A CROSS SECTIONAL STUDY ON USE OF INSTAGRAM AS A SOCIAL MEDIA TOOL FOR ORAL SURGERY AMONG FINAL YEAR STUDENTS AND INTERNS AT A DENTAL COLLEGE

• G.Anjana

Final year, BDSSaveetha dental collegeSaveetha Institute of medical and technical sciences Chennai-77

• Dr. Rubin S John

Senior lecturer, Department of oral and maxillofacial surgerySaveetha dental college Saveetha Institute of medical and technical sciences Chennai-77

FUNDING:

The present project is supported/funded/sponsored by

- Saveetha Institute of Medical and Technical Sciences
- Saveetha Dental College and Hospitals
- Saveetha University
- L&T infotech ltd.

ABSTRACT:

Background: The Internet is now an indispensable part of human life and a main source of information. Patients view the Internet as a valuable source of health information and it affects their relationship with healthcare professionals. Instagram is a photo and video viewing social media where people can watch videos, photos of desired contents.

Aim: to evaluate the usage of instagram for viewing contents related to oral surgery by final year students and interns of a dental college.

Settings and design: the cross sectional study was conducted among students in a dental college

Materials and methods: An electronic questionnaire was prepared and sent to all final year students and interns studying in saveetha dental college. The questionnaire comprised closed-ended items with a choice of predefined answers that covered demographics, reasons for using social media, and the ways in which social networking might affect professionalism.

Statistical analysis used: SPSS software

Result:Out of the 250 participants, 205 filled the form. Out of the 205 students who filled the form, 44% were final year students and 46% were interns. 90% of the participants use instagram while 10% don't, out of the 90% who use instagram, 55% were female and 45% were male students.

Keywords: Instagram, social media, oral surgery, innovative technique

INTRODUCTION:

Social media has become an integral part of modern life. It is defined as a form of electronic communication that disperses users' content throughout networking sites. Various technologies and gadgets such as cell phones, tablets, and computers are used to electronically promote engagement, sharing, social interaction, and collaboration within society.[1] Presently, numerous social media platforms are available, including Snapchat, Facebook, Instagram, WhatsApp, Twitter, and YouTube. Instagram is a free photograph and video sharing application also serving as a social media platform. It was founded in October 2010. It acquired a huge user base in a very short time and currently ranks 15th in the list of most visited web sites in the world. Considering it has more than one billion users, the average daily visitor spends 5 minutes 42 seconds on the on-site, and more than 100 million photographs or videos are uploaded daily. Instagram hosts all types of accounts in all fields imaginable and as for the fields of dentistry and medicine, many posts are performed by doctors, clinics, and patients with a variety of videos or photographs covering personal experience or suggestions[2]. Also, patients are seeking aesthetic surgery to improve their appearance on Instagram, and other social media platforms. However, all this information is uploaded without any type of expert review; therefore, its accuracy and reliability are not guaranteed.

Several studies explored the perception of dental and other healthcare providers towards the use of Social media. More than half of dental practitioners surveyed in one study believed that Social media platforms are more effective in marketing than conventional methods. Choong KA et al revealed a positive attitude toward Social media's use to attract new patients. In a Saudi Arabian Study, one-third of the participants mentioned that they use Social media to communicate with their patients and market their practice[3]. In another study that targeted physicians in Saudi Arabia, most of the participants stated that Social media had a good impact on physicians' knowledge and abilities; however, there were ethical concerns regarding its use. Dong et al. highlighted the need to create a clear guideline to improve physicians' skills in using Social media safely and professionally. [4]At the same time, another study specified that Social

International Journal of Early Childhood Special Education (INT-JECSE) DOI:10.9756/INTJECSE/V14I5.735 ISSN: 1308-5581 Vol 14, Issue 05 2022

media's role in the dental-care provision is still a vague area for both patients and dentists. Both share concerns about its uses and benefits and noted the excellent opportunity for dental practices to utilize and benefit from the use of Social media. Given limited studies covering the use of Social media by dentists in Saudi Arabia, this study aims to investigate dentists' opinions towards the use of Social media in daily practice and the expected limitations from its use.[5]

There have been mixed reviews on the benefits of using Social media by healthcare providers. The most-reported concerns were legal and security issues. Counts of reviews of the medical literature available online have been labeled "low quality" which, if fallen into the wrong hands and taken heed of, could lead to potentially adverse, possibly lethal consequences such as drug overdose or unnecessary cosmetic surgical procedures[6]. In addition, Social media tends to spread misinformation much quicker than reliable and verifiable facts, which might cause cyber disarray or confusion. This could lead to breaches in patient-healthcare provider confidentiality, professional image ruin, and healthcare professionals licensing issues. Not to mention the amount of distortion a piece of information can go through being forwarded from one Social media platform to another amongst lay people[7]. Some studies were performed on the relationship between social media and orthognathic surgery. However, no study was found that investigated the information about usage of instagram by dental students for knowledge.

MATERIALS AND METHODS:

The present cross-sectional study was conducted between january and June of 2021 on a sample of interns and final year dental students in saveetha dental college chennai,India. he administrators provided approval for data collection in the dental institution. The study participants were informed about the purpose and objectives of the study. They were also provided information about their voluntary participation and their right to refusal. Those willing to participate in the study provided their consents. The dental students were provided with self-administered questionnaires (annexure). Google forms were used to fill out the questionnaire which was sent through Emails and messages. Any query or ambiguity about the questionnaire items was addressed. The survey respondents' demographic information and their responses about usage of instagram, purpose of usage,types of posts that students find useful,if the students own any page related to dentistry, if it has helped in clinical practice or not.

The data was entered in MS Excel (2010) and transferred to IBM SPSS Statistics for Windows, version 22 (IBM Corp., Armonk, NY, USA) for statistical analysis. Descriptive statistics included frequency distributions and percentages. Mean of dentists' opinion (Main outcome) was calculated and used for bivariate analyses purposes. The significance between the mean of dentists' opinion on the use of SM and demographic variables was tested using an independent t test. A p value of 0.05 or less was considered statistically significant to choose what kind of posts they follow.

RESULTS:

Out of the 250 participants, 205 filled the form. Out of the 205 students who filled the form, 54% were final year students and 46% were interns(figure 1). Figure 2 shows that 90% of the participants use instagram while 10% don't, out of the 90% who use instagram, 55% were female and 45% were male students(figure 3). 27% of participants chose that they use instagram for leisure,3% have chosen that they only use it for studies related, 70% have chosen both (figure 4). Figure 5 shows that 89% of participants follow oral surgery related pages while 11% don't. Figure 6 shows that 58% of students feel that posts and photos of oral surgical treatment posts are useful,27% chose videos or reels and 15% chose stories. When the participants were asked if these posts helped them in a clinical scenario, 62% had answered yes, 13% answered no and 25% had answered it has helped sometimes (figure 7). Figure 8 shows that 85% of participants have learned something new by watching these posts in social media while15% have answered no. And finally when the participants were asked if they own any account related to dentistry, 59% have answered no, 10% have answered yes and 25% have answered maybe in the near future.

DISCUSSION:

As the power of social media increases every day, millions of people rely heavily on their social media accounts for information to the extent of seeking answers on the Internet first for their medical or dental problems instead of even consulting with doctors[8]. The Instagram application is one of the social media platforms that many prefer as it provides easy access to information, videos, and photographs about orthognathic surgery as well as other health-related topics. The number of photographs or videos uploaded daily is over 100 million and patients have quick access to photographs, comments, or videos about oral surgery[9]. In this study, we aimed to investigate the usage of instagram by the final year students and interns.

This study's findings agree with the results of several reports that younger-aged dentists are using Social media to engage with their patients compared to older-age dentists [10]. When considering a dentist's age as a determinant factor in using Social media, younger dentists (under 35 years old) were using Twitter, Instagram, and Snapchat significantly more than older dentists[4]. It is worth mentioning that social media is relatively recent, where social platforms such as Instagram and Snapchat started only 10 years ago while Twitter started 14 years ago. Thus, someone could realize the larger effect of social media on younger generations who grew up with social media surrounding them. Dentists must understand that Social media's professional use should be dictated by the type of Social media frequently used by their patients[11]. Furthermore, the daily use of Social media was alarming as most respondents reported using for more than 30 min a day, which might introduce signs of "over-dependence". This reported overuse of Social media needs to be addressed by

dentists and professional organizations in the form of educational programs and counseling services to better guide dental professionals in the proper use of Social media.

The effect of Social media on dental care delivery is indisputable. Patients use Social media to collect information on their health status, health concerns, and health care providers..Ajwa et al. reported that 89.4% of dental practitioners believed that Social media is the most effective marketing strategy to recruit patients into dental practices in Saudi Arabia.[12] They also reported that 82.3% of their sampled participants mentioned that posting an ad on Social media created an increased influx of patients to the dental clinics. This is in line with the psyche of the current generation as they like to explore their options on SM before they embark on the journey, be it their doctor's appointment or their travel expenses. It gives a sense of security because they back their information obtained on SM and the internet.[13]

Patients may shy away from asking as many questions as they would like to interview with their doctors. This is one of the factors that make them turn to the Internet, and social media as a source of information. However, the reliability and accuracy of the photographs and videos shared on Instagram are controversial because it is a 'social' platform, everyone shares their opinion. Most videos on social media about orthognathic surgery are posted by patients or clinical advertisement agencies and small number of them are coming from the field specialists, such as maxillofacial surgeons or orthodontists[14]

Another social media study performed by Coleman et al investigated how patients used social media in relation to orthognathic surgery. The patients were asked to fill a questionnaire containing 15 questions. It was observed that 87% of the participants had less anxiety after researching oral surgery on social media. Most of the oral surgery patients surveyed indicated their most frequent search terms as 'tooth extraction" and 'impaction.' In our study, we also learned that #toothextraction and #impaction are the most frequently used hashtags by students for oral surgery on Instagram. To better educate individuals about the mentioned surgical procedures on social media, one recommendation can be that authoritative bodies such as associations of orthodontists and maxillofacial surgeons promote the advantages of orthognathic surgery by reposting good quality content published by clinician members[15]. One of the most important limitations of this study is that it was based on the evaluation of most recent posts performed in a single time range on the Instagram platform. Another limitation is that the data changes continuously on Instagram platform.

CONCLUSION:

Within the limits of this study it can be concluded that students find instagram as a very useful tool in learning about oral surgery. Many new videos and techniques of various procedures are being uploaded by thousands of dentists around the world which actually helps students as well as fellow dentists and patients to learn new things.

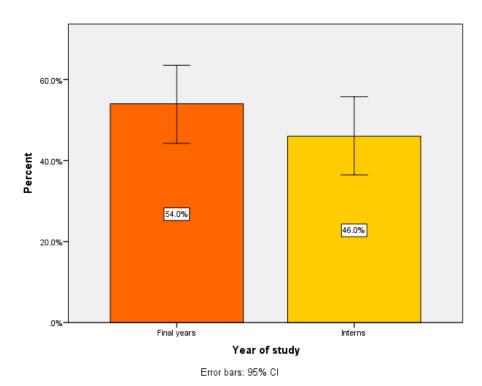


Fig 1: Bar graph showing year of study of the participants. X axis denotes year of study and y axis denotes number of participants. Here 54% were final years(orange) and 46% were interns(yellow).

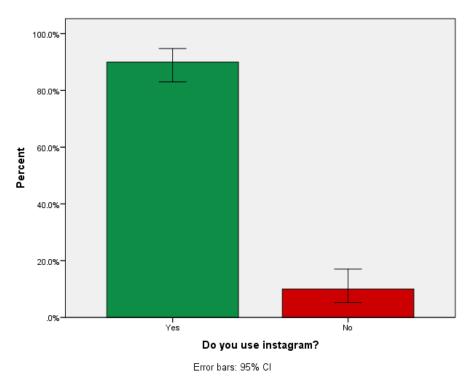


Fig 2: Bar graph showing usage of instagram by the participants. X axis denotes if the participants use or do not use instagram and y axis denotes number of participants. Here 90% of participants use instagram(green) while 10% do not(red).

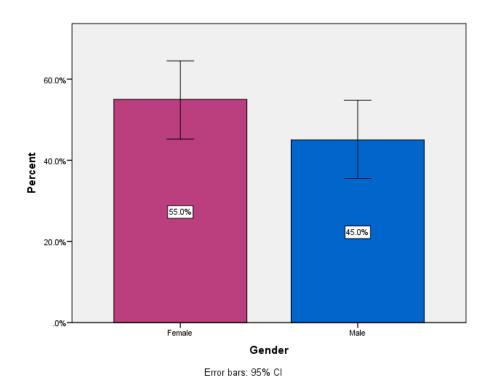


Fig 3: Bar graph showing gender of the participants. X axis denotes gender and the Y axis denotes the number of participants. Here, 55% of participants are female(pink) and 45% are male(blue).

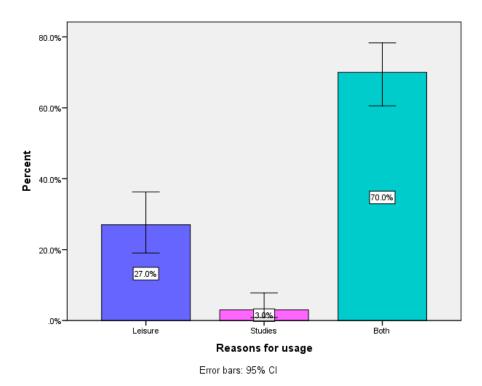


Fig 4:Bar graph showing reason for usage of instagram by the participants. X axis denotes reasons for usage and the y axis denotes the number of participants. Here, 27% use instagram for leisure(purple), 3% use for studies(violet) while 70% use for both(blue).

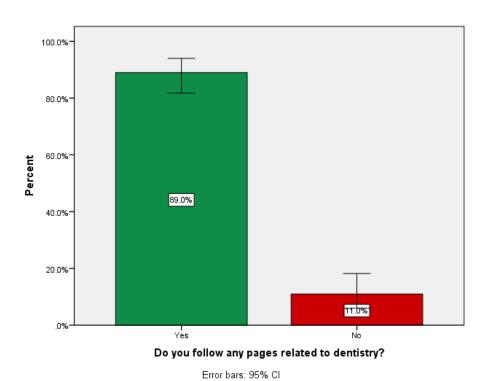


Fig 5::Bar graph showing if the participants follow any pages related to dentistry. X axis denotes the answer and the y axis denotes the number of participants. 89% have answered yes(green) and 11% have answered no(red).

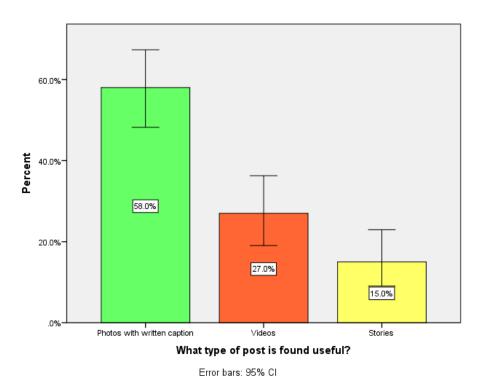


Fig 6::Bar graph showing what type of posts the participants find useful. X axis denotes different types of posts and the y axis denotes the number of participants. 58% have chosen photos with written captions(green), 27% have chosen videos(orange) and 15% have chosen stories(yellow).

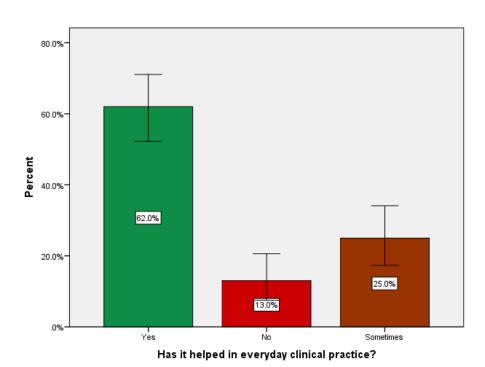


Fig 7: :Bar graph showing if instagram has helped the participants in clinical practice. X axis denotes yes or no and the y axis denotes the number of participants. Here, 62% have chosen yes(green), 13% have chosen no(red) and 25% have chosen sometimes(brown).

Error bars: 95% CI

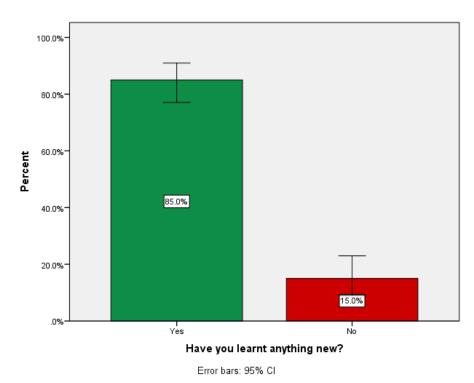


Figure 8:Bar graph showing if the participants have learned anything new. X axis denotes yes or no and the y axis denotes the number of participants. 85% of participants have answered yes (green) and 15% have answered no (red).

REFERENCES:

- 1. Henry RK, Molnar A, Henry JC. A Survey of US Dental Practices' use of Social Media. The Journal of Contemporary Dental Practice 2012;13:137–41. https://doi.org/10.5005/jp-journals-10024-1109.
- 2. Henry RK, Webb C. A Survey of Social Media Policies in U.S. Dental Schools. Journal of Dental Education 2014;78:850–5. https://doi.org/10.1002/j.0022-0337.2014.78.6.tb05738.x.
- 3. Aboalshamat K, Alkiyadi S, Alsaleh S, Reda R, Alkhaldi S, Badeeb A, et al. Attitudes toward Social Media among Practicing Dentists and Dental Students in Clinical Years in Saudi Arabia. The Open Dentistry Journal 2019;13:143–9. https://doi.org/10.2174/1874210601913010143.
- 4. Parmar N, Dong L, Eisingerich AB. Connecting With Your Dentist on Facebook: Patients and Dentists Attitudes Towards Social Media Usage in Dentistry (Preprint) n.d. https://doi.org/10.2196/preprints.10109.
- 5. Knösel M, Jung K, Bleckmann A. YouTube, Dentistry, and Dental Education. Journal of Dental Education 2011;75:1558–68. https://doi.org/10.1002/j.0022-0337.2011.75.12.tb05215.x.
- 6. Radu M, Carol Davila University of Medicien and Pharmacy, Radu G, Condurache A, Purcărea VL, Carol Davila University of Medicien and Pharmacy, et al. The influence of digital media on the success of a health care unit. Journal of Medicine and Life 2018;11:254–6. https://doi.org/10.25122/jml-2018-0064.
- 7. Gormley M, Collins L, Schofield S, Neville P. Exploring the impact of digital professionalism awareness training on dental undergraduate students. European Journal of Dental Education 2021;25:271–81. https://doi.org/10.1111/eje.12601.
- 8. Benson, Vladlena. Cutting-Edge Technologies and Social Media Use in Higher Education. IGI Global; 2014.
- 9. Dobson E, Patel P, Neville P. Perceptions of e-professionalism among dental students: a UK dental school study. British Dental Journal 2019;226:73–8. https://doi.org/10.1038/sj.bdj.2019.11.
- 10. Law RW, Kanagasingam S, Choong KA. Sensationalist social media usage by doctors and dentists during Covid-19. Digit Health 2021;7:20552076211028034.
- 11. Dorfman RG, Vaca EE, Mahmood E, Fine NA, Schierle CF. Plastic Surgery-Related Hashtag Utilization on Instagram: Implications for Education and Marketing. AesthetSurg J 2018;38:332–8.
- 12. Ajwa N, Alomran A, Alsuwaie H, Alzamil K, Alfaifi R, Almasry N, et al. Dental Practitioners' Perception toward Management of Physically Challenged Patient among Saudi Arabia. J IntSocPrev Community Dent 2018;8:546–52.
- 13. Passos K-K, Leonel A-C, Bonan P-R, Castro J-F, Pontual M-L, Ramos-Perez F-M, et al. Quality of information about oral cancer in Brazilian Portuguese available on Google, Youtube, and Instagram. Med Oral Patol Oral Cir Bucal 2020;25:e346–52.
- 14. Cork N, Grant P. Blurred lines: the General Medical Council guidance on doctors and social media. Clinical Medicine 2016;16:219–22. https://doi.org/10.7861/clinmedicine.16-3-219.
- 15. O'Dowd A. Tomorrow's dentists seek guidance on social media use. British Dental Journal 2019;226:545–545. https://doi.org/10.1038/s41415-019-0252-4.