

The Current Use of Social Media in Undergraduate Nursing Education

A Review of the Literature

Jennifer Gunberg Ross, PhD, RN, CNE, Shannon Marie Myers, SN

Social media, including blogs, Twitter, wikis, Facebook, YouTube, and Ning, provides an opportunity for nurse educators to engage undergraduate nursing students who are members of the millennial generation in active learning while enhancing knowledge and fostering communication. Despite the rise of social media usage in undergraduate nursing education, there is a significant deficiency of empirical evidence supporting the efficacy and outcomes of these teaching strategies. This article provides an overview of social media use in undergraduate nursing education and a review of the existing research related to social media use in prelicensure nursing education. Overall, undergraduate nursing students respond positively to social media use in nursing education; however, no outcome measures are available to determine the effect of these teaching strategies on student learning.

KEY WORDS: Millennial, Social media, Undergraduate nursing education, Web 2.0

Social media has become a commonplace component of 21st century life since the development of Web 2.0, which allowed for interactive online interfaces. The broad term of social media comprises several specific types of Web 2.0 technologies including but not limited to wikis (ie, Wikipedia), blogs and microblogs (ie, Twitter), content and video sharing (ie, Pinterest, Instagram, and YouTube), and social media sites (ie, Facebook and LinkedIn) that allow users to connect with other individuals and share information.^{1,2} Internet and social media usage are common among adults in the US, with 85% of adults using the Internet.³ Sixty-five percent of all American adults, and 90% of young adults age 18 to 29 years, use social media.⁴ Facebook is the most popular

social media site, with 72% of adult social media users active on Facebook⁵; approximately 23% to 31% of adults use other social media platforms such as Pinterest, Instagram, LinkedIn, or Twitter.³

Eight-two percent of baccalaureate nursing students are younger than 30 years,⁶ putting them in the Millennial generation.⁷ As the first generation of digital natives,⁸ Millennial students' appreciate incorporation of technology into the learning environment.⁹ Informatics is listed as a Quality and Safety Education for Nurses prelicensure competency,¹⁰ and nursing education organizations have highlighted the necessity for educational integration of informatics in prelicensure programs to enhance the technological expertise that is required in today's healthcare environment.^{11,12} Nurse educators are in a unique position to guide students in the safe, professional, and responsible use of this technology.¹

Social media is a platform that can assist nursing faculty in helping students gain greater knowledge and skills in professional communication, health policy, patient privacy, ethics, and writing competencies¹³ while supporting students' preference for informatics-rich learning environments in an effort to guide their professional use of online technologies. Social networking can serve as an innovative, engaging approach for educating future nursing professionals by facilitating and expanding discussion beyond the traditional classroom, promoting critical thinking, providing collaboration among students and teachers, and assisting with patient education.^{1,8,14} The purposes of this article are to provide an overview of the current state of the use of freely available social media in undergraduate nursing education and review the current evidence related to the integration of social media into prelicensure nursing education.

BACKGROUND

While the nursing profession is embracing social media with increasing frequency since it fosters professional communication and research dissemination,^{2,15} nursing education has been slow to adapt the use of social media.¹⁶ Social media provides an effective method for professional and patient education^{2,17} and professional connection.^{2,18}

Author Affiliation: College of Nursing, Villanova University, PA.

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Corresponding author: Jennifer Gunberg Ross, PhD, RN, CNE, College of Nursing, Villanova University, 800 Lancaster Ave, Villanova, PA 19085 (Jennifer.ross@villanova.edu). Copyright © 2017 Wolters Kluwer Health, Inc. All rights reserved.

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As with any technology, there are risks inherent in social media use. Privacy and professional effect are important considerations when using social media since everything posted online is accessible to the wider Internet community.⁸ The privacy requirements related to HIPAA apply to healthcare professionals and students even within an online setting.¹⁹ Posting unprofessional content or breaching patient privacy online can have serious ramifications for students, nurses, institutions, or the nursing profession, which can result in loss of employment and disciplinary or legal action.^{1,2,8,13,15,18,20}

Personal privacy is also a concern when using social media since posted information may be accessible to the other Internet users.⁸ Moreover, student information is protected under the Family Educational Rights and Privacy Act (FERPA).²¹ Appropriate privacy settings can improve the security of personal information but do not guarantee that posted information will remain private. Thus, individuals must be diligent in choosing which social media sites to use and what information is shared.

The use of social media as an educational strategy also raises privacy concerns regarding the interactions among students and between students and teacher.²² Some students may wish to keep their personal lives private from their peers and faculty. Consequently, it is imperative that written guidelines for the educational use of social media are developed and discussed before using social media as a teaching strategy.²² In addition, faculty may consider an alternate assignment for students who do not use social media or prefer not to connect with their peers and instructors on social media.

In response to the concerns about privacy related to social media use, several nursing organizations, including the American Nurses Association, National Council of State Boards of Nursing, and National Student Nurses' Association, have developed guidelines describing recommendations for social media usage, the risks associated with social media use for nurses, the potential ramifications, and strategies to avoid problems.^{20,23,24} In general, with diligence toward their ethical, legal, and professional responsibilities, nurses can use social media without concern.² However, student nurses may not be aware of what constitutes inappropriate use of social media or the ramifications of such behavior. Therefore, the integration of social media into prelicensure nursing education provides nurse educators with an opportunity to discuss and be the role models for appropriate professional use of social media within the context of the nursing profession. However, it is imperative that students understand the ethical and legal privacy standards that guide nursing practice before engaging in any educationally based social media activity.²²

The pervasive use of social media within the healthcare industry, along with the significant concerns about

privacy, highlights the importance of discussing social media in prelicensure education to support professional and safe use of this ever-growing technology.^{1,25} Nursing faculty can serve as role models to show nursing students how to appropriately and responsibly use social media to maximize privacy and maintain professionalism within an online environment.²⁵ Social media use in nursing education should be designed in a purposeful manner with measureable objectives to assure effectiveness.^{1,8} Exploring the freely available resources can assist nursing faculty who want to integrate social media as a teaching strategy.

Review of the Literature

A comprehensive search of the literature was conducted to obtain relevant information and research findings about social media use in undergraduate, or prelicensure, nursing education. The articles collected from the literature review fall into two main categories: overview of teaching strategies using social media applications in nursing education and research studies exploring the perceptions of social media applications in nursing education. Because of the limited number of published formal research studies related to social media use in nursing education, this review will focus primarily on how various forms of social media have been integrated into nursing education courses to provide an overview of the current use of social media technologies in undergraduate nursing education. The limited empirical research, which is primarily qualitative, will also be presented to provide the current state of the science related to the use of social media in nursing education.

Teaching Strategies

Blogs

Blogs provide an avenue for online discussions through which individuals can post asynchronous, chronological messages and respond to other entries, thus promoting discussions among users.²⁶⁻²⁸ The back-and-forth discussion format of blogs promotes collaboration among students by fostering discussion of course content outside of the classroom, thus allowing students to become more engaged with each other in the learning process through responding to blog posts.²⁶⁻²⁸ This can be accomplished through discussion questions, case study analysis, or exam preparation, allowing students to consider their own thoughts about the question at hand as well as read and respond to their peers' opinions.²⁸

Reflective journaling has been widely used as an effective teaching strategy in nursing education for many years. Since blogging promotes self-reflection, blogs offer an ideal format for clinical reflective journals²⁸ or development of cultural sensitivity through reflection and discussion.²⁶ Such reflective

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journals allow students to develop higher level thinking and reasoning skills by reflecting on clinical experiences, personal and patient cultural needs, and student performance. Although traditional reflective journaling is usually an individual activity, online blogs offer a more collaborative approach, allowing peers to support each other by offering feedback and reflection.²⁹

Simulation debriefing is another educational strategy that supports higher level clinical reasoning skills through reflection and discussion. Instead of completing simulation debriefings live in a classroom or laboratory setting, students and faculty can debrief a simulation within an online blog, which promotes critical reflection of performance through self-reflection and constructive feedback for peers.²⁸

Twitter

Twitter (www.twitter.com) is considered a microblog where users post short comments, or “tweets,” of 140 characters or less online under a username.^{30,31} Tweets can be public or private depending on the settings designated by the user.³¹ Other Twitter users can follow posts based on sender, key words, or hashtags.³⁰ Thus, Twitter fosters active learning, supports reflection and higher levels of thinking, and promotes interactions among students and between students and faculty, which fosters collaboration and community.³¹ The limited character count in Twitter encourages students to be concise and does not overburden students with lengthy text, which encourages student completion of assignments.

Faculty can use Twitter to quickly and easily notify students of a class cancellation, remind them of an upcoming assignment, or offer short take-home points from a lecture or professional conference.^{31,32} Students can also use Twitter to ask faculty a question related to course content or assignments or offer real-time reflection on a learning activity such as a simulation.³¹ By using Twitter rather than e-mail, all members of the class reap the benefit of seeing the tweet and the instructor's response.³¹ Although interaction can also be accomplished through e-mail, students tend to access Web 2.0 communications more frequently than e-mail and demonstrate a preference for social media applications.³³

Within a specific nursing course, students may be required to post a certain number of times to Twitter using a course-specific hashtag.³⁰ These tweets may be comments, questions, or content review.³⁰ This specific Twitter feed provides students in that course with a collection of course materials for study.³⁰ Like blogs, Twitter, as a microblog, can be used as a platform to discuss simulation experiences or answer discussion questions.³²

Wikis

Wikis are Web sites created through the collaboration of many users.²⁸ Multiple users can edit wiki pages easily,

which allows for a collaborative product that reflects the expertise of many individuals.²⁸ Within nursing education, wikis foster students' collaboration and provide a perfect online venue for group work.²⁸ Wikis can be used for projects developed by teams of nursing students such as nursing care plans, evidence-based nursing care projects, or group-developed scholarly papers.²⁸ Furthermore, within a wiki format, student groups can review course content by developing collective study guide tables or share medication card information for clinical rounds.²⁸

Facebook

Facebook (www.facebook.com) offers an excellent social media outlet for nursing education since 90% of young adults aged 18 to 29 years are actively engaged on Facebook.⁴ Facebook is a social media network in which users create a profile and link with acquaintances to create a virtual network of “friends.”¹ Facebook users can post photos, videos, status updates, or Web links on their personal profile that can be viewed by friends on their “News Feed.”¹ To view an individual or group's posts on Facebook, they must be connected in the virtual Facebook network as “friends,” but anyone with a Facebook account has access to the public Facebook profiles of all users.¹⁴

Facebook can be integrated into nursing courses to increase the fidelity, or realism, of case studies or simulations.^{22,34} Facebook pages can be created for case study or simulation patients, which are maintained by a faculty member.^{22,34} Students can then interact with this patient through Facebook by following his/her posts to collect data and by asking and answering questions. This engagement helps student apply theory in a safe, controlled, nonthreatening manner.^{22,34,35} Class Facebook groups can be created to allow students and faculty to interact in the virtual Facebook world through discussions and photo or video sharing.¹⁴ Facebook can also serve as a platform for students to upload video projects for faculty and peer-viewing and evaluation.¹⁴

YouTube

YouTube (www.youtube.com) is the most popular free video-sharing Web site that allows for public or private availability of user-generated videos.^{14,36,37} Anyone can freely access videos on YouTube at any time with only an Internet connection.³⁶ Users can create channels within YouTube to easily group similar content. Though the content on YouTube is openly available to anyone without registration, users can create accounts to upload personal videos or save and organize favorite videos for easy retrieval.

YouTube offers a vast array of patient case studies and educational videos that can be used in the classroom to promote student engagement through active learning, critical thinking, and application of knowledge.^{36,37} By using YouTube, students can see short, relevant clips of full-length features,

view talks from out-of-town conferences, watch therapeutic nurse-patient communication, observe proper performance of clinical skills, examine healthcare provider interactions, and obtain patient education materials.^{36,38} Because of the video-sharing nature of YouTube, it is easy for faculty to post links to YouTube videos in PowerPoint presentations, on Course Management Systems, in syllabi, or send via e-mail for student use.³⁸ However, it is imperative that educators review YouTube videos carefully for content accuracy and appropriateness before using these videos in the classroom or for student reference³⁷ because many of the most frequently viewed nursing skill videos on YouTube do not have accurate information or are of poor quality due to the user-generated format.^{36,38,39} YouTube can also be used for student evaluation since it provides a platform for nursing students to submit video assignments such as patient education¹⁴ or clinical skill performance.

Ning

Ning (www.ning.com) is a social media networking site where groups can create custom networks that represent their shared interests and experiences.^{14,40} On signing up with Ning, individuals can join various freely available networks within the platform while their personal information remains private; therefore, nursing faculty can create Ning networks specifically for the students in a particular class.^{14,40} Because Ning maintains privacy of the personal information of all members of a network and offers flexibility in formatting, media, and personalization, Ning networks can be used in place of other social media outlets for nursing education.^{14,40} For example, video sharing is easily accomplished within a Ning network since all members of the network have the capacity to upload videos; therefore, Ning can be used as a platform to house student video projects.¹⁴ Ning also provides a modality for blogging that allows students to respond to discussion questions and interact with each other.⁴⁰ Broader Ning networks that encompass multiple nursing schools across the country or around the world can enhance the learning experience because students benefit from discussions including varied opinions and viewpoints.⁴⁰

Research Findings

Qualitative

Twenty baccalaureate nursing students participated in a qualitative research study to explore the use of online discussion between students attending universities in two different countries to support the development of cultural competence in baccalaureate nursing students. Ten students from each of the two universities engaged in online discussions with each other and their faculty, and student pairs (one from each university) worked together to complete assignments about cultural competence, which allowed the students to

explore one another's cultures, values, and views of health, healthcare, and the nursing profession. Student pairs then gave presentations to all student participants. Student assignments during the course and reflections after completion of the course were analyzed using an inductive approach and qualitative content analysis to allow the researchers to develop categories and themes from the data. The authors concluded that social media technology offers an appropriate method to develop cultural sensitivity for students who are unable to travel abroad. The experience provided all participants an opportunity to better understand themselves and others, including differences and similarities.⁴¹

A total of 198 BSN students participated in a qualitative study exploring the use of Facebook as a format to support self-efficacy in sophomore nursing students. Within the Facebook group, students initiated and replied to discussions about their nursing school experience. An inductive approach was used to analyze the discussion topics, responses, "likes," and "seen by" listings. The authors concluded that social media offers an avenue to support self-efficacy and peer learning in nursing education, which may enhance students' learning experiences and promote retention.⁴²

Seventy junior baccalaureate nursing students participated in a qualitative study exploring the use of Twitter as a delivery method for educational information. The participants were randomly assigned into two groups: one group received four tweets each week (discussion questions or information) for 6 weeks related to resilience while the other group received four tweets each week related to nursing knowledge or nursing trivia questions. After the completion of the educational intervention, participants received an e-mail survey regarding the experience. Almost all participants in both groups responded positively to the activity, indicating that they liked using Twitter. The researchers concluded that Twitter is an easy-to-use, effective method to deliver information to undergraduate nursing students.⁴³

Mixed Methods

Ten nursing students from the United Kingdom were paired with 10 science students from Canada in a mixed-method research study designed to explore the use of social media applications to foster collaboration between undergraduate students from different countries and disciplines. A blog and Facebook page were created for the project. Student pairs worked together using e-mail or Skype videoconferencing to develop responses to biweekly discussion questions, which were posted on the blog. All students could respond to blog posts. At the end of the semester, student pairs created a video describing what they learned from the project, which was posted to the Facebook group. Participants responded to an online questionnaire that included Likert-style questions related to the teaching strategy and open-ended questions.

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A focus group was also conducted with 13 of the participants. Lastly, Google Analytics was used to determine use of the blog and Facebook page over the duration of the project. Both the quantitative and qualitative results indicated that students enjoyed the experience and that they felt the social media partnerships fostered their learning. The authors concluded that social media offers a cost-effective method to promote international student collaboration and scholarly inquiry.⁴⁴

A total of 52 first-year nursing students participated in a mixed-method study exploring the use of social media communication (wikis, Facebook group, and e-mail groups) between faculty and nursing students entering their first clinical practicum versus traditional communication (phone and individual e-mails). The participants were randomly assigned to one of four communication groups: wiki, Facebook, group, e-mail, or control (traditional method). The number of posts and responses for each participant was monitored, as well as the qualitative content of their posts. In addition, a qualitative questionnaire was administered at the completion of the clinical rotation to ascertain participants' response to the use of the various social media applications. Students who participated in the Web 2.0 applications (wiki and Facebook group) accessed their communication tools more frequently than the group e-mail or traditional communication group. Furthermore, students in the Facebook group demonstrated the greatest amount of online interaction with both peers and faculty. The results indicated a preference for social media applications over group e-mail or traditional communication and suggested that specifically Facebook is a helpful tool to promote interaction among peers and between students and faculty during clinical rotations.³³

DISCUSSION AND CONCLUSIONS

Given the demographics of current undergraduate nursing students from the Millennial generation and the pervasive use of social media in the 21st century lifestyle, nurse educators need to consider implementing innovative teaching strategies that use modern-day technology such as social media applications to engage students, promote interaction, encourage active learning, and support content application. Through the use of social media technologies, nurse educators can role model appropriate social media use and support the professional development of nursing students within the online environment.

According to the current nursing education literature, social media, including Facebook, blogs, wikis, Twitter, YouTube, and Ning, is beginning to be integrated into undergraduate nursing education with increasing frequency as an innovative teaching strategy. Because social media represents a relatively new form of social interaction, its usefulness in nursing education is still being evaluated. The

very limited research exploring the use of various social media platforms in undergraduate nursing education, which is mostly qualitative at this point, demonstrates that social media, as a teaching strategy, is generally well-received by students. Social media platforms such as blogs, Facebook, Twitter, and wikis seem to have potential for student collaboration, peer-learning, student-faculty communication, and delivery of content; however, there are no quantitative outcomes measures available to support the use of these teaching strategies. Therefore, because of the dearth of empirical research within the nursing education literature related to social media, it is imperative that nurse educators formally explore the efficacy of various forms of social media on undergraduate nursing student outcomes, such as learning and knowledge retention, to support best practices of social media use in the classroom.²⁷ Specifically, comparing the efficacy and outcomes of different types of social media, and comparing the outcomes of social media versus traditional teaching strategies would significantly add to the body of knowledge.²⁷

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