

## Role of Social Media in Teaching-Learning Among Under-Graduate Medical Students of Kolkata.

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### Abstract:

**Introduction:** In the modern cyber era, people often communicate through social media. Other than building and keeping mere relationship, different population group started to reap social media for special purposes. Students of different disciplines seen to use social media proficiently. Medical students are also no exception in this matter.

**Objectives:** The current study was planned to understand the extent of use of social media by medical students especially for study purpose; benefits and harm of social media as per perception of the participants under study. **Methodology:** It is a descriptive, cross sectional study conducted at Medical College, Kolkata in 2017. All student of seventh semester were taken for study. A pre-designed and pre-tested data collection form was used and data analysed in excel worksheet in computer.

**Result:** Among 135 students, 76.30% were male; 76.30% had urban origin, 47.41% students stay at college hostel. 84.44% had smartphone, 56.30% had laptop, 25.93% had tablets and 19.26% had desktop in their possession. 98.52% used social media, among them, 99.25% used Face Book, 86.47% used WhatsApp and several others used Skype, Twitter, Hike, Instagram, Hangout etc. Average monthly expenditure for uses of social media was Rs. 279.44±494.42. Among 133 users 132(99.25%) used social media for education purpose, among users all used it for getting information of classes, 90.15% used it for solving queries, 77.27% used it for getting & sharing class notes & question paper. While all 135 students sought opinion on benefit of social media for study, 90.37% responded assertively. 64.75% said that they get class notes, 50.82% get schedule & information of classes. 74.07% opined that social medias are harmful for study, 47.41% said that social media wastes time & energy.

**Conclusion:** Social media is a necessary evil. Many students get necessary information regarding schedule of classes and notes but at the same time some end up wasting a lot of time on unnecessary chatting and useless things.

**Keywords:** Social media, role, under-graduate medical students, Kolkata.

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### I. Introduction

Communication is the lifeblood of a society. People communicate in different ways like face to face talking, talking over phone, by writing letters & documents and non-verbal way sometimes. There came a revolutionary development of information technology and digital communication in last few decades where man started communicating virtually through internet more and more due to unprecedented connectivity, convenience, easy accessibility and affordability. The latest mode of communication in the modern cyber era is social media. Everyday, more and more people are participating in social media. Other than building and keeping mere relationship, different population group started to reap social media for special purposes. Students of different disciplines seen to use social media proficiently.<sup>(1, 2, 3,4, 5)</sup> Medical students are also no exception in this matter. The ubiquity of the internet and computer-based technologies has an increasing impact on higher education and the way students access information for learning.

Despite the extensive use of social media for different purposes there is a paucity of information about the quantitative and qualitative use of social media by the students of current generation. With this background, the current study was planned to explore the extent of use, benefits & harm of social media to the undergraduate medical students of Kolkata.

## **II. Methodology**

It is a descriptive observational study, cross sectional in design, conducted at Medical College, Kolkata, the premiere and oldest medical institution of Asia. The study was conducted during April – June 2017. The study was planned to understand the extent of use of social media by medical students especially for study purpose; benefits and harm of social media as the medical students under study perceived. All students studying in seventh semester in Medical College, Kolkata during the period of study formed the population. All the seventh semester students present during one day data collection and volunteered to participate were taken under the study i.e., census method of selecting candidates followed. A pre-designed and pre-tested questionnaire was used as tool for collecting data. Inbuilt anonymity was maintained in the data collection form and filled-up questionnaire were also collected in locked & key boxes to make the whole study anonymous. Data was compiled in Excel worksheet in computer, tabulated and meaningful percentages and proportions were calculated.

## **III. Result**

The current study titled 'Role of social media in teaching-learning among under-graduate medical students of Kolkata.' was aiming to explore utility and impact of social media among medical undergraduate students of Kolkata. All the 135 students present in the class on the day of data collection who consented to participate constituted the subjects under study. All were from 7th semester batch; 103(76.30%) male and 32(23.70%) lady students; 117(86.67%) had home state at West Bengal, 6(4.44%) in Bihar, 5(3.70%) from Odisha, 3(2.22%) from Jharkhand & Uttar Pradesh each, and 1(0.74%) from Haryana. Among participants 103(76.30%) had urban origin, 32(23.70%) were from rural India. Currently 64(47.41%) students stay at college hostel, 61(45.19%) stay at their own home, 7(5.19%) at rented house and 3(2.22%) stay at as paying guest or relatives house. (Diagram – 1)

Among participant students 116(85.93%) had mother tongue Bengali, 14(10.37%) Hindi and 5(3.70%) were Odia. Religion-wise 118(87.41%) students were Hindu, 13(9.63%) were Muslim, 2(1.48%) were Buddhist & Atheist each. Though the current medium of instruction for all the students were English but at plus 2 level 68(50.37%) students used English, 66(48.89%) Bengali and 1(0.74%) used Hindi.

Mean per capita monthly income of students family was Rs.13,421.87±21226.34 with range 750 – 50,000.00

Use of social media is gadget dependent. It gets flourished if students possess own electronic gadget which is compatible for using social media. Among participant students, 114(84.44%) had smartphone, 76(56.30%) had laptop, 35(25.93%) had tablets and 26(19.26%) had desktop in their possession.

Among the current undergraduate medical students under study 133(98.52%) used social media and 2(1.48%) did not. Among users, 132(99.25%) used Face Book, 115(86.47%) used WhatsApp, 31(23.31%) used Skype, 23(17.29%) used Twitter, 13(9.77%) used Hike, 4(3.01%) used Instagram, 2(1.50%) used Hangout, Tango each, 1(0.75%) used LinkedIn, Google+, IMO, WeChat, Quiz up, Reddit Tumbler, Snapchat and Pinterest each. (Diagram -2) Average no. of contacts was 133. Students were asked about highest no. of contacts in the social media they used. It was 621.43±1126.78, range being 20 to 5000. 116(87.22%) students had current teacher in their contact in social media. Average monthly expenditure for uses of social media was Rs. 279.44±494.42, range being Rs. 0 to 1200. Among 133 users 132(99.25%) used social media for education purpose. Among the users all use it for getting schedules & information of the classes, 119(90.15%) used it for solving queries, 102(77.27%) used it for getting & sharing class notes, question paper, 90(68.18%) used it for discussion with friends, group, 3(2.27%) for staying updated, for future planning, 1(0.76%) used it for getting e-books, educational videos & images each. (Diagram – 3)

Irrespective of use of social media and their purpose of uses while all 135 students sought opinion on benefit of social media for study, 122(90.37%) responded assertively. 79(64.75%) said that they get class notes, 62(50.82%) get schedule & information of classes, 45(36.89%) can discuss with friends, seniors, teacher or can perform interactive and group study, 37(30.33%) used social media for solving queries, 34(27.87%) get information and stay updated using it, 29(23.77%) use social media for getting slides, picture of instruments, model, specimens, problem cards, power point presentation on different academic topic and information from blogs, 18(14.75%) of the students get information related to examination like schedule, sample questions of examination, quiz, MCQs. Some lesser no. of students get benefit from social media in other way like get video, lecture (9.02%), social media brings refreshment, break monotony (4.10%), getting e-book (2.46%), can choose between good or bad lecture (0.82%), can even request for proxy in classes (0.82%). (Table 1)

Among 135 students 100(74.07%) opined that social medias are harmful for study. Among these 135 students 64(47.41%) said that social media wastes time & energy, 38(28.15%) has opinion that it breaks concentration, 28(20.74%) said it is addicting, 5(3.70%) told that social media hampers fitness, makes sedentary habits, life becomes lazy, lethargic and chances of non-communicable diseases increased, 3(2.22%) has the opinion that chatting with girl, encountering wrong / harmful people, indulging in bad activities and irrelevant

post and message are harmful. 2(1.48%) students opined that social media use leads to less social participation and communication skill do not develop, 2(1.48%) said that it can lead to mental disorder and mental dissatisfaction on getting excess criticism. A few students had the opinion that social media use hampers sleep (0.74%), harmful to eye (0.74%), leads to pain in hand or long use (0.74%), develops tendency to bunk class (0.74%), neglecting of one's duties (0.74%) and expensive 0.74%. Another 1(0.74%) student said that harmful effect of social media outweighs benefits and 1(0.74%) named it as necessary evil. (Table 2)

#### **IV. Discussion**

The current study titled 'Role of social media in teaching-learning among under-graduate medical students of Kolkata' was conducted in Medical College, Kolkata. Among 135 seventh semester students 76.30% were male; 76.30% had urban origin, 47.41% students stay at college hostel. 84.44% had smartphone, 56.30% had laptop, 25.93% had tablets and 19.26% had desktop in their possession. 98.52% used social media; among them, 99.25% used Face Book, 86.47% use WhatsApp and some students used Skype, Twitter, Hike, Instagram, Hangout etc. Average monthly expenditure on social media was Rs. 279.44±494.42. Among 133 users 132(99.25%) used social media for education purpose, all used it for getting information of classes, 90.15% used it for solving queries, 77.27% for exchanging class notes, question paper. While all 135 students sought opinion on benefit of social media for study, 90.37% responded assertively. 64.75% said that they get class notes, 50.82% get information of classes. 74.07% opined that social media is harmful for study, 47.41% said that social media wastes time & energy.

Though exactly similar study like current one was not found but some interesting studies in the domain of social media use discussed below which showed same tune. Study conducted by Thalluri J et al., titled, "Social Media for Learning and Teaching Undergraduate Sciences: Good Practice Guidelines from Intervention", in 2013, revealed that Facebook was used in learning and teaching clinical problem solving in a Pathology at a South Australian university. A good practice and checklist were developed from the post-intervention evaluations. It was found that use of Facebook beneficial for students in terms of providing an innovative way of learning; fostering greater interaction amongst co-students and staff; and effectively engaging them with the content of courses. The importance of clear communication of goals and objectives to students was identified from student comments. Six good practice principles were identified relating to: goals and objectives, expectations, communication, engagement with the course content, active participation, and learning environment.<sup>1</sup> A prospective cohort study conducted by Joanna Gutmann et al. on use of learning media by undergraduate medical students in Pharmacology, revealed a predominant use of digital over non-digital learning resources (69 ± 7% vs. 31 ± 7%; p < 0.01) by students. Most used media for learning were lecture slides (26.8 ± 3.0%), apps (22.0 ± 3.7%) and personal notes (15.5 ± 2.7%), followed by textbooks (> 300 pages) (10.6 ± 3.3%), internet search (7.9 ± 1.6%) and e-learning cases (7.6 ± 3.0%). When comparing learning media use of teaching vs. pre-exam self-study periods, textbooks were used significantly less during self-study (-55%; p < 0.01), while exam questions (+334%; p < 0.01) and e-learning cases (+176%; p < 0.01) were utilized more. Overall, the study revealed a high prevalence and acceptance of digital learning resources by undergraduate medical students, in particular mobile applications.<sup>2</sup>

A cross-sectional study was conducted by Andrea Bickerdike et al. to determine learning strategies, study habits, and online social networking use of undergraduates at an Irish medical school, and their relationship with academic performance. The study demonstrated that excessive use of social networking contributes to poor study habits, which are associated with reduced academic achievement.<sup>3</sup> Study conducted by Anam Ali on use of Facebook for educational purpose in a UK medical school in the year 2016 revealed that medical students use Facebook for social and academic interaction. Students were using Facebook to augment their learning and undergraduate lives. Facebook had enabled students to create a supportive learning community amongst their peers. It also given a caution that medical educators wishing to capitalize on Facebook, as a platform for formal educational initiatives, should remain cautious of intruding on this peer online learning community.<sup>4</sup> Unpublished thesis titled 'The effects of social media use in undergraduate students' by Tara Heffner at Rowan University, hypothesized that social media use by undergraduate students would positively affect their academics and social life in college.<sup>5</sup>

#### **V. Conclusion**

Social media is a necessary evil. Many students get necessary information regarding schedule of classes, class notes, pictures of specimen, slides, instruments, power point presentation of lectures, download e-books, can solve queries by interacting with fellow students, seniors, even with teachers but at the same time some end up wasting a lot of time on unnecessary chatting and useless things. In this way, social media use are very engrossing. If students are not disciplined enough and they do not have the necessary self control, they will end up spending hours just scrolling down and doing nothing. Addiction to social media sometimes overrides other duties of society.

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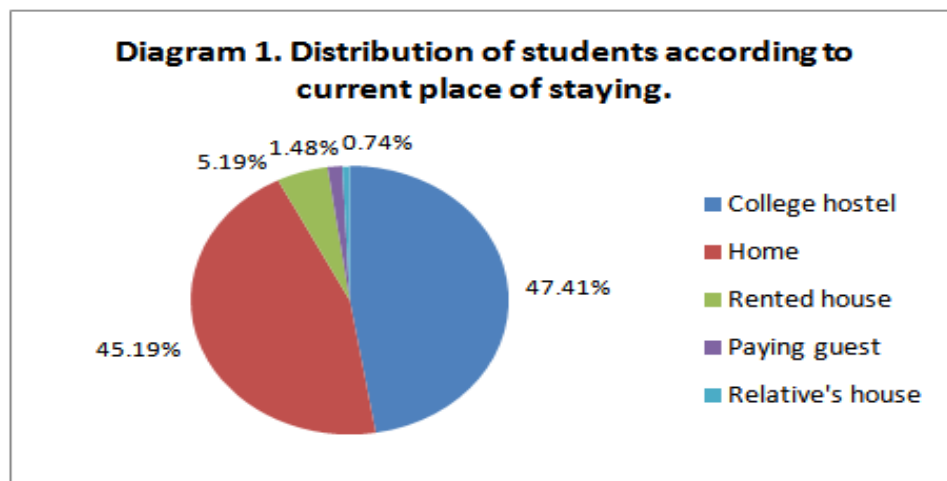
### Tables & Diagrams

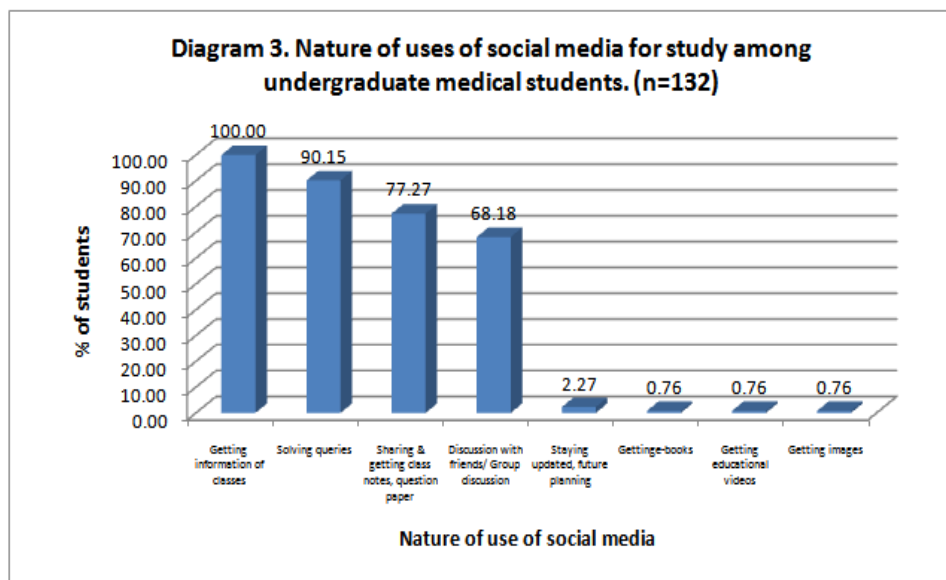
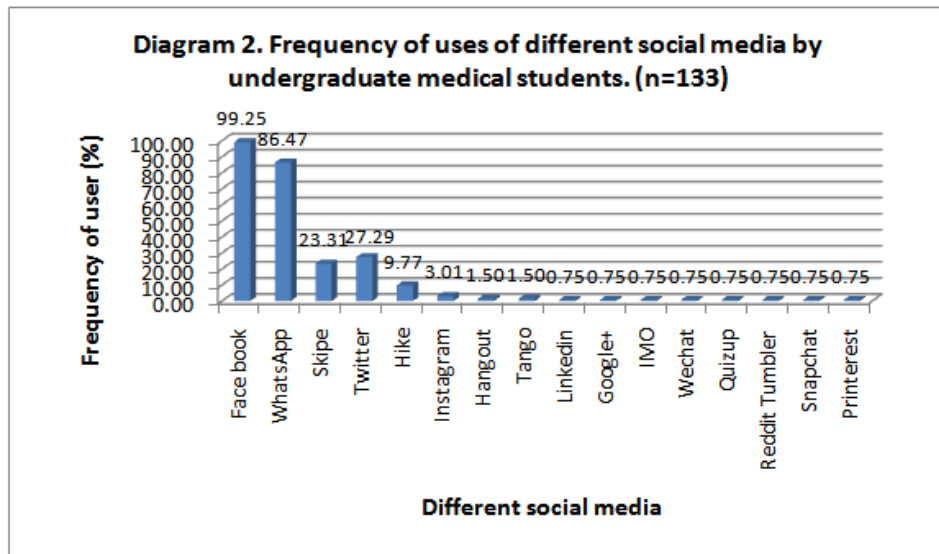
**Table 1.** Opinion of students about benefits of using social media for study. (n=122)

Benefits of social media use	No.(%)
Getting class notes	79(64.75)
Getting schedule & information of classes	62(50.82)
Discussion with friends , seniors, teachers, interactive study, Group study	45(36.89)
Solving queries	37(30.33)
Getting information /current update	34(27.87)
Getting slide/ instruments/ picture/model/ specimen/ problem cards/ power point presentation/blog	29(23.77)
Getting exam information/ schedule/ question/ MCQ/ quiz	18(14.75)
Getting video/ surgical videos/ lecture	11(9.02)
Refreshment/ break monotony/ encouragement	5(4.10)
Getting e-book	3(2.46)
Can choose between good and bad lecture	1(0.82)
Can request friend for proxy in classes	1(0.82)

**Table 2.** Opinion about nature of harm of social media use on study. (n=135)

Harmful effect of social media use	No.(%)
waste of time & energy/ time consuming	64(47.41)
Break concentration/ distraction / diversion/ ADHD	38(28.15)
Addiction	28(20.74)
Hampers fitness, sedentary habits develops, life become lazy, lethargy, chances of NCD	5(3.70)
Chatting with girls, encounter wrong/ harmful people, indulging bad activities, irrelevant posts and messages	3(2.22)
Less social participation, Communication skill do not develops	2(1.48)
Mental disorder, mental dissatisfaction on getting excess criticism	2(1.48)
Hampers sleep	1(0.74)
Harmful to eye	1(0.74)
pain in hand on long use	1(0.74)
Tendency to bunk class	1(0.74)
Neglecting of other duties.	1(0.74)
Expensive	1(0.74)
Effect outweigh benefits	1(0.74)
Necessary evil	1(0.74)





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