ABSTRACT: New innovations and advances in science and technology in the present day have made considerable and significant changes in the lifestyle of people all around the globe. Communication from one part of the world to another is possible at the hit of a button. Social networking is being rampantly used everywhere and by everybody, be it youngsters or the older generation. Facebook and Whatsapp are the most commonly used means of communication in social networking at present. Smart phones functioning as minicomputers with fast internet connectivity in the pockets of today’s technosavvy generation have made them create and spend most of their time interacting with people in a virtual world. There is an urgent need to understand the dynamics of social media and its effects on the lifestyle of people. Studies documenting the same have been very few. This study was conducted to understand the benefits and harms towards health and academics of MBBS students. This cross-sectional study on 147 MBBS students revealed interesting findings and opinions of the students. Effects of Facebook and What Sapp on productivity and sleep disturbances due to it were the significant findings of the study. Facebook and Whatsapp can be considered both beneficial and harmful and it solely depends on how it is being put to use.

KEYWORDS: Facebook, Whatsapp, Health, Academics, Youth.

INTRODUCTION: During the past decade, online social networking has caused profound changes in the way people communicate and interact. Along with the benefits of living in modern world of advanced technology, man has confronted with newer health challenges and problems. India being a forerunner in cyber world, it’s an urgent need to understand the dynamics of social media. Facebook and Whatsapp are commonly used social media. As of the third quarter of 2014, Facebook had 1.35 billion monthly active users and as of August 2014 Whatsapp announced more than 600 million monthly active users. Therefore a study was conducted to understand the benefits and harms of Facebook and Whatsapp towards health and academics of MBBS students of Govt. Medical College, Surat.

AIMS AND OBJECTIVES:

AIM: To know whether Facebook and Whatsapp are beneficial or harmful.

OBJECTIVES:

1. To see the effects of Facebook and Whatsapp on health.
2. To see the effects of Facebook and Whatsapp on academics and productivity.

METHODOLOGY: It was an observational cross-sectional study, conducted during November 2014 at Government Medical College, Surat. Participants were 147 MBBS students (61 boys, 86 girls).
Only MBBS students were included, while students of other courses were excluded. Thus, convenient sampling was employed. Pretested semistructured questionnaire was used. Informed verbal consent was taken by all the participants. Data entry was done in Microsoft Excel software and analysis was done using SPSS v16 software.

**RESULTS:** Participants were in the age group of 18-24 years with a mean age of 20.48 years.

It was found that around 98% (144) participants use social media and among them Facebook and Whatsapp users were 87.1% (128) and 94.6% (139) respectively. Average time spent on Facebook & Whatsapp was found to be 3.09 hrs/day.

The following diagram represents the frequency of the usage of Smartphones, Facebook and Whatsapp among the participants (blue bars) and their parents (red bars).

**The significant findings of the study are as follows:**

1. Those who access Facebook/Whatsapp immediately after waking up 49.6% (73) reported lack of time for productive work 29.3% (43) (p value = 0.01).

2. Participants accessing Facebook and Whatsapp before sleeping are 83.6% (123) and among them 21.9% (27) reported sleep disturbances (p = 0.02).

Around 52.4% (77) participants revealed that the use of Facebook and Whatsapp has increased their creativity. Facebook and Whatsapp usage have increased closeness between family members, friends and relatives in 91.8% (135).
Assessment of health related benefits and drawbacks was carried out and observations are shown in table no. 1.

HEALTH RELATED BENEFITS AND DRAWBACKS:

| Benefits                                      | No.  | %   | Drawbacks                      | No.  | %   |
|-----------------------------------------------|-----|-----|--------------------------------|-----|-----|
| Health related articles, pages                | 101 | 68.7| Insomnia                       | 58  | 39.4|
| Increased awareness about health              | 94  | 63.9| Lack of physical activities    | 55  | 37.4|
| Stress buster                                 | 54  | 36.7|                              |     |     |
| Group discussion on health related topics     | 42  | 28.5| Eye related problems           | 51  | 34.6|
| Recent updates                                | 40  | 27.2| Headache                       | 44  | 29.9|
| Sharing of health tips                        | 35  | 23.8| Mood alteration                | 41  | 27.8|
| Case related query                            | 33  | 22.4| Anxiety Addiction              | 40  | 27.2|
|                                              |     |     | Stress                         | 36  | 24.5|
|                                              |     |     | Depression                      | 11  | 7.4 |
|                                              |     |     | Increased suicidal tendency     | 4   | 2.7 |

**Table 1**

Majority of the participants revealed that health related articles and pages shared through Facebook and Whatsapp are very useful in sharing various health related information. Some consider them like a stress buster also. However insomnia, lack of physical activities and eye related problems were major health related drawbacks reported by most of the study participants. Surprisingly depression and suicidal tendencies were also reported as some shocking drawbacks of Facebook and Whatsapp.

Assessment of academical and financial benefits and drawbacks was carried out and observations are shown in table no. 2.

Academics and Finance Related Benefits and Drawbacks:

| Benefits                                      | No.  | %   | Drawbacks                                      | No.  | %   |
|-----------------------------------------------|-----|-----|-----------------------------------------------|-----|-----|
| Information, Group discussions                | 66  | 44.8| Poor performance                              | 78  | 53.1|
| Entrance exam preparation, picture based study| 50  | 34.0| Loss of interest from studies                 | 71  | 48.2|
| Timetable, lecture schedules can be shared    | 50  | 34.0| Decreased study time                          | 65  | 44.2|
| Serves as substance of Xerox at times         | 47  | 31.9| Financial loss due to decreased productive work leading to less productivity | 33  | 22.4|
| Job, vacancies - advertisements. Economical   | 24  | 16.3|                                              |     |     |
|                                              | 98  | 66.6|                                              |     |     |
Majority of the participants when asked about the benefits of Facebook and Whatsapp replied that Facebook and Whatsapp are very useful in sharing academical informations and also play an important role during entrance exams preparation. Poor performance, loss of interest and decreased time for studies were some major drawbacks reported by the participants.

Facebook and Whatsapp are economical as many consider them as a substance of xerox, at the same time there is also a financial loss due to decreased productive work leading to less productivity.

Assessment of social benefits and drawbacks was carried out and observations are shown in table no. 3.

**Social Benefits and Drawbacks:**

| Benefits                          | No. | %    | Drawbacks                        | No. | %    |
|----------------------------------|-----|------|----------------------------------|-----|------|
| Long distance communication      | 138 | 93.8 | Unwanted relations               | 46  | 31.2 |
| Improved interpersonal relations | 97  | 65.9 | Less interaction with society    | 46  | 31.2 |
| Building new friendship          | 96  | 65.3 | No face to face interaction      | 41  | 27.8 |
| Share and tag photos             | 87  | 59.1 | Reduced attachment with parents  | 31  | 21   |
| Easy way of communication        | 81  | 55.1 | Ignoring people around us.       | 22  | 14.9 |
| Fast and speedy                  | 80  | 54.4 |                                  |     |      |
| Sharing ideas with people around | 45  | 30.6 |                                  |     |      |
| globe                            |     |      |                                  |     |      |

Table 3

Social benefits reported by many participants were long distance communication, improved interpersonal relations, making new friends. Unwanted relations, less interaction with the people around us were major social drawbacks considered by many study participants.

**DISCUSSION:** Globally there has been a lot of advances in the field of technology and communication. Now-a-days many electronic gadgets are available with lots of facilities along with internet connectivity which has changed the way of communication and lifestyle. Facebook and Whatsapp are the widely used social networking media. In the study conducted here, 98% (144/147) participants used social media and Facebook and Whatsapp users were around 87.1% (128/147) and 94.6% (139/147) respectively.

Facebook addiction syndrome is a part of internet addiction disorder. Internet addiction disorder may be broadly defined as "the inability of individuals to control their internet use, resulting in marked distress and/or functional impairment in daily life". One of the study conducted in South Korea on Internet addiction disorder showed that Internet addiction disorder is a serious public health concern. Scientists have found that compulsive internet use can produce morphological changes in structure of brain in internet addicted students as compared to students deemed "not addicted".¹
Till date, the scientific literature addressing issues like the impact of Facebook and Whatsapp on health is scarce. Use of Facebook and Whatsapp can be a boon or a bane. Likewise it can have varied effects on the health of an individual too.

Communicating with each other has become easy and faster with the advent of social networking from one part of the globe to the other and distance is no more a barrier now a days. Most of the time in a day is spent in this virtual world. Participants in this study revealed that they spend around 2.3 hours on Whatsapp and 0.78 hour on Facebook per day. Therefore as much of the quality time of a day is utilised in Facebook and Whatsapp, time for other productive work is reduced. Around 49.6% (73) participants reported use of Facebook and Whatsapp immediately after waking up and among them 29.25% (43) of them reported lack of time for productive work. The results were found significant with p value 0.01. Another significant finding of the study was that 83.67% (123) participants access Facebook and Whatsapp before sleeping and out of them 18.3% (27) complained of sleep disturbances due to inadequate sleep (p value = 0.02).

About 37.4% (55) also felt that it lead to lack of physical activities. About 24.5% (36) revealed that Facebook and Whatsapp was a reason for stress. Mood alterations, headache, eye problems, depression, increased suicidal tendencies were the other health related adverse effects as cited by the participants. This indicates the impact of Facebook and Whatsapp on the mental health which is a very important dimension of health.

Decreased study time, loss of interest in studies, poor performance were the most common effects on the academic performance of the participants.

The relationships created in this virtual world of Facebook and Whatsapp builds new friendships and improves communication among people. At the same time participants in this study also opined that the use of Facebook and Whatsapp also leads to lesser face to face interactions, lesser understanding, false impressions, materialistic and unwanted relations.

Just as a coin has two sides, the study participants are of the opinion that Facebook and Whatsapp has beneficial effects on health and academics too. They felt that Facebook and Whatsapp is a good platform to share academic and health related articles, recent updates, sharing and discussing ideas and that it also enhances creativity in people.

CONCLUSION: The aim of this study was to know that whether Facebook and Whatsapp are beneficial or harmful. By conducting this study several unreported points have been highlighted. Within a relatively short time span Facebook and Whatsapp has revolutioned the way youngsters interact. Facebook/Whatsapp are considered as hidden social gatherings as they allow to people to connect instantly. This study also evaluated that Facebook and Whatsapp may interfere with physical activities, drawing attention away from the studies, and decreasing face to face interaction. Facebook and Whatsapp has two sided picture, on one side it is a way of communicating with the friends and family members living thousands of kilometers apart and on the other hand there are not only bad effect on the youth but also the killing of precious time. The effects of Facebook and Whatsapp were found both beneficial and harmful. It all depends on how the person uses them either for increasing creativity, improving interpersonal relationships or as a harmful tool for health, academics and real life relations.
RECOMMENDATIONS: The present study findings raise numerous future research questions. This study findings cannot be generalised because we concentrated on students of only one institution. This implies that further studies should be conducted on a larger scale in various institutions in order to minimize the selection bias and for better generalization.

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