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## SHORT COMMUNICATION

**USE OF INFORMATION TECHNOLOGY BY THE MEDICAL STUDENTS**

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**ABSTRACT**

**Background:** Usage of information technology is increasing among university students. The extent of usage among medical students is not studied well. The aim of the study is to assess the usage pattern of information technology by first year and second year medical students of government Kilpauk medical college. Chennai.

**Method:** 200 students of first year and second year students were participated in this study. They were interviewed using pretested questionnaire to bring out the different pattern of the internet use and application knowledge of information technology in medical field.

**Results:** Among 200 students 84% of second years and 43% of first years access the internet using their mobile phones. The application knowledge of information technology (IT) is 97% in second year students when compared to first year student 45%. Majority of students (97%) prefers computer classes to be included in medical curriculum.

**Conclusion:** The usage of information technology by the second year medical students are increasing when compared to the newly admitted students and also the purpose of using IT and knowledge of IT in medical field also improving when they are entering second year.

**Key words:** computer, internet, information technology.

**INTRODUCTION**

The use of computer and information technology (IT) has been on the rise in the recent past. Internet plays a key role regarding the information flow. Students can use these facilities for information access and communication too. The extent of usage of this information technology among medical students is not well studied. It is well known that doctors are little averse to use of computers. This may inhibit the medical students and they may not be optimally using the internet for their education. Last few studies<sup>1,2,3,4,5</sup> have shown that the use of computerized information system by medical professionals can improve the quality of care, enhance the use of evidence based medicine and maintain the update knowledge. Considering explosive growth in information technology, it is important to study the use of information technology by the medical students. The present study aims to determine the use of IT by the students of Government Kilpauk medical college students of first and second years. The study is proposed to find out the present status of the usage of information technology by the medical students to improve quality of life care, to enhance the use of

evidence based medicine and to maintain and update knowledge. We teachers so that come to know the extent and type of use of internet by our students. This will enable us to design suitable teaching-learning activities. We can also find out the difference in usage of information technology by the newly admitted students and second year students. This will pave way to decide whether computer education needs to be formally included in the curriculum.

**MATERIALS AND METHOD**

This study was carried out on first and second year students of Govt kmc Chennai. A total of 200 students were enrolled. The present study was approved by the institutional ethics committee. Each subject were briefed in detail about the nature and purpose of the study. Confidentiality was assured and informed consent was taken. They were interviewed using a pretested questionnaire. The questionnaire contains simple questions to bring out the different pattern of internet use by the medical students. Data was collected at the end of the study and presented in percentage.

## RESULTS

Table 1: Pattern of accessing internet

s.no	Pattern of computer use	First year Number N=100	Percentage(%)	Second year Number N=100	Percentage (%)
1	How often do you access internet				
	a)>once a day	60	60%	80	80%
	b)once aday	25	25%	10	10%
	c)once in two days	8	8%	6	6%
2	d)once in a month	7	7%	4	4%
	Approximate time you spend browsing in a day				
	a)half an hour	83	83%	14	14 %
	b)one hour	9	9%	29	29%
3	c)two hour	3	3%	36	36%
	d)>two hour	5	5%	21	21%
	Where do you access the internet				
	a)home	35	35%	10	10%
4	b)net centre	22	22%	6	6%
	c)mobile	43	43%	84	84%
	Do you know computer				
5	a)yes	66	66%	83	83%
	b)no	44	44%	17	17%
5	Which of the following do you use				
	a)google	90	90%	80	80%
	b)yahoo	10	10%	14	14%
	c)other	-	-	6	6%

TABLE 2: Purpose of using internet by the students

s.no	Purpose of using internet	First year Number N=100	Percentage(%)	Second year Number N=100	Percentage(%)
1	Do you use the internet for academic purpose				
	a)yes	45	45%	96	96%
2	b)no	55	55%	4	4%
	Do you e mail for communication				
3	a)yes	45	45%	90	90%
	b)no	55	55%	10	10%
4	What are the common situation for which you browse the internet				
	a)e books	-		1	1%
	b)seminar	-		1	1%
	c)projects	-		1	1%
	d)allof the above	45	45%	97	97%
5	What is the entertainment purpose you use the internet for				
	a)download movies			-	
	b)download music			-	
	c)play games	37	37%	-	
	d)social networking	-		-	
5	d)all the above	8	8%	100	100%
	Other purpose for which you use the internet(you can choose more than one option)				
	a)banking				
	b)railway reservation				
	c)GPRS		45%(chatting)		79%(all purpose)
d)shopping				21%(railway reservation)	
e)chatting					

TABLE 3: Knowledge of internet use in medicine

s.no	knowledge of using internet in medicine	First year Number N=100	Percentage(%)	Second year Number N=100	Percentage(%)
1	What is telemedicine				
	a)buying television to learn medicine	8	8%		
	b)using telepathy to learn medicine	2	2%		
	c)using telecommunication to learn medicine	90	90%	100	100%
2	What is webinar				
	a)using the web to conduct seminar	52	52%	98	98%
	b)using spider webs for communication				
	c)using radio to bring out your views	11	11%	2	2%
3	What is evidence based medicine				
	a)individual clinical expertise and best external clinical evidence	24	24%	94	94%
	b)using forensic department help	37	37%	3	3%
	c)using same medicine your friend used for illness	39	39%	3	3%

Table 4: Views about IT In medicine

s.no	Views of using internet in medicine	First year Number N=100	Percentage(%)	Second year Number N=100	Percentage(%)
1	Do you think video conference classes would prove useful				
	a)yes	78	78%	92	92%
	b)no	22	22%	8	8%
2	Do you think computer classes should be included in medical curriculum				
	a)yes mandatory	63	63%	97	97%
	b)do not necessary	29	29%	1	1%
	c)no idea	8	8%	2	2%

The pattern of accessing internet by the students is presented in Table1.It was observed that 60% of first years and 80% of second years access the internet >one hour a day and 83% of first years and14% of second years spend approximately less than half an hour. It was also observed that most of the students access the internet through the mobile (84% of second year and 43% of first year)

The purpose of internet usage was evaluated in Table2.96% of second year and 45% o first years use the internet for the academic purpose.90% of second year& 45% of first year use the net for communication79% of second year use the net for banking, GPRS, shopping, chatting whereas 21% use

the net for railway reservation.37% of first year use the net for playing games.

Table 3 shows the knowledge of internet use in medicine is 100% in second years whereas 90% in first years. and Table 4: shows 97% favors the computer courses in medical curriculum 92% of second years supports video conference

#### DISCUSSION

The present study evaluated and compared the pattern of accessing internet, purpose of internet usages, knowledge of internet use in medical field and their views about the information technology in medical curriculum between first year and second years.

83% of second years access the internet through mobiles whereas 45% of first years access the net at home. This may be due to restriction in usage of mobile phones while entering the medical college.

The second year students Use the information technology more for academic purpose (90%),when compare to the newly admitted students where they mostly use the IT for playing games (45%).The reason behind this is the exposures in urban areas and their engagement in small thesis.

It is also found that majority of the students advocated the internet use should be encouraged in medical curriculum which is comparable with the study done in Jammu, India(Sharma et al.,2006) and (Unnikrishnan et al in mangalore 2008)

Our study has limitation .Since this study was conducted at single tertiary government teaching hospital land most of the students entering the first years are from rural areas.

## CONCLUSION

The use of information technology is rapidly becoming the key component of medical education in many parts of the world to improve the quality of care, enhance the use of evidence based medicine and to maintain and update knowledge. Information technology play important roles in many aspects of future medicine. The usage of information technology for academic purposes by the second year medical students are increasing when compared to the newly admitted students and also the knowledge of IT in medical field also improving when they are entering second year. This may be due to exposure in urban areas and also small theses they are undergoing from second year onwards. Computer classes in the medical curriculum also necessary for the computer application and internet use.

Hence training in computer knowledge and usage of information technology is mandatory .This also enable us to design suitable teaching-learning activities

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