%) of the students have poor knowledge, 1 (2%) the student has very good knowledge and no one have very poor knowledge. The mean value of overall knowledge score of students regarding adverse effects of problematic use of mobile phone was 9.38 and the standard deviation was 2.27.

Section II: Association between knowledge regarding adverse effect of problematic use of mobile phone and selected demographic variables.

Table 2: Association between knowledge regarding adverse effects of problematic use of mobile phone and selected demographical variables.

S. No.	Variables	X ²	T value	Df	5% level of significance
1	Age	0.42	3.84	1	Not Significant
2	Gender	1.91	3.84	1	Not Significant
3	Religion	0.68	3.84	1	Not Significant
4	Occupation of father	2.68	3.84	1	Not Significant
5	Occupation of mother	0.89	3.84	1	Not Significant
6	Education of father	2.57	3.84	1	Not Significant
7	Education of mother	2.80	3.84	1	Not Significant
8	Monthly family income	2.92	3.84	1	Not Significant
9	Type of family	2.00	3.84	1	Not Significant
10	Attended awareness programme	1.27	3.84	1	Not Significant

Chi -square test was done to find out the association between

the knowledge of adolescents and the selected demographic variables. Hence there was no significant association between knowledge of students and the demographical variables.

Conclusion

The purpose of the present study was to find out the knowledge regarding adverse effects of problematic use of mobile phone and to estimate the association between knowledge with various demographic variables among the adolescent students from selected school at Karaikal. Results of the present study highlighted that the adolescent students have knowledge regarding various physical health hazards and psychological health hazards of mobile phone but many of them have lacks the knowledge regarding the adverse effect of problematic use of mobile phones. By considering this finding it is clear that the some of the interventional steps have to be taken on individual as well as institutional level to increase the awareness for students regarding adverse effects of problematic use of mobile phone use. The technology always helps the human beings for his progress but its overuse without knowing about its hazards is always dangerous. The present study highlighted this truth. So, it is necessary to recognize this truth and some action has to be taken.

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