International Journal of Allied Medical Sciences and Clinical Research (IJAMSCR)

IJAMSCR |Volume 1 | Issue 2 | Nov - 2013
www.ijamscr.com

Research article

A study to assess the information of communication on Knowledge regarding hazards of mobile Phone uses and prevention among Adolescents

***Angel Rajakumari.G[1], Dr. Sunitha M, Soli.T.K[3]**

[1]Vice Principal,Department of Obstrectics and Gynecology, Chandana College of Nursing, Suryapet, Andharapradesh, India.

[2]Principal, Shaadan women's college of Pharmacy, Khairatabad, Hyderabad, India

[3]Staff Nurse, Paras Hospital, Gurgaon, India

ABSTRACT

Aim

To evaluate the effectiveness of knowledge and attitude on hazards of mobile phone uses and prevention among nursing adolescents

Participants and setting

The objective of the study was to evaluate the effectiveness of education knowledge and attitude on hazards of mobile phone uses and prevention among adolescents. Descriptive design was adopted and the study was conducted in suryapet.50 adolescents who fulfilled the inclusion criteria were selected by using non-probability convenient sampling technique.

Intervention

Data was collected regarding demographic variable, knowledge and attitude of the adolescents on hazards of mobile phone uses and prevention. The investigator assessed the level of knowledge and attitude of the adolescents by using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. Structured teaching programme was conducted on the same day on group wise each group consists of 10 members. Data collection was done in Telugu and English the questionnaire was distributed to each adolescents. At the end of the teaching the doubts were cleared. Then 10 minutes was allotted for discussion.

Measurement and findings

The study revealed that 72% of adolescents had good knowledge and 22% had average knowledge. It was found that majority (80%) of adolescents had positive attitude and 14% had negative attitude towards hazards of mobile phones. The effectiveness of programme showed high level of significant at $p<0.001$ level. It showed that structured teaching programme was an effective method to improve the knowledge and attitude there by the avoiding phone usage.

Conclusion

Adolescents tend to adopt negative attitude towards hazards of mobile phones only after they have good knowledge regarding hazards of mobile phone uses and prevention. On the basis of the results of the present study, it may be suggested that youth should be aware regarding the complications and consequences of mobile phone usage.

KEY WORDS: Adolescents, hazards of mobile phone, prevention, knowledge, Attitude

INTRODUCTION

Human are social being. People are different from one individual to another. Every individual have their unique lifestyle. People have their own way of choice in spending their leisure time. These activities become habits when they do it regularly. This habit can be healthy and unhealthy to people.

*** Corresponding author: Angel Rajakumari.G**

Some habits like playing indoor and outdoor games, reading books, cooking, gardening, doing exercise etc, help the individual to improve their physical and mental well-being, but some habits like watching television, playing video games, using internet excessively etc diminishes their physical health as well as mental health. These habits becoming common in all age groups.[1] Communication is essential in day to day life. In ancient period they had used postal letter, trunk call, fax etc. Evolution of scientific technology has brought enormous changes in the communication pattern. Sharing of information become very easy with help of computer and mobile phone. They do many wonders like sending sms, mms, e-mail, voice messages, video conferences etc. Even though these facilities are available in computer, mobile phones are affordable and portable. Mobile phone have revolutionized modern communication and empowered consumers. However like many consumer technology, applications of mobile phones, internet, and computer have their own distinctive advantages and disadvantages.[2] Mobile phone is a small, portable communication device that enables people to make phone call whenever they need to communicate Mobile phone becomes more and more a necessary tool in people`s daily life. The wireless communication function is the best advantage provided by a mobile phone. The ability to communicate via voice, text and even email has made anywhere, anytime human-to-human interaction possible across vast geographical areas.[3] The advent, acceptance and proliferation of mobile phones have democratized opportunities and avenues for millions of people. Rural, hilly areas and underserved areas are now interconnected to urban areas due to advanced cellular communication technologies. Mobile phones can be used to transmit report of early warnings concerning various emergencies such as weather-related disasters, accidents and crimes etc .These information can be obtained in finger tips within a few seconds. Industries, businesses etc are using mobile phone as new tool for improve their services to their customer. Due to many advanced applications mobile phones help to remind important events like mobile phone banking, next immunization schedule etc.[4] Even though mobile phones have many advantages there are some hazards as mobile phone like limited attention span other activities, road accident is using mobile phonewhile diriving. The negative physical health effects of excessive mobile phone usage leads to female and male infertility, cancer of parotid glands, irregular sleep, blurred vision, headache, impaired hearing, fatigue, pain in the hands, back and neck soreness due to poor posture. Other than physical complaints psychological symptoms are anxiety, restlessness, stress, irritable, mood swings, depression, aggressive behavior, bullying behavior, memory loss, and ring anxiety etc.[5] The ill effects of mobile phone radiation is very worrisome in all age group. Mobile phone addiction is one of the problems among young adults. That is using mobile phone long time for chatting, unnecessary checking the phone, becoming irritable when they are not getting call, sending messages, taking photos and send through multimedia messages and whatapps, sending bad messages, talking and sending messages to unknown number, night also they are checking messages between sleeping. Young adults spend more than 6 hours on the mobile phone every day. Thus young adults become vulnerable group to be affected with the negative effect of extra mobile phone usage. Those health effects apply to young adults can be expected to have even more severe health issues due to the increased absorption of the radio frequency radiation levels. Radio Frequency radiation is a proven health risk, and especially young adults can have minimal exposure to the ill effect of excessive mobile phone usage by educating young adults through the properly designed prevention programme.[6] Mental health problems have been increasing among young people around the world. The quick development and widespread use of mobile phones, and their vast effect on communication and academic, work and private life, it is important to know about possible negative health effects of the exposure. Extensive focus has been on exposure to electromagnetic fields (EMF). Self-reported symptoms associated with using mobile phones most commonly include headaches, earache, and warmth sensations and sometimes also perceived concentration difficulties and fatigue. However, electromagnetic fields exposure due to mobile phone use is currently known to have major health effects.[7] Young people are more attracted and addicted to mobile phone due to its variety of application. Today`s society also give the status of

people depend on type and number of mobile phone used. The recently released Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) describes "mobile phone addiction" using the following 11 criteria: (1) use in larger quantities or over longer amounts of time than initially intended, (2) Unable to reduce the excessive use, (3) spending a great deal of time obtaining, using, or recovering from the mobile phone, (4) craving, (5) recurrent use of mobile phone resulting in a failure to fulfill major role obligations, (6) though social/interpersonal problems, unable to control the mobile phone usage, (7) neglect of other important activities because of mobile phone use, (8) use in situations in which it is physically hazardous, (9) continued use of the mobile phone despite adverse physical or psychological consequences associated with use, (10) tolerance(increased time to using mobile phone day by day), and (11) withdrawal symptoms (people become irritable, aggressive, mood changes etc when they are not receiving calls or messages).[8]

MATERIALS AND METHODS

The researcher obtained a formal permission from Village Administrative Officer, Suryapet. The investigator selected 50 adolescents by non-probability convenient sampling technique. An oral consent was obtained from the adolescents. A brief introduction about self and the study was given by the investigator and confidentiality of the responses was assured. The data was collected by self-administered questionnaire. The investigator collected 10 samples per day to assess the knowledge and attitude by using structured knowledge questionnaire and modified five point Likert scale. The investigator issued the questionnaire to the respondents, after the completion of the questions he received back the questionnaire. The interview was conducted in Telugu and English. Ethical aspects were considered throughout the study. Analysis of socio demographic data of adolescents on hazards of mobile phones was done in terms of frequency and percentage distribution. Mean and standard deviation was used to compute the knowledge and attitude of adolescents on hazards of mobile phone uses and prevention. Correlation coefficient was used to study the correlation between knowledge and attitude with selected socio demographic variables.

DESCRIPTION OF THE RESEARCH TOOL

It consists of three sections.

SECTION A

Section A consist of demographic variables such as age, year of study, gender, religion, father`s education, mother`s education, type of family, monthly expenses for mobile phone, residential area, family income, source of information, duration of mobile phone using.

SECTION B

The level of knowledge regarding hazards of mobile phone uses and its prevention were assessed through self-developed knowledge questionnaire.

Part I: Questions related to hazards of mobile phone uses and prevention.

SECTION C

Modified three point Likert scale to assess the attitude regarding hazards of mobile phone uses and prevention. This section includes 10 items with choices as agree, uncertain and disagree.

SCORING PROCEDURE

SECTION B

The total number of knowledge questions was 20. All the questions had four alternatives with one right answer. A score of "one" was given for every correct answer and score of "zero" was given for every wrong answers. The total score was converted into percentage and interpreted as follows,

Adequate knowledge - >75%
Moderate knowledge - 50 – 75%
Inadequate knowledge - <50%

SECTION C

To interpret the level of attitude the score was classified as,

Positive attitude - >75%
Favorable attitude - 50 – 75%
Negative attitude - <50%

Attitude questions consist of both positive and negative statements. The score given for positive questions were as follows,

Agree - 2
Uncertain - 1
Disagree - 0

Similar for attitude negative question scored as follows,

Agree - 0
Uncertain - 1
Disagree - 2

RESULTS

Table 1: Mean and standard deviation of knowledge and attitude on hazards of mobile phone uses and prevention among adolescents

N=50

Domain	Pretest		Posttest		't' value
	Mean	S.D	Mean	S.D	
Knowledge	6.69	1.345	16.45	1.09	39.86*** (S)
Attitude	7.67	1.90	13.67	1.453	17.73*** (S)

*p<0.05, **p<0.01, ***, S – Significant

Table 1 denotes the mean and standard deviation of knowledge and attitude and hazards of mobile phone uses and prevention among adolescents. Observing the pretest level of mean knowledge score was 6.69 with S.D 1.345 and posttest level of mean knowledge score was 16.45 with S.D 1.09 and the't' value of 39.86 showed high level of significance. With respect to the pretest mean attitude score was 7.67 with S.D 1.90 and posttest mean attitude score was 13.67 with S.D 1.453 and the't' value of 17.73 showed high level of significance.

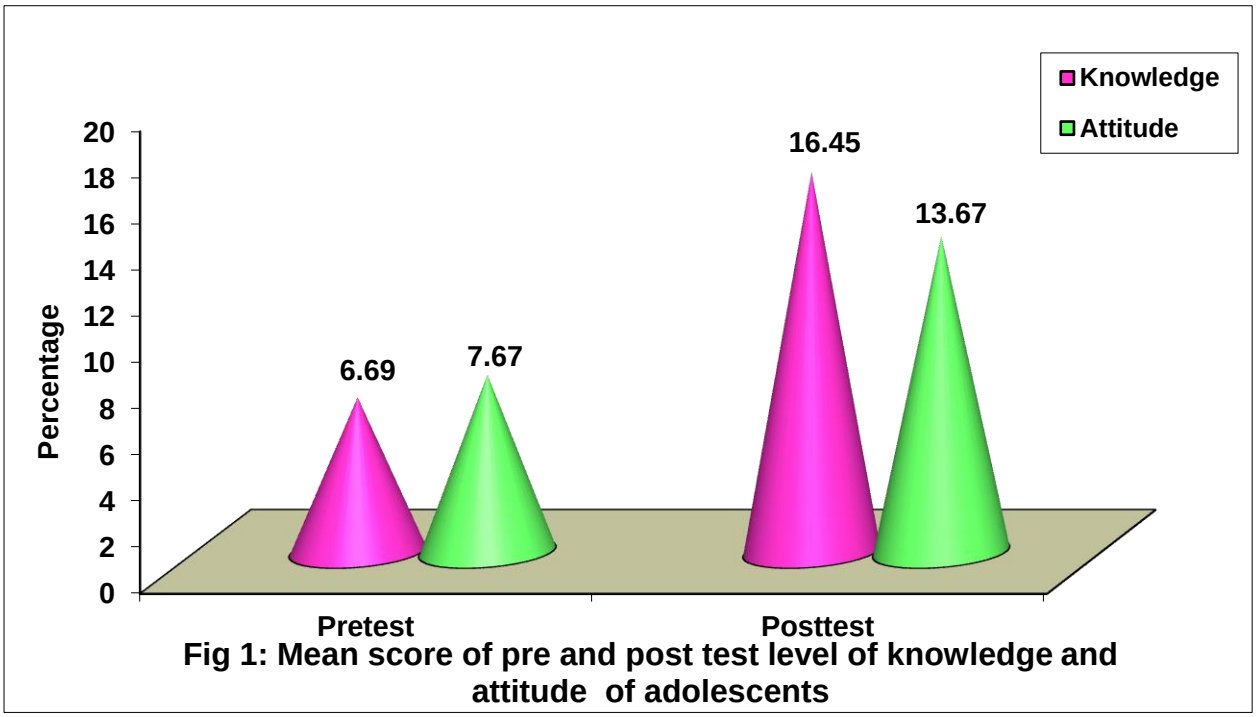

Fig 1: Mean score of pre and post test level of knowledge and attitude of adolescents

Table 2: Correlation of pre and posttest level of knowledge and attitude on hazards of mobile phone uses and prevention among adolescents

N = 50

Domain	Knowledge		Attitude		'r' value
	Mean	S.D	Mean	S.D	
Pretest	6.69	1.345	7.67	1.90	0.21*
Posttest	16.45	1.09	13.67	1.453	0.61***

*p<0.05, ***p<0.001

Table 2 shows the correlation of pre and posttest level of knowledge and attitude on hazards of mobile phone uses and prevention among adolecesents**.** The analysis reveals that the pretest level of knowledge mean score was 6.69 with S.D 1.345, the attitude mean 7.67 with S.D 1.90 and overall 'r' value was 0.21 which significant at p<0.05 level.The posttest level of knowledge mean score was 16.45 with S.D 1.09, the attitude mean 13.67 with S.D 1.453clearly indicates a positive correlation between knowledge and attitude (r = 0.61) which is significant at p<0.001 level.

DISCUSSION

Table 1 denotes the mean and standard deviation of knowledge and attitude and hazards of mobile phone uses and prevention among adolecesents. Observing the pretest level of mean knowledge score was 6.69 with S.D 1.345 and posttest level of mean knowledge score was 16.45 with S.D 1.09 and the 't' value of 39.86 showed high level of significance. With respect to the pretest mean attitude score was 7.67 with S.D 1.90 and posttest mean attitude score was 13.67 with S.D 1.453 and the't' value of 17.73 showed high level of significance. Table 2 shows the correlation of pre and posttest level of knowledge and attitude on hazards of mobile phone uses and prevention among adolecesents**.** The analysis reveals that the pretest level of knowledge mean score was 6.69 with S.D 1.345, the attitude mean 7.67 with S.D 1.90 and overall 'r' value was 0.21 which significant at $p<0.05$ level. The posttest level of knowledge mean score was 16.45 with S.D 1.09, the attitude mean 13.67 with S.D 1.453clearly indicates a positive correlation between knowledge and attitude ($r = 0.61$) which is significant at $p<0.001$ level.

CONCLUSION

The present study concludes that adolescents tend to adopt negative attitude towards prevention of mobile usage only after they have good knowledge regarding hazards of mobile usage. On the basis of the results of the present study, it may be suggested that youth should be aware regarding the complications and consequences of complications of mobile usage so that they may adopt the negative attitude towards hazards of mobile phones and plan their future life accordingly. A lot of educational activities and improvement in the alcohol awareness programmes are needed to promote the good knowledge and negative attitude towards hazards of mobile usage to make the future life better. The information education communication about level of knowledge regarding hazards of mobile phone uses and its prevention improved knowledge of young adults.

REFERENCES

[1]. Asbridge.M & Fukuma (2013) The correlation between motor vehicle crash and cell phone use. Journals of psychological researches, 54 (4)127-129.
[2]. Annika Harenstam and Maerses (2011) The relation between mobile phone uses and psychological problem. Journal of behavioral psychology, 36 (5) 321-324.
[3]. Kheiefets (2010) Perception radiation from mobile phone. Journal of abnormal clinical studies, 18(23) 121-122.
[4]. Moissonier (2009) The risk of mobile uses and physical problems. Journal of psychological researches
[5]. Van Den Buluk (2011) The impact of mobile phone addiction and sleep pattern. Journal of abnormal clinical studies,51(32) 31.
[6]. Tochigi (2012) The impact of mobile phone and sleep pattern. Journal of abnormal clinical studies, 21(29) 321.
[7]. Rika & Ferickmarts (2009) The mobile phone addiction and ring anxiety. Journal of abnormal clinical studies, 1(27) 11-12.
[8]. Sanchez M (2011) .The impact of mobile phone addiction and sexual risk behavior among adults. Journal of personality and clinical studies, 31(20) 234.