

# Usage of Mobile Phone among Medical Students in Ahmadabad Gujarat



## Medical Science

**KEYWORDS :** mobile phone, internet, medical students

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### ABSTRACT

*Background: Mobile phone holds the great importance in everyday life. Mobile phone and internet usage have become universal practice especially among the student community. Mobile Phone usage has both pros and cons*

*.This study focused on the cell phone usage among medical students in an urban setting in Gujarat.*

*Methods: 330 medical students participated in the study. Pretested questionnaire was used to collect data and analysis was done using MS Excel and Epi Info.*

*Results: Out of the total 330 sample, 119 male and 211 female from first, second and third year MBBS and Post Graduate students. In 59% of the students, Age of initiation of phone usage was around 17 to 19 years. 86.36 % of students had smart phones. 37.88 % students spent Rs.100 to Rs 250 per months.*

### Introduction:

One of the important technological advancements in the last three decades or so has been the advent of the mobile phone also known as cell phone.<sup>1,2,3</sup> In the last 20 years, worldwide mobile phone subscriptions have grown from 12.4 million to over 5.6 billion, penetrating about 70% of the global population.<sup>4</sup> Its usage has also become an important public health problem as there have been reports of plenty of health hazards, both mental and physical, in people of all age groups.

Use of the internet is a part of college students' daily routine as they have grown up with computers. It is integrated into their daily communication habits like use of the telephone or television. College students use the internet nearly as much for social communication as they do for their education. But just as they use the internet to supplement the formal parts of their education, they go online to enhance their social lives.<sup>5</sup>

In addition to telephony, modern-day mobile phones also support a wide range of other services such as text messaging, E-mail, internet access, short-range wireless communications (infrared, Bluetooth), business applications, gaming and photography.

Almost 87-90% of the population in an advanced country like the USA, use cell phones, and a sizeable number of these is school and college going students.<sup>6</sup> In India too, we note that the scenario is similar with people from both rural and urban areas, educated or illiterate, and belonging to almost all ages; now dependent on a cellular phone.

Hence a study on habit of mobile phone usage among medical students in an urban setting in the densely populated Ahmadabad city of Gujarat was deemed apt.

### Aims and Objectives:

1. To assess pattern of mobile phone usage among medical students and the impact of economic status of parents on it.
2. To find out the usage of mobile phones for education, social networking or entertainment by the students and its effects on their study.

### Methodology:

The present cross sectional study was carried out in B.J. medical college of Ahmadabad, Gujarat. The study population consisted of 330 medical students including undergraduate and postgraduate. All students were selected randomly and prior to administering the questionnaire, the class was addressed regarding the purpose of study. Data was collected using a pre-tested pre-designed questionnaire during March to April, 2014. Data entry and analysis done in Microsoft Excel and Epi Info.

### Results :

**TABLE 1 BASELINE CHARACTERISTICS OF THE STUDY POPULATION (N=330)**

Age (Years )	Frequency	Percent
17 To 20	198	60.00%
21 To 24	114	34.55%
25 To 28	16	4.85%
> 28	2	0.61%
Sex		
Male	119	36.06%
Female	211	63.94%
Study Year		
First Year	79	23.94%
2nd Year	107	32.42%
3rd Year	68	20.61%
Intern	59	17.88%
Post graduation	17	5.15%

**TABLE 2: INFORMATION OF PARENTS EDUCATION AND OCCUPATION (N= 330)**

Education	Father		Mother	
	Frequency	Percentage	Frequency	Percentage
Illiterate	0	0.00%	14	4.24%
Primary	13	3.94%	20	6.06%
Secondary	29	8.79%	44	13.33%
Higher Sec	18	5.45%	43	13.03%
Diploma	10	3.03%	2	0.61%
Graduate	159	48.18%	145	43.94%
Post Graduate	98	29.70%	59	17.88%
PHD	3	0.91%	3	0.91%

Occupation				
Profession	146	44.24%	43	13.03%
Semi Profession	78	23.64%	45	13.64%
Clerical ,Shop Owner	87	26.36%	6	1.82%
Farmer	6	1.82%	0	0.00%
Skilled Worker	0	0.00%	0	0.00%
Semi -Skilled Worker	10	3.03%	0	0.00%
Unskilled Worker	3	0.91%	236	71.52%
Unemployed				

The study population comprised 36.06% male and 63.94% female students. We observed that female students outnumber the males in using mobile phone; reason may be a feeling of sense of security and approachability by parents. Out of the total students, 79 (23.94%) were in first year and 107 (32.42%) were in second year, M.B.B.S. Here most of the students who participated in the study aged between 17 to 28, of which 60% were of adolescent age i.e.17 to 20 years at the time of survey. Parents of more than 45% were graduate and 44.24% were in professional job. (Table 1, 2)

**TABLE 3A: DETAILS OF MOBILE PHONE USAGE PATTERN AMONG STUDY POPULATION (N= 330)**

Price of Mobile (Rs.)	Frequency	Percentage
Less Than 5000	33	10.00%
5000 To 10,000	95	28.79%
10,000 To 20,000	101	30.61%
20,000 To 25,000	31	9.39%
25,000 To 30,000	19	5.76%
More Than 30,000	51	15.45%
Expenses / Month	Frequency	Percentage
Less Than 100	20	6.06 %
100 To 250	125	37.88 %
250 To 500	107	32.42%
500 To 1000	63	19.09%
1000 To 1500	9	2.73%
More Than 1500	6	1.82%
Internet	Frequency	Percentage
No	21	6.36%
Yes	309	93.64%
Total	330	100.00%
MB Use	Frequency	%
Less Than 500 MB	62	20.06%
Less Than 1 GB	102	33.01%
1 To 2 GB	92	29.77%
More Than 2 GB	53	17.15%
Total	309	100.00%

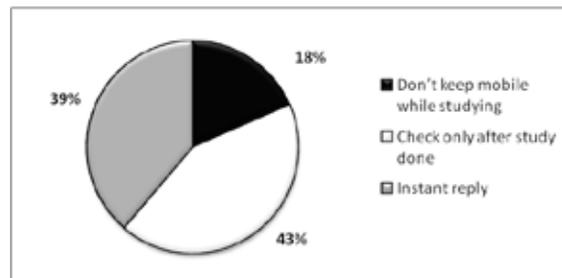
**TABLE 3B: DETAILS OF MOBILE PHONE USAGE PATTERN AMONG STUDY POPULATION (N= 330)**

Age of mobile usage initiation	Frequency	Percentages
Less Than 15	24	7.27%
15 To 17	80	24.24%
17 To 19	195	59.09%
More Than 19	31	9.39%
Number Of Mobile Phone		
1	266	80.61%
2	50	15.15%
3 Or More	14	4.24%
Smart		
Yes	285	86.36%
No	45	13.64%
Brand Of Mobile		
Blackberry	4	1.21%
Samsung	150	45.45%
Sony	17	5.15%
HTC	14	4.24%
I Phone	28	8.48%
Nokia	61	18.48%
Micro Max	31	9.39%
LG	5	1.52%
Others	20	6.06%

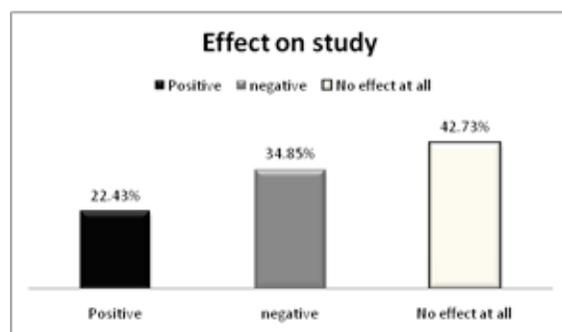
59.09% of the students of our study who started using phone at the age of 17 to 19 years while About 7.27 % of the students had started phone usage before age 15 years of age.

In the present study at least one gadget (mobile phone) is owned by each student of which 4.24% have 3 or more phones. More than three forth (80.61%) of students had smart phones.45.45% of the respondents had Samsung mobile phone followed by Nokia 18.48% and others.

Among them, 30.61 % students had mobile phone priced between Rs 10,000 to 20,000. 15.45% of the students had phone priced Rs 30000 and above. Monthly expenditure on mobile phone usage was Rs. 100 to Rs 250 in 37.88 % followed by Rs.250 to Rs.500 in 32.42 % students. Almost 93.64% students were using Internet through mobile phone. (Table 3A and 3B)

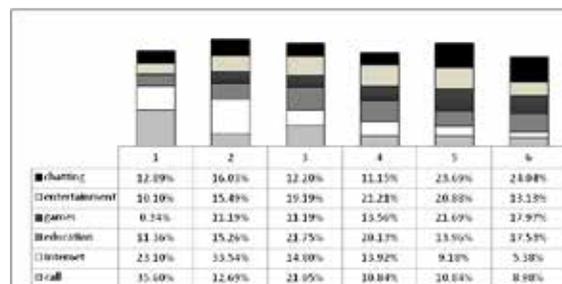


**FIGURE 1: SHOWING PATTERN OF MOBILE USAGE IN STUDIED POPULATION DURING THEIR STUDY**



**FIGURE 2: SHOWING EFFECT OF MOBILE USAGE ON THE EDUCATION OF MEDICAL STUDENTS**

Among them 22.43 % believed that mobile usage had positive effect on their studies as compared to 42.73% who were unaffected. Among the users only 18.49% did not keep mobile phones while studying. (Figure 1, 2)



**FIGURE 3: SHOWING PRIORITY WISE USE OF MOBILE PHONE**

**Discussion**

The present study was done to analyze the magnitude of mobile phone utilization among medical college students in Ahmadabad. The mean age of the study population was 20.35±2.33

years. In the present study at least one gadget (mobile phone) is owned by each student of which 4.24% have 3 or more phones. More than three fourth (80.61%) of students had smart phones. This finding was similar to mobile dependence study among medical students in Delhi.<sup>7</sup>

The observation in our study about monthly expenses incurred by students on mobile phone (especially for recharging the pre-paid services, internet usage, subscribing to caller tunes, were comparable to study done in jodhpur medical students in which 44% students responded that they spend Rs. 250-500 per month for their mobile recharge, only 6% spent <100 rupee, 22.6% spent 100- 200 rupee per month while 27.4% student spent more than 500 rupee per month for mobile recharge.<sup>8</sup>

Preferred Brand of Mobile Handsets Study revealed that 45% of the respondents had Samsung mobile phone followed by Nokia 18%. This was differ to the findings of a study which was done among Visnagar (Gujarat ) rural, students, where as 66.43% of the undergraduate college students used Nokia mobile handsets.<sup>9</sup>

### Conclusion

The observations in the present study are from a small group of medical students only, which may not reflect the scenario world-wide since millions of cellular mobile subscribers are added every month indicating that full blown nomophobia has all possibilities to reach to epidemic scale. In reality these results give an alarming indication that in coming era more and more youth may become users and so will be more dependent on mobile phones, which may lead to serious psychiatric and psychological problems among users. Since there is no positive effect of mobile use on the study of medical students as per our study we conclude that costly mobile use among medical students is unnecessary.

### REFERENCE

1. Ling RR, Perdersen PE. Mobile Communications: Re-Negotiation of the Social Sphere (Computer Supported Cooperative Work). London: Springer Verlag, 2005 | 2. Madell D, Muncer S. Back from the beach but hanging on the telephone? English adolescents' attitudes and experiences of mobile phones and the internet. *Cyberpsychol Behav* 2004;7:359-67; | 3. Mezei G, Benyi M, Muller A. Mobile phone ownership and use among school children in three Hungarian cities. *Bioelectromagnetics* 2007; 28:309-15.) | 4. Electromagnetic Fields and public health: mobile phones (2011) Fact sheet No.193, World Health Organization. | 5. Jones, S (2002) The Internet Goes to College, *Internet & American life* Sep 15 | [available from <http://www.pewinternet.org/> ] | 6. World Health Organization Says Cell Phones a Possible Cause of Cancer (2011) American Cancer Society. | 7. Gupta N, Krishnamurthy V, Majhi J, Gupta S. Gadget Dependency among Medical College Students in Delhi. *Ind J Comm Health*, 25(4); 362 - 366 | 8. Dr Brijendra Singh Mobile Phones: A Boon Or Bane For Mankind? - | *Behavior Of Medical students International Journal Of Innovative Research & Development* april, 2013 Vol 2 Issue 4(195-205) | 9. Atul Patel , Dr.Harishchandra Singh Rathod Mobile Phone Usage Habits Of Students Commuting From Rural Areas To Nearby Town - An Exploratory Study Of Visnagar (Gujarat-India) *Global Journal of Management and Business Research* May 2011 Volume 11 Issue 6 Version 1.0 |