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PERSPECTIVES

Recommendations for health care educators on e-professionalism and student behavior on social networking sites

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Background: The blurring of private and professional lives on social networking sites (SNSs) such as Facebook has led to ethical and professionalism concerns for health care professionals and students.

Aim: Using Facebook as the main subject for discussion, this article provides health care educators with several recommendations on what their students should know regarding e-professionalism and their behavior on SNSs.

Methods: Literature searches were carried out in PubMed from May 2013 to July 2014 based on the keywords "Facebook" and "pharmacy". Articles were screened and filtered based on their titles and abstracts for studies addressing concerns about e-professionalism. Based on the major concerns identified and a review of cases from published literature, a set of recommendations were devised.

Results: These recommendations are related to issues on accountability, employability, privacy, distinctions between personal and professional identities, fitness to practice, and the need for guidance on e-professionalism. Health care students should be aware of guidelines and policies of unacceptable/unprofessional behavior on SNSs and accept accountability for their own actions and behavior online.

Conclusion: These recommendations are structured for educators who are dealing with these issues in their teaching practices and experiences, as well as to inform the teaching pedagogies of those who are into e-learning and developing courses that utilize social media and SNSs.

Keywords: e-professionalism, Facebook, health care education, social media guidelines, social networking sites

Introduction

The evolution of the Internet in the Web 2.0 era has been critical in transforming people's attitudes toward medicine and health care. It changed the way health-related information was disseminated by allowing users to interact with online content. The advent of social media also allowed the exchange of user-generated content.[1] Its uniqueness was its openness and ability for two-way communication and collaboration. The social media revolution, spearheaded by various forms of technology, opened up new channels for communication and learning. Among them, the social networking site (SNS) Facebook gained rapid popularity worldwide. In fact, Facebook was the most utilized SNS in the US, accounting for >91% of SNS visits,[2] and 23% of Facebook users accessed their accounts five or more times daily.[3] The use of SNSs in Asia was even more popular. Singapore was the top country where people spent most of their time on Facebook, overtaking the UK (top fourth) and the US (top fifth).[2]

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Furthermore, the fastest-growing online community on Facebook was from India.[2]

In recent years, much attention has been focused on the use of social media for health care education. The digital connectivity of the younger generation, particularly among 18- to 34-year-olds, has led to the coining of the term "Generation C" for their "connectedness".[4] In fact, Facebook is the most used social media channel used in higher education, with a 37% increase of US schools using this channel from 2010 to 2012.[5] The advent of mobile social media also makes it easier to connect to SNSs anytime and anywhere. The rapid growth of the mobile app industry makes this possible. It is predicted that there will be >10 billion smartphones and tablets shared among 7.3 billion people by 2016.[6] However, the blurring of private and professional lives of health care practitioners and students online has led to various ethical and professionalism concerns. For example, a nurse in Sweden was suspended from her job after she posted on an SNS a photo of herself holding a piece of flesh during a brain operation.[7,8] Similarly, medical students found it difficult to distinguish their personal and professional identities on Facebook.[9] Furthermore, there is an expectation that health care practitioners and students should adhere to higher standards of behavior than non-health care professionals. In a qualitative study of medical students' and residents' Facebook accounts, a small proportion had unprofessional information publicly available, such as foul language, drunkenness, sexist and racial comments, and comments violating patient privacy. However, Facebook use significantly declined as the students neared graduation.[10] These forms of unprofessional online behavior are not uncommon in medical schools. In fact, 67% (30/45) and 7% (three of 45) of medical schools reported disciplinary actions of informal warnings and student dismissals, respectively, for such behavior.[11] Thus, there is a need to increase the awareness of students in the health professions regarding the importance of e-professionalism on SNSs and the impact it can play on their professional reputation and career.

The changing paradigm in health care has led to a more patient-centered focus whereby patients act as partners in their care and are not just passive recipients.[12] The impact of online professionalism on SNSs such as Facebook is important for both health care practitioners and health care students. For example, it is estimated that >90% of medical students and professionals in the US (eg, resident and practicing physicians) use social media, including Facebook.[13] A similar proportion of nurses (86%) and 50%–60% of pharmacists have a Facebook account.[14–16] Therefore, Facebook offers a huge opportunity as a potential communication channel. In fact, various organizations are leveraging on social media channels to disseminate information and reach out to their members.[17] However, the traits of a professional,[18] including accountability, ethical decision making, conscience, trustworthiness, and pride in the profession, are not easily inculcated in an online environment where there is only a subtle line between one's personal and professional identity. To further complicate matters, students are generally unaware of how their information on SNSs is used by universities, employers, and professional or legal bodies. Various universities and companies are actively developing policies to regulate student, staff, and employee behavior online,[11,19] but an international set of "good practice" social media guidelines for health care students does not exist.

As part of developing a new syllabus on e-health for pharmacy students, it was deemed appropriate to address some of the major concerns regarding the impact of social media and SNSs on their future career. This article presents some recommendations to educators of health care students (eg, medical, nursing, other allied health) who are dealing with concerns relating to e-professionalism in their teaching practices and experiences. These recommendations are also meant to inform the teaching pedagogies of those who are into e-learning and developing e-courses that utilize social media on what the students should know when on SNSs.

Methodology

Literature searches were carried out in PubMed from May 2013 to July 2014 based on the keywords "Facebook" and "pharmacy". Articles were screened and filtered based on their titles and abstracts and on whether the studies addressed any form of e-professionalism concerns by pharmacy professionals, trainees, and students. Reviews, systematic reviews, meta-analyses, and original studies were included in the analysis. Only articles and abstracts that were published in English were included in the search, as was additional literature from the citations of the retrieved articles. From the articles identified, the major concerns were classified into issues related to accountability, employability, privacy, distinctions between personal and professional identities, fitness to practice, and the need for guidance on e-professionalism (Table 1). Recommendations were then given to address these concerns.

Recommendations for educators

1. Educators should teach students about e-professionalism and help them understand how SNSs can impact e-professionalism

Cain and Romanelli[20] defined e-professionalism as the "attitudes and behaviors … reflecting traditional

Table 1 E-professionalism concerns **and recommendations for educators**

Reference	Proportion of respondents who agreed to statement (%)						Recommendations for educators of health care students
Respondent group	**Cain et al[32] (n=454)**	**Ness et al[33] (n=212)**	**Ness et al[23] (n=212)**	**Cain et al[31] (n=244)**	**Hall et al[22] (n=569)**	**Prescott et al[21] (n=91)**	
	US residency directors	**US pharmacy undergraduates**	**US pharmacy undergraduates**	**US pharmacy undergraduates**	**UK pharmacy undergraduates**	**UK pharmacy undergraduates**	
Online professionalism							
1. I would want guidance sessions/ guidelines on the impact of social networking on online professionalism as a health care professional	NA	NA	NA	NA	NA	68%	Educators should teach students about e-professionalism and help them understand how SNSs can impact e-professionalism
2. What happens on SNSs like Facebook is separate from what happens in school	NA	NA	NA	NA	NA	53%	Educators should advise students against having a double standard regarding their health professional image online and in reality, but also help them understand that it is not always easy to distinguish personal and professional identities on SNSs
3. Health care professional students should be held to higher accountability regarding their online image on SNSs than other non-health care professional students	72%	54%	NA	69%	NA	NA	
4. I would want a faculty member "friend" on SNSs (eg, Facebook/LinkedIn)	NA	40%	NA	39%	NA	NA	Educators should maintain the professionalism of the teacher–student relationship on SNSs
Fitness to practice and employability							
5. Students' behavior on SNSs can/should impact fitness to practice	NA	NA	NA	NA	NA	83%	Educators should make their students aware that their behavior on SNSs may impact their fitness to practice
6. Employers should consider the profile information of potential employees when hiring	77%	55%	55%	43%	27%	NA	Educators should raise the awareness among students regarding their online profiles and the information that they post online, as this information will affect others' opinion of them as a health care provider, including that of potential employers
7. Information posted online (eg, photo, message, joined a group, status updates) will affect people's opinion of me as a health care provider	79%	69%	45%	73%	NA	51%	
8. I have posted information online (eg, photo, message, joined a group, status updates) that I feel embarrassed about and would not want a potential employer/faculty member/patient to view	NA	32%–46%	37%	32%–36%	45%	26%	Educators should remind students to exercise restraint when posting information that they will feel embarrassed about or not want a faculty member, patient, or potential employer to see
9. I am aware of what is classified as unacceptable/unprofessional behavior by regulating bodies (eg, school, health professional body)	NA	NA	NA	NA	71%	90%–95%	Educators should ensure that students are aware of guidelines and policies on unacceptable/unprofessional behavior on social media

(*Continued*)

Table 1 (*Continued*)

Reference	Proportion of respondents who agreed to statement (%)						Recommendations for educators of health care students
Respondent group	**Cain et al[32] (n=454)**	**Ness et al[33] (n=212)**	**Ness et al[23] (n=212)**	**Cain et al[31] (n=244)**	**Hall et al[22] (n=569)**	**Prescott et al[21] (n=91)**	
	US residency directors	**US pharmacy undergraduates**	**US pharmacy undergraduates**	**US pharmacy undergraduates**	**UK pharmacy undergraduates**	**UK pharmacy undergraduates**	
Online privacy							
10. I use the privacy settings on Facebook to limit public access to my information	NA	96%	66%	79%	93%	85%	Educators should advise students to use the privacy settings on SNSs to limit public access to their personal information, but also remind them not to fully rely on the privacy settings
Accountability online							
11. Students should be accountable for illegal acts on SNSs	93%	78%	64%	69%	NA	70%	Educators should teach students to be responsible for their online activity by accepting accountability for illegal acts and/or unprofessional behavior online
12. Students should be accountable for unprofessional behavior on SNSs	86%	57%	61%	55%	NA	52%	

Notes: Copyright © 2010. American Journal of Health-System Pharmacy. Adapted from Cain J, Scott DR, Smith K. Use of social media by residency program directors for resident selection. *Am J Health Syst Pharm*. 2010;67(19):1635–1639.[32] Copyright © 2013. American Journal of Pharmaceutical Education. Adapted from Ness GL, Sheehan AH, Snyder ME, Jordan J, Cunningham JE, Gettig JP. Graduating pharmacy students' perspectives on e-professionalism and social media. *Am J Pharm Educ*. 2013;77(7):146.[33] Copyright © 2014. American Pharmacists Association (APhA). Adapted by permission of APhA. From Ness GL, Sheehan AH, Snyder ME. Graduating student pharmacists' perspectives on e-professionalism and social media: qualitative findings. *J Am Pharm Assoc* (2003). 2014;54(2):138–143.[23] Copyright © 2009. American Journal of Pharmaceutical Education. Adapted from Cain J, Scott DR, Akers P. Pharmacy students' Facebook activity and opinions regarding accountability and e-professionalism. *Am J Pharm Educ*. 2009;73(6):104.[31] Copyright © 2013. American Journal of Pharmaceutical Education. Adapted from Hall M, Hanna LA, Huey G. Use and views on social networking sites of pharmacy students in the United Kingdom. *Am J Pharm Educ*. 2013;77(1):9.[22] Copyright © 2012. The Pharmaceutical Journal Publications. Adapted from Prescott J, Wilson S, Becket G. Students want more guidelines on Facebook and online professionalism. *Pharmaceut J*. 2012;289:163.[21]

Abbreviations: NA, not applicable; SNS, social networking site.

professionalism paradigms that are manifested through digital media". This was aptly described for the younger generation of students and health care professionals, where their online identity played a significant role in their lives. In fact, 68% of UK pharmacy students indicated that they wanted to know about e-professionalism, currently available guidelines, and how SNSs would impact their careers as future health care professionals. They also wanted guidance sessions on this topic.[21]

Professionalism in health care education is traditionally instilled in students so that they not only have the relevant expertise and skills in their specialties but also are accountable, proud, trustworthy, and exhibit leadership qualities in front of peers and patients.[18] This involves a continual process of inculcating the right attitudes, behaviors, and values in students throughout their undergraduate years. While lists of social media guidelines[19] can be given and the importance of e-professionalism taught, knowing these guidelines and their importance does not equate to a change in students' online behavior. In general, students are aware of the need to behave professionally online but may choose to do so only after they graduate. Studies have shown that up to half (40.2%) of pharmacy students will change their social media habits after they graduate.[22] For example, students are willing to clean up or delete their social media profile or make themselves unsearchable before important career fairs where potential employment contracts are signed.[23] However, evidence suggests that improvements or even a complete change in the educational approach is needed for the behavioral change to occur.[24] Hence, educators should begin teaching their students about e-professionalism in their early undergraduate years. Furthermore, in order to address the generation gap between the more senior practitioners and younger students, and to ensure that such guidelines are accepted, students should be involved in generating and implementing these guidelines among themselves. Doing this not only cultivates their sense of professional responsibility but also their viewpoints can be complemented by the experiences and opinions of the senior practitioners.

Another way to inculcate e-professionalism is to encourage health care students to develop their own personal social media policy, following Vartabedian's[25] suggestion for practitioners who encounter patients on social media. The onus then falls on students to follow their own policy. Proactive e-professionalism education should include mentoring and discussions, as well as educators being role models for students.[26,27] General guidelines from health care organizations (eg, the American Medical Association, http://www.ama-assn.org/ama/pub/news/news/social-media-policy.page) can be used as starting points for students to develop their own personal policy. Issues of appropriate posts, posting an expert or personal opinion, and the legalities and best practices of online behavior on SNSs can then be used as building blocks to improve their policies.

2. Educators should advise students against having a double standard regarding their health professional image online and in reality, but also help them understand that it is not always easy to distinguish personal and professional identities on SNSs

Professionalism in physical settings is easily distinguishable. For example, time spent in hospitals or schools indicates the professional identities of health care students and trainees. Therefore, time spent outside is personal.[10] In addition, the switch of the professional image of medical students is obvious through their change of clothes (eg, white coat).[9] However, this distinction is not so clear on SNSs. Social media channels were designed for social communications, and their nature makes these communications available to a wider audience.[28] It is common and not unprofessional to post information or find friends, potential working partners, and colleagues online. In fact, this forms the basis and is an advantage of SNSs. Students perceive their online profile to be an accurate representation of their character.[22] However, people's behavior on social media channels tends to differ from reality.[29] The difference between students' perceptions and their online behavior leads to a "double standard" in their actions online and in real life. In fact, half (53%) of UK pharmacy students considered their behavior on SNSs to be separate from school, implying that they may not associate their information-sharing behavior with negative consequences on e-professionalism.[21] Students may feel that their posts on SNSs like Facebook are personal and targeted at their friends, therefore they can post whatever they like without being "scrutinized" by the public. This attitude, which has been expressed by both medical and pharmacy students, is contradictory of their perceptions that professionals should be held to higher integrity standards than other nonprofessionals.[30–33] However, students tend to forget that once the information they post on social media becomes public, there is no way to control how this information is used by others.

Even though the curricula in some institutions[11,19] address certain issues regarding SNS behavior of students and faculty, unfortunately, the laws and ethical and professional standards

of health care practitioners that are traditionally taught to health care students in general do not address online behavior and e-professionalism sufficiently. For example, the code of ethics by the International Pharmaceutical Federation does not provide any specific recommendations on how pharmacists should conduct themselves on social media.[34] Educators assume that students will know how to use their own judgment to conduct themselves professionally online.[30] However, without a set of international guidelines on e-professionalism and social media, students can be confused as to how the rules and standards apply to their behavior on SNSs. They may unknowingly or unintentionally discuss patient cases or make discriminatory statements without being aware of their violation of laws or professional standards. In a court case in 2009, a nursing student on rotation was expelled from a US university for violating the nursing honor code and confidentiality agreement because she made profane comments relating to sex, race, and religion about the patients she encountered.[28]

The inability to separate personal and professional lives seems to be more obvious in the younger generations, who think that their thoughts and opinions are personal when posted on SNSs, even when their posts may negatively impact others.[30] Therefore, educators should encourage students to:

- Be responsible. Recently, a teenage juror was jailed for lying that he was ill when he went to watch a musical instead.[35] In another case, a banker was dismissed after he was found lying about needing time off for a family emergency when his picture later appeared on Facebook dressed as a fairy at a party and drunk.[8] With integration of location-based services or photo-sharing apps like Foursquare and Instagram, one's past actions may be found out and serious consequences can result. Students should not lie or cheat online if they would not do it in reality.
- Be authentic. Many people use pseudonyms on SNSs, thinking that their online activity will be masked. Recent statistics show that 83 million Facebook accounts (8.7% of users) were fake, with 2.4% of users using pseudonyms.[36] However, a user's real identity can be determined through browsing habits and tracking tools associated with an individual's pseudonym.[37] An individual's privacy can also be affected by linking collected data associated with the pseudonym across multiple data platforms and over long periods of time. The key is to be honest and transparent regarding one's online identity.
- Respect patients' privacy and confidentiality. Be aware that maintaining patients' privacy and confidentiality does not just mean not divulging patients' names. Other possible tell-tale signs include details of the environment, circumstances, time at which the event occurred, physical descriptions of patients, and health-related information, among others. A breach of the nurses' code of conduct led to two staff losing their jobs at a UK hospital after a nurse appeared on Facebook in a revealing pose with a patient in the background. This breach was due to the nurse not properly safeguarding the privacy and confidentiality of the patient.[7,8]
- Adhere to the honor and ethics codes of their respective health profession. Generally, students in medical or health care professions will subscribe to an honor and/or ethics code that requires them to adhere to standards of accountability, confidentiality, honesty, integrity, and professionalism. Although these codes were not created in the social media era, they should follow the "spirit of the law" and not go overboard when expressing their personal opinion on SNSs. Name-calling, making threats, and spreading rumors online are characteristics of cyberbullying[38] and can lead to serious consequences. They should not post hurtful or hateful speeches or speak poorly of patients on SNSs. It can be difficult, sometimes impossible, to retract information once it is posted online.

The bottom line is to put themselves in the shoes of the other party when posting online. How would they feel if someone else posted the same thing about them? If they would feel hurt, embarrassed, or angry, they should think twice about posting it.

3. Educators should maintain the professionalism of the teacher–student relationship on SNSs

Studies have suggested that students want to see the nonprofessional side of their professors on Facebook, but they do not want their own personal lives to be monitored by their professors.[29] Students want to connect to their teachers or mentors online because they can expand their contacts, which may potentially help in their future careers. For example, nearly 40% of the US pharmacy students wanted to "friend" their professors on SNSs.[31,33] It is not uncommon for educators to have their former or current students as Facebook contacts. The evolving privacy policies of Facebook, and the increasing popularity of LinkedIn, a professional SNS for connecting to colleagues and other professionals, can increase the communication potential and ties among the college "family" of staff, students, and alumni. However, faculty and students alike should not cross the line of e-professionalism on SNSs. Faculty members are generally more aware of the difference in the use of SNSs that are used for personal reasons (eg, Facebook personal profile pages) and those that are

more for professional purposes (eg, LinkedIn). In a study of 95 pharmacy faculty members, 72% stated that they would decline a student's friend request.[39] Nearly half of the same cohort of faculty participants would decline a student's request until the student has graduated (47%), or totally ignore the request (43%). In fact, all of them would not initiate a friend request to a student.[39] There are many instances of "unacceptable professional conduct" by teachers on Facebook resulting in disciplinary actions.[40] Educators must realize that even if they are very conscientious in their postings, they may still be made privy to e-professionalism issues from personal information posted by their student "friends", which may lead to harm of the students.[20] Therefore, they should take steps to safeguard not only themselves but also the reputation and well-being of their students.

Despite the negative issues regarding e-professionalism in teacher–student relationships on SNSs, this channel does offer several advantages, such as enabling the provision of advice and mentorship to the student, as well as future working connections and friendships.[41] In order to help educators harness the advantages of Facebook, an educator's guide was developed last year.[42] This article highlights several points that are relevant to educators of health care students.

- They should adapt to the learning styles of the Generation C students by embracing digital and social media and mobile technologies as part of their own educational pedagogy. This allows students to have a more active role in learning in an interactive and collaborative environment, at their own time and pace, anytime and anywhere.
- Facebook can be used as a professional development resource for students through the creation of specific groups on various subject matters. Content from Microsoft Office files can also be shared using the Docs.com Facebook app. Additionally, educators can "like" Facebook pages from organizations and conferences that are relevant to their expertise and interests so that updates can be seen in their news feed.
- They should be a role model to students by conducting themselves in a civilized and responsible manner on SNSs. They should be respectful and courteous in their posts and discuss inappropriate online behavior with their students. Do not just "talk the talk" but "walk the walk".

4. Educators should make their students aware that their behavior on SNSs may impact their fitness to practice

The online attitudes and behavior exhibited by students on SNSs may present a negative impression to others, which, in turn, can impact on their fitness to practice as health care professionals. In fact, 83% of students agreed that their behavior on SNSs should impact their fitness to practice.[21] Students may sometimes vent their frustrations by speaking poorly of their classmates or teachers/preceptors on SNSs, not realizing that their posts may lead to negative consequences. Furthermore, such actions may backfire when students realize that they need help from their instructors to provide referee letters or recommend job opportunities in the future. Many students forget that their instructors are only human and thus prone to hurt as well. Some posts that students think are harmless may actually hurt the instructor's feelings. These posts can amount to cyberbullying, which may result in the instructor experiencing anxiety and depression and perhaps even leaving the teaching profession.[43] Therefore, educators should remind students that their instructors deserve the right to respect and privacy. Posting hurtful comments under an alias does not guarantee anonymity. There is always a possibility that things that are posted online can be linked back to their original author, even if they are deleted.[44] Such information can be misused or used inappropriately against the original author.[45] Students should also be reminded not to post emotionally (eg, anger in the heat of the moment). They should refrain from using any abusive, threatening, or obscene language and any rude, hateful, hurtful, or defamatory comments online.

5. Educators should raise the awareness among students regarding their online profiles and the information that they post online, as this information will affect others' opinions of them as a health care provider, including those of potential employers

This is a common trend in recent years. Statistics show that 91% of employers screen potential job candidates through social media channels, with the most popular channels being Facebook, Twitter, and LinkedIn.[44,46] A study conducted for the technology sector showed that 20% of the candidates were rejected by companies based on their social media profiles.[47] In health care, this may translate to employers not wanting to offer residency positions or jobs. The information that can be mined from SNSs about a candidate can potentially be more revealing than that obtained from job application forms, transcripts, and interviews.[28] Not surprisingly, companies reject potential candidates because they lie about their qualifications or post inappropriate photos or negative comments about their previous employers.[46] However, employers will not tell the rejected candidates that this was the reason.[29] In a survey of 377 pharmacy students in the UK, 45% revealed that they had posted items online that

they would not want their prospective employers to see.[22] Therefore, educators should ensure that students realize that any information that portrays them in a bad light for employers can potentially jeopardize their job applications and career prospects. Some employers may think that people who are not careful in the information they provide online or protecting access to it may not be suitable to work in a professional environment. On the brighter side, more than half of employers (68%) had employed potential candidates due to positive impressions about their personalities and fit within their organization.[46]

Ethical and legal concerns regarding job applicants' privacy rights on SNSs have arisen as a result of this trend. Questions that have been asked include:[28] 1) whether it is fair to judge the information of an applicant when that same information cannot be accessed for others due to a difference in privacy settings, and 2) whether a piece of information should be used if it is brought forth by someone who has access to the applicant's online persona, even though the applicant has actively attempted to keep his/her profile private. In the US and UK, serious measures are taken against employers who ask employees or job applicants for their social media login details.[48,49] Facebook has also indicated that it would take legal action against employers that break its policy of password sharing by asking candidates for their passwords.[48] However, this trend by employers will continue with the aid of policies and access to project work on open-source channels, in order to choose the most qualified candidates.[50] Surprisingly, surveys from multiple studies showed that more than half of pharmacy students (43%–77%) felt that employers should consider the profiles of potential employees when hiring.[23,31–33] In order to cater toward this trend, students should leverage on the advantages of social media by:[50–52]

- Using professional SNSs such as LinkedIn as their professional SNS so that potential employers can review their profiles as electronic résumé (some alternatives to professional networking are also provided in the Search Engine Journal)[53]
- Reviewing the content on their SNS regularly and keeping their professional profiles up to date
- Removing public content that would make them feel uncomfortable (eg, venting their frustrations about their job, colleague, or company)
- Engaging in online communities that they are passionate about and being involved in topics that are in their area of professional interest and expertise.

The openness and social nature of SNSs are the main attractive features of SNSs, but these same features can also act as a double-edged sword. The lack of social inhibitions when freely expressing one's behaviors and thoughts online may generate wrong or negative impressions of that person's online persona due to the "public" display of "private" posts that may have otherwise been repressed in face-to-face interactions.[20] When a health care professional used "emoticons" in a work communication with a client, the client misinterpreted these gestures as being romantic, while the health care professional merely meant them as being friendly.[7] Thus, misinterpretation of posts by health care students or trainees may lead to them being misjudged as unprofessional, disrespectful, or even uncaring toward patients.

Over half (51%–79%) of the pharmacy students agreed that the information they posted online would affect others' opinion of them as a health care provider.[21,23,31–33] This was probably because they felt that SNSs could help improve patient–practitioner communication, as echoed by medical students and residents.[13] Interestingly, medical residents (8%) and students (1%) were aware of patients visiting their SNS profiles. In fact, similar proportions had also received "friend" requests from patients. On the other hand, they had a different mindset compared with practicing doctors, since they also visited patients' SNS profiles and felt that it was all right to interact with patients on SNSs as part of patient care.[13] In order to maintain e-professionalism, health care educators and preceptors should remind their students/trainees to take heed of these guidelines:[54]

- Respect patients by not discussing any of their medical conditions or personal information online, even if the information seems anonymous. Instead, students should provide a broader perspective by discussing the issues at hand.
- Share up-to-date evidence-based health information and resources on SNSs where appropriate.
- Be professional and do not post updates that would put the profession in a bad light.

6. Educators should remind students to exercise restraint when posting information that they might feel embarrassed about or not want a faculty member, patient, or potential employer to see

Personal information may be accessible to a wider audience if the privacy settings on SNSs are not configured correctly. There is no certainty as to the types of information and the extent to which it is shared on the Internet, especially through Internet searches. Online posts and pictures can surface in search engine results years after they are uploaded. Generally, 26%–45% of pharmacy students tended to post information

that would make them feel embarrassed online.[21–23,31,33] Therefore, as a form of guidance, they should refrain from posting foul language and personal and derogatory comments reflecting their disgruntlement about their institution/employer, peers, faculty, and/or patients.[55,56] In addition, they should exercise caution when "liking" groups that contain controversial topics or material. The key is to "think with your mind, not with your heart".

Special attention should also be paid to pictures posted on SNSs. Students should be reminded that even if they are not the ones posting the photos, they can still be "tagged" in photos posted by others. Even though photos posted on SNSs are meant to be viewed by the public, the intended audience is usually people within the user's social network. However, in reality, any information posted can be seen by everyone, hence creating an ethical dilemma of whether the "public" is the "open public".[28] In a case of a student teacher from Millersville University who posted pictures of herself dressed as a pirate and drunk on MySpace, the school district barred her from classes and reclassified some of her credits so that she was issued a degree in English instead of education, thus preventing her from seeking credentialing of her qualifications.[28] Photos depicting alcohol intoxication, risk-taking behavior, and sexually explicit material should be avoided, and students should let people know if they do not want to be tagged in such photos. Furthermore, photos that are posted on SNSs by students may not be representative of who they are today, since the photo may have been posted several years back.[23] Educators should inform their students to consider whether comments or photos that they post online are acceptable to the "open public" if conveyed on another medium. If they feel uncomfortable or embarrassed, then restraint should be exercised. In addition, it is important to remind students to "clean up" unwanted photos and posts published in their past as well.

7. Educators should ensure that students are aware of guidelines and policies on unacceptable/unprofessional behavior on social media

Many organizations, including education institutions, have come up with their own social media guidelines and policies for employees and students.[19] However, these guidelines vary among institutions. Some schools adhere to these guidelines strictly and may carry out disciplinary actions on staff and students if they do not follow these guidelines and policies. Students must realize that even though content on social media channels is protected by free speech, their rights do not extend to "speeches" that disrupt the discipline of the school.[57] It is thus important for educators to remind students to be aware of and follow the social media policies of their institution and/or professional body. On the other hand, institutions (especially those that train health care students) should also examine their honor codes so that these can be updated to adequately include e-professionalism concepts, as well as address problems occurring on social media. Otherwise, their honor codes may be legally challenged if a problem arises due to a student invoking the code.[28]

Over 90% of UK pharmacy students stated that they were aware of unacceptable and unprofessional behavior dictated by their regulatory bodies.[21] However, the line blurs when such behavior occurs on SNSs. Therefore, health care students should use the social media policies of their institution to develop their own guidelines that they can easily follow. Furthermore, they should not make any endorsements on behalf of their institution/organization or use any representative logos on their personal profile or posts, unless they are given specific approval and permission to do so. The use of disclaimers that state that posts represent only the student's own views and not those of the institution/organization can be useful too.

8. Educators should advise students to use the privacy settings on SNSs to limit public access to their personal information, but also remind them not to fully rely on the privacy settings

SNSs can sometimes be a bit too social. For example, personal photos that are tagged by friends can reveal details about a person through face recognition software (eg, identity, relationships).[58] Hence, it is important not to provide personal information that can be "stolen" (eg, contact details). With the advent of geo-tagged photos (ie, images with the latitude and longitude embedded) and location-based apps such as Foursquare (https://foursquare.com/), people should not be too specific with their "check-ins" either, particularly if they are in remote areas or alone.[59] Educators should teach students about the privacy policies that are relevant to them (eg, in their institutions) and ensure that they know how to use the privacy settings on the specific SNSs that they frequently use. In particular, Facebook users can set different levels of privacy, ranging from being totally public to restricting certain contacts and being completely private. In fact, more than three-quarters of pharmacy students were aware of and used the privacy settings on SNSs such as Facebook to limit their information.[21,22,31,33] In another study, the visibility of pharmacy students' Facebook walls was decreased from 18% to 8% after a presentation of their college social media policy, thus demonstrating an increase in their Facebook security settings.[60] Users who do not know how to set their privacy

on Facebook are encouraged to refer to the how-to wiki for general guidance.[61]

Sometimes it can be difficult to identify the changes in privacy agreements of SNSs due to frequent updates. Some clauses that involve legal language may not be easily understood by laymen users. Another way to protect one's identity is to not fully rely on the privacy settings of SNSs but to assume that whatever is posted can potentially be accessible by the public. An analogy would be the privacy of the message in a sealed letter compared with a postcard. In the latter, the message can be read by all who handle it.[28] Just like emails, the privacy of SNS communications is limited once the message is sent or posted. As an example, there were rumors that "private messages" of Facebook users in France from 2007 to 2009 were publicly accessible.[62] The key point here is that students should not post something that they do not want to be seen by the public eye.

9. Educators should teach students to be responsible for their online activity by accepting accountability for illegal acts and/or unprofessional behavior online

The famous phrase "with great power comes great responsibility" from the movie Spiderman is very apt here.[63] Social media empowers users to share any information about their lives with others. Thus, it is the responsibility of users to use these channels appropriately. Irresponsible conduct and unprofessional behavior on SNSs can negatively impact a health care student's life (eg, school expulsion) or professional career (eg, criminal prosecution) if they are not careful. Two students in the US were disciplined by their school for creating a MySpace profile of their principal with vulgarities, crude references, and defamatory comments about his wife and children.[28] In a court case that followed, the appeals of one of the student's parents regarding the violation of the student's freedom of speech and the parents' rights to raise their daughter were rejected, and the judges ruled that the school could discipline the students even though the comments did not amount to "substantial disruption", because they had an effect on the school. Police have also used SNSs like Facebook and MySpace to investigate crimes and illegal acts (eg, child pornography, illegal drug use, and sexual acts) and gather surveillance data about criminals and gangs.[64,65] Students should be made aware of the liabilities and serious consequences of posting illegal activities online. Not surprisingly, in studies done on pharmacy students and pharmacy residency program directors, both groups felt that students should be more accountable for illegal acts (64%–78% for pharmacy students and 93% for residency program directors) than unprofessional behavior (52%–61% for pharmacy students and 86% for residency program directors) on SNSs.[21,23,31–33] This could be because they felt that illegal acts would be more clearly demarcated in the law. Nonetheless, students should not post any content on SNSs that is objectionable, vulgar, or related to any form of harassment. Additionally, posting of content that is defamatory or infringes on copyright should be avoided. Lastly, educators should remind students not to vent their frustrations on SNSs, especially by posting threats online when they mean no harm. Venting frustrations through a Facebook post not only goes against e-professionalism but can hurt the feelings of others, even if the individual referred to in the post is not "friends" with the person who posted it. Hearing such comments from word of mouth creates more harm than good. The consequences of unprofessional online behavior may result in the souring of a relationship with a friend, colleague, or even the patient–practitioner relationship. Furthermore, threats that are posted online may be reported by other SNS users to the police, which can result in investigations or, worse, the arrest of the student responsible.[66] The bottom line is that sometimes it may be too late to regret or retract a comment due to a moment's act of folly.

Summary

This article has identified 12 major concerns relating to e-professionalism that are relevant to health care professionals, trainees, and students. Nine recommendations are provided to address these concerns with the intention of assisting health care educators in their task of raising the awareness of e-professionalism with their students. These recommendations are related to issues of accountability, employability, privacy, distinctions between personal and professional identities, fitness to practice, and the need for guidance on e-professionalism. We hope that educators can utilize these recommendations to improve the online conduct of their students and uphold the standards of e-professionalism that health care professionals should have in this digital age.

Disclosure

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