



EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING IMPACT OF MOBILE PHONE USE ON HEALTH STATUS AMONG NURSING STUDENTS OF SELECTED NURSING COLLEGES, BANGALORE

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ABSTRACT

Human being is a social animal. To socialize with others, we need to share over views, beliefs, feelings etc. This sharing is facilitated by communication. Communication is the transfer of information from person to person. This may be in form of sound transmission such as human speech, the beating of the drum, or even the bird's call. It can also be in a form that requires sight like writing, pictures, and signals, gestures and a form that requires the utilization of other senses. There are many means on how you can reach out to other people to communicate and one of this is the use of a mobile cell phone. It can be used for business calls that binds two or group of people to convey messages to each other and these are possibly made for colleagues and business men or employers to conduct business and meetings anytime, anywhere. Objectives: - 1.To assess the existing level of knowledge regarding impact of mobile phone use on health status among the nursing students of selected nursing college, Bangalore.2. To develop and administer a video assisted teaching programme on knowledge regarding impact of mobile phone use on health status among the nursing students of selected nursing college, Bangalore. 3 .To assess the effectiveness of video aid teaching programme on the impact of mobile phone use on health status among the nursing students of selected nursing college, Bangalore, by post-test knowledge score. 4.To find out the association between the post-test knowledge regarding impact of mobile phone use on health status among nursing students with selected demographic variables. Design:-Pre-experimental design (one group pre-test post-test design) was used for the study to see the effectiveness of Video assisted teaching. 50 nursing students, in selected nursing college, Bangalore were recruited by non-probability purposive sampling technique. Necessary administrative permission was obtained from concerned authority. Structured interview schedule was used to elicit the baseline data and structured questionnaires and video assisted teaching were used to elicit the knowledge regarding impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore. Setting:-The study was conducted in selected nursing college, Bangalore, 50 samples were recruited for the present study. Result: - The data was analyzed by using descriptive and inferential statistics. Knowledge of nursing students was assessed and tabulated, out of 50 nursing students reveals that 16 (32%) participants were in inadequate knowledge, 34 (68%) participants were in moderate knowledge in pre-test but it was decreased in post-test that is 48 (96%) participants were in adequate knowledge 2 (4%) were in moderate knowledge in post-test and there was no inadequate knowledge found in post-test. Paired't' value of knowledge was 12.5 which is greater than the table value and found statistically significant. Conclusion: - The overall experience of conducting this study was satisfying and enriching the



knowledge. The study was a new learning experience for the investigator. The study shows that there is a great need to develop and implement video assisted teaching programme for various topics and procedures. Study was found to be effective in the improving knowledge of nursing students as evidenced by the significant change between pre-test and post-test knowledge score. The study reveals that the video assisted teaching programme can be used as an effective teaching learning method.

Key Words: Knowledge, Effectiveness, Video Assisted Teaching Programme, Impact of Mobile Phone Use.

INTRODUCTION

Mobile phone is a small, portable communication device that enables people to make phone calls whenever where they are. Signal transmission is the very basic concept for mobile phone. The convenience of mobile phone is allowing people to communicate with one another without the limitation of regions and time. Mobile phone is a device providing two-way communication. The technology influencing on mobile phone started back in the mid twentieth century. The very first mobile telephony service was in Sweden. The concept of mobile phone was invented during the Second World War by the American Dr. Martin cooper in April 1973 at New York. Mobile phones were invented because people wanted to communicate faster and at different locations.¹

The whole world is gripped by the mobile craze. Whether it is a student, housewife, shopkeeper, rickshaw driver, and milkman, professional, rich or poor, almost everyone carries a cell phone in his/her hand. A Mobile phone is a must have item for many an average teenager. Many people spend more than six hours a day on their phones in talking, texting or playing games. The extensive use of cell phone is making us addict of this small device. Just like every medicine has its side effects, cell 2 phones also have some drawbacks. The increased usage of mobile phone has increased the magnitude of potential health risks among its users.²

The mobile phone could be the most incredible device ever made in the consumer world. The mobile phone which started as a bulky device for voice communication has in the last 15 years, morphed into lean models with a bewildering array of features. However among the billion plus consumers worldwide, the prime utility of the mobile phone remains voice.³

Telephony introduced in India in 1882. According to recent reports, India was purported to overtake China to become the world's largest mobile telecommunications market by the year 2013. It was also predicted that by 2013, the teledensity will shoot up to 75% and the total mobile subscriber base would be a colossal 1.159 billion.⁴

According to MIC (Market Intelligence Center), an ICT industry research institute based in Taipei, global mobile phone subscribers hit 3.1 billion in 2007, with the global mobile phone penetration rate reaching approximately half of the global population, growth momentum of global subscribers is expected to slow down after 2008. The CAGR (Compound Annual Growth Rate) of global mobile phone subscribers is expected to reach

7.9% during the period 2007-2012, boosting the number of global mobile phone subscribers to 4.5 billion in 2012, with penetration rate hitting 64.7%, up from 46.8% in 2007.⁵

WHO confirmed that mobile phone use may represent a long-term health risk, classifying mobile phone radiation as a carcinogenic hazard and possible carcinogenic to humans'. one study of past cell phone use cited on the report showed a 40% increased risk for gliomas (Brain cancer). Radiation from cell phones can possibly cause cancer According to the WHO.⁶

Cell phone damage key brain cells and could trigger the early onset of Alzheimer's disease, Researchers have found that radiation from cell associated with learning, memory, and movement. people who use a cell phone for hours a day are 50% more likely to develop mouth cancer than those who do not talk on them at all new research has shown. People who used cell phones were 2 ½ times more likely to have a temporal brain tumor on the side of the head where they held their phone.⁷

Today the fastest growing group of mobile phone users is the children and young people. This growth is actively encouraged by the professional advertising campaigns from the mobile phone industry in which the indispensability of the phones to their life styles. In today's world, the mobile phone plays a vital role in the millennium goal. It comes under the category of 8th goal: Develop a global partnership for development (trade/aid/debt). Its target is in cooperation with the private sector, make available benefits of new technologies, especially information and communication. Increased access to communication technologies such as mobile phones brings many new opportunities for sharing information.⁸

The adolescents and children are more attracted for the mobile phones; they are more addicted and crazy for these mobile phones. The tissues of children's are tender and they are likely to more affect by use of mobile phones. Children below 16 years should be discouraged from using mobile phones. The adolescents between 14-18 teens 96% of them have at least one mobile and 22% of them own multiple mobile phones. They all use mobile all the day a third makes call over 6 minutes long, half is poorly informed about their potential health risks related to electromagnetic pollution. They perceive its noxious but only 23% holds it far from the body, very small percent uses hand free kit.⁹



Telecom operator added a whopping 22.88 million mobile subscribers in November 2010, taking the total number of telephone users in the country to 764.76 million, sectorial Regulator TRAI today said according to data released by telecom Regulator Authorities of India, the mobile subscriber base increased to 729.57 million by the end of November 2010 from 706.69 million in the preceding month, registering a growth of 3.24%. with this, the overall Teledensity (telephones per 100 people) in India touched 64.34 per cent.¹⁰

The total numbers of mobile phone subscribers have reached 851.70 million. The mobile tele-density has increased to 71.11 % in June 2011. In the wireless segment. Indian telecom operators added a staggering 227.27 million wireless subscribers in the 12 months between Mar 2010 and Mar 2011 averaging at 18.94 million subscribers every month, Indian telecom operators added a staggering 227.27 million wireless subscribers in the 12 months between Mar 2010 and Mar 2011 averaging at 18.94 million subscribers every month.¹¹

MATERIALS AND METHODS

The research design adopted for this study is Evaluative Research Approach. The research design used for this study Pre-experimental (one group pre-test post-test) research design. The study was conducted in selected nursing college, Bangalore. The sample size of this study comprised of 50 nursing students, in selected nursing college, Bangalore, who met the inclusive criteria were selected through the purposive sampling technique. Structured interview schedule was used to elicit the baseline data and Video assisted teaching on impact of mobile phone use on health status was administered for nursing students at selected nursing college, Bangalore.

Necessary administrative permission was obtained from concerned authority. A letter requesting permission was sent to the concerned authority of the selected nursing college, Bangalore, prior to the data collection during the month of December 2020, and permission was granted for the same. The data was collected in the month of January, 2021 selected nursing college, Bangalore. The data was collected from 50 nursing students by using purposive sampling technique. The purpose of the study was explained to the group and confidentiality of their responses was assured. After obtaining the permission and consent, the pre-test was administered using the questionnaire followed by Video assisted teaching. After 7 days, the post-test was administered by using same questionnaire for evaluating the effectiveness of video assisted teaching regarding knowledge on impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore.

RESULTS

Assessment of level of knowledge regarding impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore.

The data presented in table 1 shows that in the pre-test majority of nursing students 34(68%) having moderate knowledge on impact of mobile phone use on health status but in post-test majority of the 48 (96%) nursing students having adequate knowledge on impact of mobile phone use on health status and there was no inadequate knowledge found in post-test.

Table1: Frequency and percentage distribution of pre-test and post-test level of knowledge of impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore

n=50

Level of knowledge	Score	Pre -test level of knowledge		Post-test level of knowledge	
		Frequency(f)	Percentage (%)	Frequency(f)	Percentage (%)
Adequate	80-100%	0	0	48	96
Moderate	50-79%	34	68	02	04
inadequate	Below 50%	16	32	0	0
Total		50	100	50	100

EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME

The findings in the above table reveals that the post-test mean % knowledge score (mean % =89.91% and standard deviation SD=1.29) was found higher than pre-test mean % knowledge score (mean % =75.41%). The

statistical paired‘t’ test implies that the difference in the pre-test and post-test value was found to be paired‘t’ 12.5. This shows statistical significant enhancement in the knowledge score and indicating the positive impact of video assist teaching.



Table 2: Range, Mean, Standard Deviation and Mean score percentage of gain in knowledge regarding of knowledge of impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore.

n=50

	Maximum	Mean	Standard deviation	Mean %	't' value
Per-test knowledge	24	18.1%	2.53	75.41	12.5
Post-test knowledge	24	21.58%	1.29	89.91	
Enhancement	24	3.48%	1.24	14.5	

S- Significant; NS – Not Significant

ASSOCIATION BETWEEN POST-TEST LEVEL OF KNOWLEDGE REGARDING IMPACT OF MOBILE PHONE USE ON HEALTH STATUS AMONG NURSING STUDENTS IN SELECTED NURSING COLLEGE, BANGALORE, WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

An analysis of association between the levels of knowledge with their selected socio-demographic variables with chi square test reveals that the variables such as age and impact of mobile phone's education are two variables significantly associate with the level of knowledge.

Table 3: Association between post-test knowledge and their selected demographic variables

n=50

Sl. No	Demographic variables	No.	%	Level of knowledge						Chi square
				Adequate		Moderate		Inadequate		
				No.	%	No.	%	No.	%	
1	Age									19.32*
	16-20 yrs	20	40%	7	14%	13	26%	0	0	
	20-22 yrs	26	52%	5	10%	21	42%	0	0	
	23-25 yrs	4	8%	3	6%	0	0	1	2%	
	Above 25 yrs	0	0	0	0	0	0	0	0	
2	Religion									32.73
	Hindu	45	90%	12	24%	32	64%	1	2%	
	Muslim	5	10%	3	6%	2	4%	0	0	
	Christian	0	0	0	0	0	0	0	0	
	Other	0	0	0	0	0	0	0	0	
3	Gender									3.30
	Male	12	24%	3	6%	8	16%	1	2%	
	Female	38	76%	12	24%	26	52%	0	0	
4	Mobile phone Brand									8.16
	Samsung	11	22	6	12	4	8	1	2	
	Realme	14	28	10	20	4	8	0	0	
	Redmi	15	30	7	14	8	16	0	0	
	Other	10	20	3	6	7	14	0	0	
5	Income of family per month									19.72
	Below 5,000	3	6%	0	0	2	4%	1	2%	
	5,000-10,000	10	20%	7	14%	3	6%	0	0	
	10,000-15,000	17	34%	11	22%	6	12%	0	0	
	Above 15,000	20	40%	15	30%	5	10%	0	0	



DISCUSSION

The present study was conducted to assess the effectiveness of Video assisted teaching on knowledge regarding impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore. In order to achieve the objective of the study, one group pre-test post- test design was adapted. 50 samples, those who fulfilling the inclusion and exclusion criteria, were selected by using non probability purposive sampling technique. This study was conducted on scheduled date. The data was collected among 50 respondents.

CONCLUSION

The study concluded that the Video assisted teaching on knowledge regarding impact of mobile phone use on health status among nursing students in selected nursing college, Bangalore was carried out effective in improving the knowledge of nursing students in a selected nursing college, Bangalore.

REFERENCES

1. Jeanie Stecher. The Importance of Mobile Cell Phone in Communication.2011. Available from;<http://www.squidoo.com/the-importance-of-mobile-cell-phone-incommunication>.
2. Sunny Lin. Mobile phones-technology-the development. 2004; Available from http://wiki.media-Culture.org.au/index.php/Mobile_Phones.
3. Mandira S. Indian health ministry commissions study on health hazards of cell phones in Karnataka. 2008. Available from: <http://www.cellphonebeat.com/entry/indias-health-ministry-commissions-study-on-health-hazards-of-cell-phones>.
4. Telecommunications Statistics in India. From Wikipedia. The free encyclopedia. 2011. Available from http://en.wikipedia.org/wiki/Telecommunications_Statistics_in_India.
5. Thomas k Thomas. Kids below 16 may find it hard to own a mobile. 2007. Available from; <http://www.businessline.com>.
6. Noric D. Teenage mobile phone use statistics. 2008. Available from www.dilanchian.com.au.
7. Cell phones can cause hearing loss in India. 2008. Available from; <http://youcanheal.blogspot.com/2008/03/cell-phones-can-cause-hearing-loss.html>.
8. Sadetzki S, Chetrit A, Cardis E, Deutch Y. Cellular phone use and risk of benign and malignant parotid gland tumors in China. *American Journal of Epidemiology*. 2008; 167(4): 457-67.
9. SarithaRai Tags. Using cell phone at wheel could cost you your licence. *Indian Express* -2011. Available from; <http://www.indianexpress.com/news/In-Bangalore-using-cell-phone-at-wheel-could-cost-you-your-licence/873584>.
10. Shinu K Oommen. A Study to assess the impact of mobile phone use on various dimensions of student's life in a selected institution in Mangalore. Unpublished M SC Nursing Research Dissertation. Father Muller School of Nursing. Rajiv Gandhi University of Health Sciences. Mangalore:2007.

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ETHICAL CLEARANCE

Permission was sought from the concerned authorities of the college of nursing, before conducting the study.

