ORIGINAL RESEARCH PAPER

Dentistry

E-PROFESSIONALISM ON SOCIAL MEDIA: THE OPINIONS OF UNDERGRADUATE DENTAL STUDENTS

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ABSTRACT

Introduction In this digital world, social media usage among professional students including dental undergraduates is increasing. Such emerging e-professionalism has its advantages and disadvantages. It develops audience engagement, communication, and networking opportunities. It also has limitations such as addictions, controversial posts, and comments, inadequate information, etc. **Objectives** This study aimed to examine the opinions of dental students about e-professionalism on social media. **Material and methods** A descriptive, cross-sectional study was conducted among undergraduate dental students at Dental Government College in Imphal, Manipur. (n = 229). The instrument used was a 28-item questionnaire modified from a previous study among dental students in Malaysia. Social media platforms such as WhatsApp, YouTube, Instagram, and Facebook were included. Data collected was statistically analyzed using IBM SPSS Statistics software 25 version (IBM Corp. Armonk, NY, USA) **Results** More female subjects were participated in this study. Attitudes of the students towards e-professionalism were very positive. The findings indicate the existence of both advantages and limitations. **Conclusions** There is a high use of social media among the students. The practices and concerns regarding e-professionalism are rising and therefore, a more uniform approach and awareness training programs on e-professionalism can help the students properly utilize it.

INTRODUCTION

E-learning has been introduced everywhere. Virtual platforms are used during any form of e-learning which can include anybody from different places at the same time. Such a form of learning helps to spread the knowledge that facilitates the professional students' learning and sharing of educational content. With new technologies such as smartphones and their applications, students become smart, and due to these online platforms, complex things regarding their courses can be easily learned. The students can easily access any social media platform. The most common online platforms are Facebook, Instagram, and YouTube.[1-5]

Every profession in this digital world, used virtual platforms for clinical practice, training as well as education. E-professionalism has been considered an emerging trend and an important approach where vital concepts are distributed through e-learning.[6-9] A study on the concept of professionalism has defined 'E-professionalism' as s "the attitudes and behaviors reflecting traditional professionalism paradigms but manifested through digital media."[10] There were both advantages and limitations of social media use among the learners as they might develop into a habit. So, awareness programs on e-learning should be managed for their quality content.[11-13]

Certain studies on the perception and attitude of medical and dental students towards communication skills with the patients and teaching ideas have already shown effective, interesting, and acceptable.[14] Some studies showed a rise in internet use by healthcare professionals in new areas like telemedicine, e-consulting, and e-learning that emphasize the impact of e-professionalism on real life.[15,16]

There is no study on e-professionalism in any of the institutes or universities in this region of India. So, this study on e-professionalism examines the opinions of dental students about e-professionalism on social media.

Subjects and methods

Study design

It was a cross-sectional study done to examine the opinions of undergraduates towards e-professionalism on social media. A team comprised of two faculties, one from the dental profession and one from the medical profession specializing in Community Medicine, and two dental internees, undertook this study.

Sampling and setting

The study population included undergraduate dental students from $1^{st}, 2^{nd}, 3^{rd}$, and 4th BDS, dental internees, and junior residents of the institute. Male participants were 92 and female participants were 137. Social media platforms such as WhatsApp, YouTube, Instagram, and Facebook were included. All the students were included except those who were not willing to participate.

Students were assured that participation in the study was voluntary, and protection of confidentiality was guaranteed. Students did not receive benefits or credits for participating in the study.

Sample size calculation was done using the formula: $N = Z^2 PQ/ L^2$, where $Z^2 = 3.84$ (Z is the critical value at 95% confidence level); P = 68.9% (prevalence of concerns on social media use in a study by Nieminen P et al.)[6]; Q = 100 – P=31.1; L = 6 (absolute error). The total sample size was calculated as 229.

Data collection and analysis

The instrument used was a 28-item questionnaire modified from a previous study among dental students in Malaysia.[6] This instrument was based on the existing literature. The questionnaire included three parts. Part 1 consisted of variables related to the basic background factors of the participants. Part 2 included questions related to social media usage in general. Part 3 included questions related to e-professionalism.

Statistical analysis

The frequency and percentage distributions of participant characteristics (age, sex, year of study, monitoring own online presence, and checking social media for own photos), and all outcome variables were presented for students

All data analyses were performed using IBM SPSS Statistics software 25 version (IBM Corp. Armonk, NY, USA)

Ethical considerations

Ethical clearance was obtained from the Institutional Ethics Committee as a part of internship training in the Department of Orthodontics and Dentofacial Orthopedics. Informed consent was also obtained from all the participants.

RESULTS

Basic characteristics (Table 1)

A total of 229 subjects participated in this study. Out of which female participants were 137 and male participants were 92. The age of the participants ranged from 18 to 29 years. Hence, the majority of the participants were female. Most of them were monitoring their online presence (47.4%) and checking for their own photos (54%) occasionally.

Unprofessional content (Table 2)

Among the participants, 49.3% were used to deleting people from their friend's list and 50.7% preferred more friends in their friend's list. Most of the participants (54.4%) did not follow people. The majority of them (68.4%) did not delete comments made by others in their profile and 64.2% liked tagging photos in their profile.

Social media invitations (Table 3)

The majority of the participants (76.3%) used privacy settings. Only 19.5% of the participants gave invitations to their patients; 35.3% to the faculties; 62.2% and 57.7%, did not accept invitations from patients and faculties respectively, and only 30.2% googled faculty members.

Concerns about social media use (Table 4)

Among all the participants, only 6.5% felt that social media use was not at all important; 55.3% thought it somewhat important, and 38.1% thought it very important. We should have appropriate concerns regarding 'violations of patient confidentiality' (75.8%) and 'posting of inaccurate dental-related information for patients' on social media (60%).

The attitude of dental students toward social media use (Table 5)

Most dental students (64.2%) agreed to the use of social media to obtain dental information by their patients. At the same time, 66% of the students agreed to the high risk of using social media for dental information by the patients. So, guiding patients for online use has become the responsibility of dentists in the world of e-professionalism (59.5%) as well and students need to keep updated on the current scenario on social media (65.6%).

DISCUSSIONS

This cross-sectional study was conducted among 229 dental students to examine the opinions of dental students about e-professionalism on social media. This study showed that the students were regular users of social media sites like WhatsApp, Facebook, Instagram, and YouTube. The students preferred using these social media platforms to keep in touch with friends and relatives, and most importantly to keep updated with new posts of any professional-related event or content.

The social media platforms also helped the students in terms of clinical aspects, communication skills, and ethical and legal aspects of their profession. Almost all the professional courses utilized e-professionalism for the benefit of the students as well as the faculty during covid pandemic crisis.[1-4]

The present study showed more female participants than males. The study by O'Connor S et al[1] showed more female participants like the present study. Another study by Marelic M et al[3] also showed more female participants than males. Other studies also showed more female participants than males.[6,10-13,15]

The present study showed that most of the participants were regular users of WhatsApp, Facebook, Instagram, and YouTube, where they upload or delete their photos, and comments from others in their profiles, check on new updates on professional aspects, etc like other studies.[1,4-7,12,13]

The present study discussed about the concerns of social media use regarding patients' confidentiality and the posting of inaccurate information about any patient, which can cause a negative impression of e-professionalism. Other studies have also mentioned that one should acknowledge the potential threats of inaccurate dental information in social media for patients. Any post related to their patient should be considered a guideline for those patients using social media and a new responsibility for the students.[1,6,13,19]

Many studies have also discussed both the advantages and limitations of the use of these media sites. Their attitudes were very positive towards social media use with a new responsibility in this digital world.[6-8] Some studies showed a rise in internet use by healthcare professionals in new areas like telemedicine, e-consulting, and e-learning that emphasize the impact of e-professionalism on real life.[9-16]

This study about the opinions on social media could help professionals and patients understand that e-professionalism would influence everyone on social media for wider professionalism and information on the health care system. Encouraging the students to use these platforms with training and awareness programs from experts will help in providing both benefits and other risks of posting information and sharing photographs on various media platforms.[1,6,9,10]

CONCLUSIONS

This was the first study to examine social media use by BDS professional students and the opinions of the students on e-professionalism in the Northeast region of India. All students were regular users of social media platforms such as WhatsApp, Facebook, Instagram, and YouTube. The study concluded that e-professionalism could be very useful for new scientific ideas and knowledge, or risk the social media users for inappropriate professional and unprofessional content. Therefore, there is a need for clear policies and guidelines on how to use social media to maintain a standard of e-professionalism for everyone in today's e-world.

Tables:

Table 1: The frequency and percentage distributions of basic characteristics among the students

Basic characteristics	Frequency	Percent
Sex:		
• Male	78	36.3
• Female	137	63.7
Year:		
• First	32	14.9
• Second	52	24.2
• Third	27	12.6
• Final	40	18.6
• Intern	49	22.8
• JR	15	7.0

Monitoring own online presence:	45	20.9
• Never	102	47.4
• Occasionally	41	19.1
• Regularly	27	12.6
• Frequently		
Checking for own photos:	53	24.7
• Never	116	54.0
• Occasionally	34	15.8
• Regularly	12	5.6
• Frequently		

Table 2: Frequency and percentage distributions of responses to the unprofessional content

Variable	Frequency	Percent
Deleted people from my friends list	106	49.3
• Yes	109	50.7
• No		
Stopped following people	117	54.4
• Yes	98	45.6
• No		
Deleted comments made by others on my profile	68	31.6
• Yes	147	68.4
• No		
Removed my name from photos that were tagged to identify me	77	35.8
• Yes	138	64.2
• No		

Table 3: frequency and percentage distribution of social media invitations

Variable	Frequency	Percent
I use privacy settings	164	76.3
• Yes	51	23.7
• No		
I have accepted invitation(s) from patients to be friends	80	37.2
• Yes	135	62.8
• No		
I have invited patients to be friends	42	19.5
• Yes	173	80.5
• No		
I have accepted invitations by faculty members to be friends	91	42.3
• Yes	124	57.7
• No		
I have invited faculty members to be friends	76	35.3
• Yes	139	64.7
• No		
I have googled faculty members	65	30.2
• Yes	149	69.3
• no		

Table 4: Frequency and percentage distribution of responses to the question 'What concerns do you have about social media use?'

What concerns do you have about social media use?	Not at all important N (%)	Somewhat important N (%)	Very important N (%)
Public perceptions of unprofessional behaviour by me.	14 (6.5)	119 (55.3)	82 (38.1)
Family perceptions of unprofessional behaviour by me	9 (4.2)	120 (55.8)	86 (40)
Public perceptions of unprofessional behaviour by my colleagues	20 (9.3)	132 (61.4)	63 (29.3)
Public perception of my dental school.	9 (4.2)	88 (40.9)	118 (54.9)
Public perception of dental profession	5 (2.3)	72 (33.5)	138 (64.2)
Violations of patient's confidentiality	10 (4.7)	42 (19.5)	163 (75.8)
Posting of inaccurate dental related information for patient.	26 (12.1)	60 (27.9)	129 (60.0)

Table 5: Frequency and percentage distribution of attitude of dental students towards social media use

Attitude of dental students towards social media use	Strongly agree N (%)	Agree N (%)	Disagree N (%)	Strongly disagree N (%)
Patients use social media to obtain dental information	37 (17.2)	138 (64.2)	33 (15.3)	7 (3.3)
The benefits of social media use in dentistry outweigh its risks	21 (9.8)	142 (66.0)	45 (20.9)	7 (3.3)
As a student of dentistry, it is my obligation to keep current on social media use.	14 (6.5)	141 (65.6)	55 (25.6)	5 (2.3)
Guiding patient' s online is a new responsibility for dentists in the digital age	42 (19.5)	128 (59.5)	33 (15.3)	12 (5.6)

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