



Research Article

**A STUDY TO ASSESS THE EFFECTIVENESS OF ORGANISED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HAZARDS OF USING MOBILE PHONES AMONG HIGH SCHOOL STUDENTS IN SELECTED SCHOOL AT BANGALORE, KARNATAKA, INDIA**

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**ABSTRACT**

**Background:** Use of mobile phones has both pros and cons but it has deleterious effect among students especially related to medical field. **Objectives:** to assess the effectiveness of structured teaching program on knowledge regarding hazards of using mobile phones among high school students in selected school at Bangalore, Karnataka, India. **Methods:** An evaluation research approach was used to assess the effectiveness of structured teaching program on knowledge regarding the hazards of using mobile phone among high school students in selected school in Bangalore. **Statistics:** Percentage was calculated for both pre-test and post-test. **Results:** Majority of students 19(63.3%) were in the age of 13-14 years. Most of the students 18(60%) were female. Majority of the students 16(53.3%) were Hindu. Most of them belongs to nuclear family 20(66.6%). Most of them have the family income of 14(46.6%) < 10,000. Most of them have total No. of siblings 17(56.5%). Most of them have monthly pocket money 27(90%) 100-200. Most of the students spend on mobile recharges 25(83.3%). Most of the students got information on hazards of using mobile phones through from friends 10(33.3%). Most of the students 18(60%) were not having any knowledge regarding side effects of mobile phones. The mean pre-test knowledge school scores were inadequate (70%). The mean post-test knowledge score was improved and it was found adequate (72%). **Conclusion:** There is significant difference between pre-test and post- test knowledge scores and it is evident that STP is significantly effective in improving knowledge regarding hazards of using mobile phones, high school students.

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**INTRODUCTION**

A mobile phone is a small electronic device used for communication and it is also used for text messaging, email etc. including access to the Internet, and MMS for sending and receiving photos and video<sup>1</sup>.

Mobile phone has become widespread use among children and adolescents and previous surveys finds that about 76%, 79% and 94 % in Hungary, Sweden and Germany respectively<sup>2-4</sup>. Past knowledge and experience is based on new knowledge related to learning and teaching becomes an integral part in nursing.

Nurses play a responsible role in various aspects related to patient and hence have to keep themselves updated always. In nursing practice, organized teaching helps to increase knowledge which includes lecture, demonstrations, discussions and etc<sup>5</sup>.

Hence the following study has been undertaken with following objectives

- To assess the knowledge of high school students regarding hazards of using mobile phone.
- To administer STP on knowledge of high school students regarding hazards of using mobile phones.
- To assess the effectiveness of structured teaching programme on knowledge of high school students regarding hazards of using mobile phones by comparing pre-test and post test scores.
- To find out the post-test knowledge scores of high school students regarding hazards of using mobile phones with selected demographic variables.

**METHODOLOGY**

**Ethical Consideration**

Prior permission was obtained for conducting study from head master of the school and informed consent was obtained from study participants.

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1. Consent was obtained from the study sample. Explanation was given regarding the purpose of the study.
2. The subjects were informed that the confidentiality of the data will be maintained.
3. The subjects were informed that the participation was purely under voluntary basis and can withdraw from the study at any time.

1. Willing to participate in the study
2. Can read and understand the medium of language being taught.

### Research Approach

An evaluation research approach was used to assess the effectiveness of structured teaching program on knowledge regarding the hazards of using mobile phone among high school students in selected school in Bangalore.

### Research Design

Research design adopted for this study was quasi experimental design to compare effectiveness of STP in terms of increased scores of knowledge regarding hazards of using mobile phones among high school students at selected schools at Bangalore

**Table 1** Schematic Representation of Research Study

GROUP	Pre-test	Intervention	Pos-test
High school students	Knowledge on hazards of using mobile phones	STP	Knowledge on hazards of using mobile phones
	1	X	2

1- Knowledge test for high school students regarding hazards of using mobile phones (pre-test)

X – Intervention, STP- Structured teaching program.

2- Knowledge test for high school students regarding hazard of using mobile phone after STP. (post-test)

### Variables of the Study

**Independent variables:** Structure teaching program on hazard of using mobilephones among High School students.

**Dependent variables:** Knowledge of High School students on hazard of using mobile phones.

**Demographic variables:** Age, gender, religion, type of family, income of the family, total numbers of siblings, monthly pocket money receive from parents, money spent on for mobile recharge, source of information.

### Setting of study

The study was conducted at selected High School in Bangalore.

### Population

In this study population was students from selected High School Bangalore.

### Sample size

The sample size consists of 50 students from selected High School in Bangalore.

### Sampling technique

The sampling technique selected for the study involves convenient sampling.

### Criteria for Sample Selection

#### Inclusion Criteria

High Students who were

#### Exclusion Criteria

1. Not available at the time of data collection
2. Have recent knowledge on mobile phone hazards

#### Tools for the Data Collection

**Section A:** It comprised information regarding socio demographic data of high school children and it includes items like

Age, gender, religion, type of family, family income, total number of sibling, monthly pocket money receives from parents, source of information, knowledge regarding hazards of using mobile phone.

**Section B:** It includes 20 items on knowledge among high school students regarding hazards of using mobile phones

**Description of STP.** STP was prepared based on title of the topic and objectives selected for the study

The STP was titled as “hazards of using mobile phone”. The STP was prepared to enhance the knowledge regarding hazards of using mobile phones. It consists of the following contents such as definition, uses, function, factors affecting the market demand and supply for mobile phones, health hazards of using mobile phones, bad effects of mobile phone on children, mobile phones safety for kids, diseases cause by using mobile phones and prevention and precautions of using mobile phone.

**Scoring Technique;** To interpret knowledge score total scores were distributed as follows.

Each item carry 1 mark for correct response and wrong answer will give as 0. The total score was 20 which are classified as follows in study.

- Adequate 15-20
- Moderate 8-14
- Inadequate 1-7

#### Content Validity

Content validity of the tool was obtaining the suggestion from nursing faculty. The suggestions were incorporated in the tool and STP was further modified and finalized.

#### Reliability of the Tool

The reliability was established by using the split half method and which indicates the tool is reliable

## RESULTS

It is observed that out of 50 high school students, 28(56%) were in the age group of 13-14 years and 22(44%) were between 15-16 years. Majority of high school students were females 36(72%) and 14(28%) were male.28(56%) were belongs Hindu religion 10(20%) were Christians and 12(24%) were Muslims. Majority of the subjects were from nuclear family 40(40%) and only 5(10%) were belongs to joint and single parent family respectively. As per family income in concerned 25(50%) were belongs less than Rs. 10,000/-, 16(30%)were belongs to Rs. 10,000/- Rs. 20,000/-, 4(8%) were between Rs. 20,000/- to Rs. 30,000/- and only 6(12%) were belongs to family income of Rs. 30,000/- and above.

Majority of high school students 39(78%) were received Rs.100/- to Rs.200/- monthly pocket money from their parents. Majority of subjects 35(70%) spend Rs.100 for their mobile phone recharge, 8(16%) spend Rs.200/-, 4(8%) spend Rs.300/- and 3(6%) were spend Rs.400/- and above for their mobile recharge. 36(72%) of high school students have no knowledge regarding side effects of mobile phones and only 14(28%) were having knowledge regarding side effects of mobile phones.

**Table 2** Pre-test knowledge regarding hazards of using mobile phone among high school students

Sl. No.	Knowledge	Pre test	
		Frequency	Percentage%
1	Inadequate	35	70.0
2	Moderate	15	30.0
3	Adequate	00	0.00
4	Total	50	100
N=50			

**Table 2** shows that majority of respondent 35(70%) found as inadequate knowledge. Post-test knowledge regarding hazards of using mobile phone among high school students.

**Table 3** Post-test knowledge regarding hazards of using mobile phone among high school students

Sl. no	Knowledge score	Post test	
		Frequency	Percentage %
1	Inadequate	00	0.00
2	Moderate	14	28
3	Adequate	36	72
	Total	50	100
N=50			

**Table 3** shows that majority of respondents 36(72. %) found as adequate knowledge, 14(28%) found as moderate knowledge frequency and percentage distribution of effectiveness of STP by comparing pre-test and post-test knowledge.

**Table 4** Pre and post-test knowledge regarding hazards of using mobile phone among high school students

Sl. no	Knowledge	Pre test		Post test	
		Frequency	Percentage%	Frequency	Percentage%
1	Inadequate	35	70	00	0.00
2	Moderate	15	30	14	28
3	Adequate	00	00	36	72
4	Total	50	100	50	100
N=50					

**Table. 4** shows that pre-test out of 50 high school students majority of them 35(70%) found as inadequate knowledge, 15(30%) found as moderate, 0(0%) found as adequate. In post -test knowledge scores majority of them 36(72%) found as adequate knowledge, 14(28%) found as moderate knowledge. The result findings suggest that the difference in post -test compared to pre-test knowledge level is better.

Here H1 is accepted that there will be a significant difference between pre-test and post-test knowledge score on hazards of using mobile phones among high school students of selected school.

**Table 5** Frequency and percentage of effectiveness of STP by comparing pre-test and post-test Mean, Standard deviation and mean percentage

Knowledge score	Pre test			Post test			Mean difference
	Mean	SD	Mean%	Mean	SD	Mean%	
50	7.6	5.06	38	15.5	10.3	77.5	7.9

**Table.5** represents the comparison of pre-test and post-test Mean, Standard deviation, mean% and mean deviation. It shows that there is a significant difference between pre-test and post-test mean score (12%). It is evident that the STP is significantly effective in improving the knowledge regarding hazards of using mobile phone.

## References

1. Ganesamurthy VS. Cell phone misuse. The Hindu 5(2). April 24, 2007. Retrieved from <http://www.thehindu.com/todays-paper/tp-national/tptamilnadu/cell-phone-misuse/article1832720>.
2. Mezei G, Benyi M, Muller A. Mobile phone ownership and use among school children in three Hungarian cities. *Bioelectromagnetics*. 2007; 28:309–315. doi: 10.1002/bem.20270.
3. Söderqvist F, Hardell L, Carlberg M, Mild KH. Ownership and use of wireless telephones: a population-based study of Swedish children aged 7–14 years. *BMC Publ Health*. 2007; 7:105. doi: 10.1186/1471-2458-7-105.
4. S, Kühnlein A, Radon K. The association between socioeconomic status and exposure to mobile telecommunication networks in children and adolescents. *Bioelectromagnetics*. 2010; 31:20–27.
5. Shinde, M., & Anjum, S. (2007). *Educational Methods and Media For Teaching In Practice Of Nursing*. Sneha Publication India (Dombivili). Available at <http://www.getcited.org/pub/103529546>

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