

Implementing social media into nursing education

Meagan Ryan*

Rankin School of Nursing, St. Francis Xavier University, Antigonish, NS, Canada

Received: February 16, 2021

Accepted: March 7, 2021

Online Published: March 21, 2021

DOI: 10.5430/jnep.v11n7p43

URL: <https://doi.org/10.5430/jnep.v11n7p43>

ABSTRACT

Social media is an aspect of everyday life for many undergraduate nursing students and can also be beneficial from an education perspective. Popular social media platforms can be used as often as daily for many nursing students. The emergence of Generation Z (born between 1995-2010) as the predominant population of nursing students calls for a shift in pedagogical approaches; one that accommodates the needs of the unique demographic. This narrative literature review examines how social media can provide an effective pedagogical tool to engage the modern undergraduate nursing student by providing a platform for accessible educational activities, fostering professional identity and encourages virtual professionalism for this unique Generation. Guided by a constructivist approach and the Social Media for Learning (SM4L) framework, this pedagogical approach could foster student engagement and promote appropriate use of social media in the personal and professional lives of nursing students. Additionally, these innovative nurses can enter the workforce prepared to use social media tools to disseminate health information and patient teaching appropriately and professionally, providing better access and improved care for patients.

Key Words: Nursing education, Social media, Constructivist, Social media for learning (SM4L), Nursing students

1. INTRODUCTION

Social media and nursing education have mixed like oil and water in recent years. As technology advances, educators are facing increasing expectations to incorporate this technology into nursing curriculums,^[1] though with headlines such as, “Social Media and COVID19: Oregon Nurse Fired After Posting Video to TikTok”,^[2] and “Nurse fired after video shows Canadian hospital staff mocking Indigenous patient”,^[3] there could be hesitance from educators to increase social media use in nursing educational settings. However, the importance of incorporating social media literacy in nursing education has never been more vital, as both nursing students and the general public are exposed to the nursing profession from a social media perspective. Many regulatory colleges have responded to this issue by implementing specific guidelines surrounding the appropriate use of social

media, and digital professional conduct that upholds confidentiality, professionalism, and enhances nursing practice.^[4] While social media can be used by nurses to enhance professional practice, disseminate evidence-based knowledge to patients, and provide communication and support for patients and families^[4] there is little integration of social media in undergraduate nursing curriculums,^[5,6] leaving educators unable to support students in appropriate social media use, and students unprepared to manage their personal and professional lives on social media platforms in a manner that positively reflects the nursing profession.

Furthermore, social media can provide an accessible option for learning activities, an issue that has been amplified by the COVID-19 pandemic, where many nursing programs worked to incorporate technology to provide virtual learning options when meeting course outcomes. While the accessibil-

*Correspondence: Meagan Ryan, RN, MN; Email: mryan@stfx.ca; Address: Rankin School of Nursing, St. Francis Xavier University, Antigonish, NS., B2G 2W5, Canada.

ity of nursing education continues to present a challenge, conversely information has never been more accessible across Canada due to the world-wide web and social media.^[7] Social media provides a platform that can be used as an effective educational tool which could initiate a shift from traditional, lecture-based approaches to meet the learning needs of current undergraduate students,^[5] provide accessibility for remote learning and better prepare undergraduate nurses for practice.

Despite the increasing importance of social media literacy in nursing,^[8] there is little incorporation of social media in nursing curriculums.^[6] Additionally, much of the literature surrounding technology use in nursing education has focused on Millennials,^[9,10] while Generation Z (born between 1995-2010) is the newest generation emerging into undergraduate education, requiring a shift in the pedagogical approaches of nursing education to suit the unique needs for current students.^[9] This literature review will shed light on the value of social media learning activities as an effective pedagogical tool in nursing education to engage the modern undergraduate nursing student.

2. BACKGROUND

Social media has become a standard online interface for communication and sharing information, photos and videos.^[11] In Canada, 94% of adults have been found to use at least one social media platform.^[12] Academic communication and engagements have also shifted from traditional modes (lecture-based, teacher-centered) to virtual spaces, supporting teaching and learning strategies on devices.^[13] The most popular platforms include Facebook, messaging apps, Instagram, Twitter, LinkedIn, YouTube^[9,11] and TikTok.^[12] Platforms such as Instagram and Facebook provide text, photo and video posts, and users can also share private messages in the applications, and as act as influencers in disseminating information.^[14,15] Twitter is a micro-blog, TikTok allows users to share short videos^[14] and YouTube provides users the ability to create longer videos.^[16] LinkedIn is similar to Facebook, but offers professional networking opportunities.^[15]

These platforms could allow students to engage outside of the classroom, consume and disseminate scholarly material and complement learning outcomes.^[17] While nursing students are proficient users of social media in their personal time,^[6] many nursing programmes do not include social media learning activities in their curriculums.^[18] In fact, the emphasis on social media in educational institution policies outlines the consequences to decrease breaches of confidentiality and promote professionalism.^[18] This means that students' exposure to social media in nursing education could be limited to

a guide of what not to do, rather than providing resources to demonstrate the proper and professional use of social media for nursing practice and scholarship. This gap within nursing education can be significant, as social media technology continues to evolve and influence our daily lives, leaving nurses ill prepared for practice using social media for appropriate professional use. This narrative literature review supports the idea of integrating social media into nursing education. This could translate to increased proficiency for entry-level nurses in using social media to teach patients using succinct posts or educational videos, create professional networks, disseminate scholarly information, and be better able to navigate social media within the professional standards.

3. THEORETICAL UNDERPINNINGS

By using a traditional constructivist approach, implementing an innovative, technological pedagogy involving social media can guide the theoretical principles of learning. Constructivism views learning as a process where new ideas are built upon prior knowledge and experience.^[19] In this process, the educator's role is to provide activities that facilitate learning by constructing impactful social opportunities for students to interact with peers, practitioners and other instructors.^[19] While traditionally this would occur in the physical clinical environment, the principles could be applied to a virtual environment as well, allowing this connection to occur using social media.

A constructivist approach to teaching could be beneficial in the process of integrating social media activities into nursing curriculums. Instructional scaffolding is a constructivist teaching process that involves providing foundational supports to learners as they begin learning a new skill and withdrawing the amount of support as learners become more independent.^[19] A useful instructional scaffold to implement social media in nursing education would be providing clear objectives, outcomes and evaluation criteria for the activity^[19] that involves social media.

Andragogy is another important factor to consider when implementing innovative learning activities and educational practices in the undergraduate setting. The principles of andragogy are self-direction, experiential learning and collaboration.^[19] The assumption in andragogy is that learners are intrinsically motivated, however younger learners with little existing knowledge of nursing for example, may need more support from their instructors to become self-directed.^[19] This support could be achieved by implementing a directive framework such as the Social Media for Learning (SM4L) framework.

The SM4L framework was developed to provide a student-

centered approach to learning by aiding in listening, engagement, relationships, authenticity, and visibility including digital presence.^[13] There are seven components to this framework; social inclusivity, life-wide and lifelong learning, media neutrality, learner-centered, cooperative, open and accessible, and authentically situated.^[13] This framework can be used to guide the implementation of social media in nursing education, as will be discussed further in this paper.

4. APPROACH TO LITERATURE SEARCH

This literature search included the CINAHL Plus, ScienceDirect, Gale and Google Scholar databases. The keywords 'social media', 'nursing education' and 'generation Z' were used in varying combinations to yield results. The abstracts of the articles were reviewed to determine relevance to the topic of implementing social media in nursing education. Inclusion criteria was comprised of articles that were scholarly and peer-reviewed, published between 2015-2020, original research studies and written in the English language. Exclusion criteria included any non-original literature, duplicated results, and any results that focused solely on practicing nurses social media use rather than nursing students. A total of 16 articles met this criteria and were reviewed.

5. KEY FINDINGS

The literature points to a shift in the educational landscape as a result of the integration of a new generation, the need for accessibility, development of a virtual identity and professionalism as important themes. These circumstances have led to the need for a change in the pedagogical approach in nursing education. Exploring each of these domains can aid in the impact of integrating social media in nursing education.

5.1 Generational implications

Generation Z includes those born between 1995-2010; this unique group has been alive since the emergence of the world wide web.^[5,20] This generation of students are accustomed to constant use of technology in their lives, and as a result, have been found to have underdeveloped interpersonal skills and are more likely to suffer from isolation and mental health issues such as anxiety and depression.^[5] In regard to education, this generation desires a digital environment, and learning that is individualized, immediate, engaging, immersive and based in technology.^[5] Due to this vastly different generation and the reliance of technology in their lives, it is logical that a post-secondary education program should incorporate technology to support these learners, leading to a shift from the traditional lecture-based teaching that many programmes use.^[5] These learners could have significant benefit from using social media as it provides familiar platforms that could immerse them in engaging and immediate

learning activities – suiting the preferred learning needs of this demographic.

Categorizing students within generations is a way to make generalizations about different groups with shared qualities,^[21] which is helpful in the discussion of technology use for nursing students. While Generation Z is the newest emerging and predominant generation in nursing education, it is not the only generation of students in undergraduate studies. For example, the Baby Boomers (i.e., born between 1946-1964) are collegial and value learning across the lifespan, while Generation X (i.e., born between 1965-1980) enjoy flexibility, independence and positivity in learning.^[20,21] Millennials (i.e., born between 1980 to the early 1990s) on the other hand, require feedback, are goal-oriented, and expect coaching in learning.^[20,21] They are also considered the early adopters of social media and are comfortable using technology.^[20,21]

These traits differ from Generation Z, however, when these groups collaborate, there can be a decrease in conflict^[21] resulting in intergenerational benefit when social media is implemented in learning activities. While the emergence of Generation Z calls for a change in traditional pedagogical approaches, introducing social media as learning activities can be beneficial for students from all generations. For example, if an activity required searching hashtags related to a lecture topic on Twitter, a Generation X student who does not have social media experience could be mentored by a Generation Z student. A study by Stephen and Gunther (2016) found that the use of Twitter in the classroom led to increased engagement, improved critical thinking and reasoning, and feelings of interconnectedness among students and faculty.^[9] This could support outcomes of collaboration, teaching and leadership in nursing students. This is merely one of many examples of the potential benefits in implementing social media into nursing education.

5.2 Accessibility

Accessibility is a critical factor in today's educational landscape, and social media platforms provide access to information for students in nearly any geographic location.^[22] Grundz and Mai (2020) found that the vast majority of adult Canadians use social media by conducting a survey of 1500 Canadians over age 18, making the nation one of the most connected in the world. Social media can facilitate informal discussion to engage students outside of the classroom, allowing for a deeper understanding of a topic when the formal class occurs.^[10] This provides an opportunity for the andragogy principles of self-direction and experiential learning to take place. Furthermore, accessibility allows students to enhance their knowledge and skill while outside of the

classroom.^[22]

Valdez et al. (2020) found that Bachelor of Science in Nursing students who used social media believed it had educational benefits and demonstrated better study habits, when they studied the relationship between the use and perceived benefits of social media in improving study habits. The importance of integrating technological learning tools into nursing curriculums is even more vital in the COVID-19 pandemic, where many programs have switched to online based learning, while clinical placements can be limited. Nursing students often reported using social media to learn more about academic topics, share scholarly thoughts and opinions, familiarize themselves with upcoming topics, skill improvement, and as a medium to conduct collaborative assignments and projects.^[22] Students also reported that refined clinical skills obtained from use of social media platforms were positively acknowledged by clinical educators.^[22] Therefore, if these educational tools are accessible to students via social media there can be many positive clinical learning outcomes.

5.3 Professional identity

It is essential for nursing students to learn what it means to be a nurse during their education.^[23] Alharbi, et al. (2020) used a descriptive qualitative approach in small sample of sixteen undergraduate nursing students and found that social media use provides nursing students with an opportunity to learn more about the nursing profession, adopt an identity where students feel a sense of belonging and pride within the profession, and aids in the retention of nursing students.^[8] Furthermore, students expressed their ability to influence society's view of the profession using social media as a medium, and share experiences among nursing colleagues.^[8]

This emphasizes the importance for nursing educators to teach social media literacy by integrating social media activities into the curriculum. The consequences of omitting social media from the curriculums could result in students developing an outlook of the nursing profession that is based on the social media presence of nurses who are active on social media. If these nurses are a positive reflection of the profession, this could be a great advantage to nursing students. In fact, it could help nursing students create mentor relationships and find role models virtually through social media platforms. In addition, the presence of nursing students online may develop a positive public image of the nursing profession. However, if the online presence of nurses on social media include actions that negatively reflect the profession, this could have serious results for a students' impression of acceptable behaviour. For example, in Oregon a nurse posted a video on TikTok where she said she continued to travel, have playdates for her children and not wear a mask in public,

while lip-syncing the song, "The Grinch".^[2] If situations like this were what nursing students are exposed to while using social media, it may be difficult to argue that this type of behaviour is not professionally acceptable. The acceptance of what students observe on social media could be enhanced with critical reflection if educators incorporate activities that demonstrate appropriate use of social media.

5.4 Professionalism

Professionalism is an essential component to nursing education. However with the increasing incorporation of technology into the nursing practice, "e-professionalism" or digital professionalism is equally as important.^[23] While nursing students often self-assess their social media skills as proficient for personal use, there is less opportunity to refine professional social media skills as educational programmes often do not offer this activity.^[6] It is essential to prepare the nursing profession with the tools to actively engage in social media within this digital world.^[1] The COVID-19 pandemic has presented additional pressures for healthcare providers including nurses, as contactless eHealth options are being more widely used when compared to the traditional face-to-face options. In fact, one public health strategy to manage knowledge dissemination surrounding COVID-19 has included using a variety of social media platforms to inform the public.^[14]

The need to become proficient in using social media technology is becoming increasingly important, so it is also essential to consider the ethical responsibilities of nursing students. While institutions often have a social media policy,^[18] it is important for nurses to abide by the Code of Ethics for Registered Nurses.^[24] While documents such as the Code of Ethics offer standards that need to be followed for nursing practice, it is vital that nursing education includes the practical application of these standards to social media use. Smith and Buchanan (2019) reviewed the integration of social media including blogging into doctoral nursing education and found that using contracts with these students when implementing social media into education curriculums was an effective method to prevent misuse. This is one strategy that could be adopted by educational institutions to promote e-professionalism in undergraduate nursing students.

Smith and Knudson (2016) found that the likelihood of unethical behaviour by nursing students was higher among younger students when a mixed-methods quantitative approach was used to explore the relationship between age (millennial and non-millennial), clinical cohort and unethical behaviour when these students were interviewed. This unethical behaviour included violating principles of confidentiality such as picture taking in the clinical area, both risking

the fiduciary patient-nurse relationship, but also the public image of the nursing profession.^[25] However, it was also noted that these behaviours could be reduced by providing improved education in ethics and professionalism for nursing students.^[25]

By including social media into nursing curriculums and starting a discussion with students surrounding its' proper use, professional misconduct can potentially be avoided. This is even more vital as technology continues to evolve and new social media platforms are introduced; students can apply the lessons learned surrounding professional conduct and maintain the Code of Ethics throughout their careers. Furthermore, it is essential that educators model professionalism when using social media, and support students in behaving professionally in the virtual environment.^[10]

6. CRITICAL OVERVIEW

While the benefits of integrating social media into nursing education as an adjunct have been demonstrated,^[4] there can be arising concerns from educators that impact implementation, as with any change in any given system. Issues of confidentiality present the most concerning potential breach when using and promoting social media in nursing education, and can result in both reprimand from the academic institution and legal implications for students.^[1] Oducado et al. (2019) used the Responsible Use of Social Media Attitude Scale (RUSMAS) in a descriptive cross-sectional analysis of 298 nursing students from Idaho, to find that nursing students understand how to use social media responsibly and uphold professional characteristics such as privacy and confidentiality. However, with integration of social media into the daily lives of nurses and nursing students, the need for continual guidance regarding social media responsibility is imperative.^[26] Nursing educators are in an optimal position and play a critical role in influencing professionalism in social media use for nurses^[1] This can be done by nursing educators role-modeling professionalism on social media platforms, and abiding by social media policies and best practices, both personally and professionally.^[1] This could be achieved by implementing the appropriate privacy settings on their accounts and learning how to screen new followers and friends to ensure appropriate patient-nurse relationships are maintained.^[23] The role-modeling process could take place if students follow the professional Twitter page of an educator, where scholarly activities are shared and knowledge disseminated.

Additional concerns include professional practice and misinformation being shared on online platforms. As discussed, nursing students can utilize social media to foster a sense of professional identify, both within the profession and to the

public.^[8] While professional misconduct is possible, this can be prevented by providing students with guidelines to the appropriate use of social media as professionals.^[8] Nursing educators can mitigate misinformation by ensuring to provide platforms that contain up-to-date and timely data for students.^[22] Guidance and a clear outline of what is acceptable throughout nursing education to support social media literacy can also prevent incivility.^[26]

These risks can be further mitigated by implementing safeguards into the structure of activities and assignments that use social media. One study that used Facebook as a communication platform for students to examine case studies and evaluated the effectiveness of this activity in a post-activity quiz, found that using six practice principles led to the positive implementation of social media in the course.^[27] The six principles are: 1. define goals and objectives, 2. provide clear expectations, 3. facilitate communication among teachers and learners, 4. engage in course content, 5. encourage active participation, 6. create a safe environment for learning.^[27] Additionally, there is a need for clear, specific and up-to-date policies that explain what professional and ethical misconduct entails.^[26] If there is no policy in place, educators must develop a written policy that incorporates the recommendations of professional organizations.^[18]

The commonalities in these steps with the SM4L framework underline the importance of creating a learning environment conducive to learning, communication and setting clear expectations for learners. To achieve the other objectives of student engagement and lifelong learning, a constructivist approach can be applied, where prior knowledge of using social media is taken into consideration.

7. PRACTICE IMPLICATIONS

The suggested approach to implementing social media into nursing education encompasses a constructivist approach, using an instructional scaffolding pedagogy, and guided by the SM4L framework. The constructivist component would acknowledge that students have an individual level of experience with social media expertise, while the instructor would hold a facilitator role.^[19] By using the instructional scaffolding approach students would also be supported to a degree that is congruent with their level of experience using social media, while the instructor in time, withdraws their support as the learner develops improved skill.^[19] The andragogical principles of self-direction, and experiential learning^[19] are supported by taking this approach.

7.1 Social media for learning framework

There are seven components of the SM4L framework.^[13] Each will be reviewed and applied to implementing social

media activities into nursing curriculums.

7.1.1 Social inclusivity

Being socially inclusive results in participants developing a sense of belonging and being a part of an activity.^[13] In a nursing related social media activity, this would mean using any platform that allows equal contribution from each participant. Additionally, ensuring that activities are beneficial for all by supporting and validating learners is also essential.^[13] This speaks to the facilitative role of the instructor, the importance of guidelines and the use of instructional scaffolds to guide learners. The presence of nursing learners on social media can be beneficial for the learners, and the image of the nursing profession, with the added benefit of sharing health information that may be helpful to the public. An example of a socially inclusive activity in nursing would be asking students to start a discussion on Twitter, using a common hashtag to link the posts together to disseminate information about nursing leadership.

7.1.2 Life-wide and lifelong learning

Connecting all learning progressions, whether formal or informal, while developing online presence and literacy is the goal of life-wide and lifelong learning.^[13] Building upon prior knowledge is a constructivist concept, and works to develop an intrinsic motivation for learning.^[13] For students from all generations, life-wide learning is essential to promote collaboration between generations to prepare all learners to proficiently use social media beyond graduation – and for a lifetime. An example of this could be a student developing a digital portfolio that can evolve as their career progresses as a virtual representation of their professional selves. As Middleton and Beckingham (2015) note, this component can also demonstrate the importance of digital literacy to prevent professional misconduct.

7.1.3 Media neutrality

This component illustrates the importance of using a variety of media, but identifying the best media for each particular activity.^[13] This concept further demonstrates the need for social media integration as a learning tool, but also suggests that not every activity can use social media as a communication medium. This is why this approach is suggested as an adjunct in nursing education to be integrated when appropriate, but not to replace all learning activities. Even within the umbrella of social media, certain platforms are better suited for certain activities. For example, social media activities cannot replace simulation or clinical time, but creating a YouTube video that teaches patients how to properly change their colostomy appliance rather than writing a paper on the same topic may be beneficial. Furthermore, YouTube, as a video platform is more appropriate for this activity than

Facebook, for example.

7.1.4 Learner-centered

This component outlines the importance of self-regulation, expression, self-efficacy and confidence of the learner, with a particular focus on relevant learning activities.^[13] Social media naturally fits into the learner-centred aspect.^[13] The importance of providing guidelines for students, however, cannot be overstated. An example of this could include a lecture on creating a private Facebook group to share study strategies including cue card, mnemonics, and videos about nursing content for a class. This group may continue throughout the entire undergraduate degree to include study strategies and sharing tips for the national nursing licensing examination.

7.1.5 Cooperative

Critical thinking and collaboration are required to form cooperative networks that aid in knowledge formation and validation.^[13] Cooperative work is not a new concept to nursing education, as group work is often assigned to foster value for learners in working together. Educators could create an Instagram account that could be used by different groups on a weekly basis to highlight illness prevention measures for university students such as pap smears, STI testing, mental health and stress management, using videos, photos and text. This would be an example of cooperative work among the learners that had direct benefit to the health of the public.

7.1.6 Open and accessible

Openness refers to time (synchronous and/or asynchronous), space (no physical limitation) and social interaction (inclusion).^[13] This can be achieved by students using messaging platforms such a WhatsApp or Facebook messenger to communicate outside of class time. As previously discussed, social media provides a platform for students to access learning activities from any geographic location,^[22] and while some may argue that not all learners will have access to social media accounts, 94% of adults in Canada have access to social media.^[12] This means that in Canada, these activities are innately accessible due to the vast majority of users. Many learners regardless of generation are therefore likely to have experience with at least one social media platform, making this activity more open and accessible than technology that is not used for personal social purposes outside of education.

7.1.7 Authentically situated

The learner will be able to connect the authentically situated social media learning activity to other scholarly activities, linking social and professional realms together to create a digital identity and positive online presence.^[13] Social media in nursing education accomplishes these points well. An example of this would be asking students to create a LinkedIn

profile to use for professional networking, disseminating and reviewing scholarly works, and creating a digital professional presence. This guided activity could be used for reflection in the future for students when creating virtual presence online to guide appropriate behaviours. Furthermore, this activity would continue to benefit the student beyond graduation and into their professional career.

The implications for the evolution of nursing education by using this multi-layered approach could lead to changes in nursing practice. As students skilled in social media and technology-use graduate and enter into the work force, they are placed in optimal positions to influence the public using these popular platforms professionally, and to improve patient knowledge and health, strengthening the patient-nurse relationship and public image of the profession. Furthermore, graduates who have had this education can initiate positive mentorship relationships with future nurses by engaging through social media platforms, providing more support to new graduate nurses. This could also improve the accessibility of health care by having social media savvy nurses, an area that has been amplified by the COVID-19 pandemic.

8. GAPS IN LITERATURE

There is a need for further research surrounding Generation Z in nursing education as they continue to progress through undergraduate education programmes.^[5] Additionally, investigating how well specific social media learning activities impact nursing education would be beneficial. The impacts of student culture and socio-economic factors on the benefit of social media use in nursing education would be an additional area of interest for effective and equitable implementation. More research surrounding the interactions between instruc-

tors and Generation Z students when implementing social media into nursing curriculum would contribute to the body of knowledge surrounding nursing pedagogy. This could also lead to significant contributions to what is known about education and improve the delivery of baccalaureate nursing education for future students.

9. CONCLUSION

The vast majority of nurses and nursing students use social media in their personal lives. However, many are not equipped with the skills to navigate social media in the professional world of nursing. By incorporating social media into nursing education, educators can ensure students are aware of appropriate use of social media as nurses, both personally and professionally by using guiding policies and procedures during learning activities. The current landscape of baccalaureate education provides an ideal climate to integrate social media into nursing education as a tool. Providing educational activities that are accessible to students has become even more critical as the COVID-19 pandemic led to a shift to virtual learning. Additionally, the emergence of Generation Z into undergraduate education has demanded a transition from a traditional learning model that engages this unique demographic. By implementing theoretical and practice frameworks such as the SM4L framework and constructivist instructional scaffolds to support learners, social media can provide a valuable learning activity for the modern nursing student. This could inevitably lead to fewer professional misconduct occurrences by nurses, and a positive reflection of the public image of nurses.

CONFLICTS OF INTEREST DISCLOSURE

The author declares that there is no conflict of interest.

REFERENCES

- [1] Daigle A. Social media and professional boundaries in undergraduate nursing students. *Journal of Professional Nursing*. 2020; 36(2). PMID:32204855 <https://doi.org/10.1016/j.profnurs.2019.08.007>
- [2] Tobias L. Social media and covid19: Oregon nurse fired after posting video on TikTok. *Scrubs Magazine*. 2020. Available from: <https://scrubsmag.com/social-media-and-covid-19-oregon-nurse-fired-after-posting-video-on-tiktok/>
- [3] Budryk Z. Nurse fired after video shows Canadian hospital staff mocking Indigenous patient. *The Hill*. 2020. Available from: <https://thehill.com/policy/healthcare/519135-nurse-fired-after-video-shows-canadian-hospital-staff-mocking-indigenous>
- [4] Nova Scotia College of Nursing [NSCN] (2019). Social media practice guideline. Bedford, NS. Available from: https://cdn1.nscn.ca/sites/default/files/documents/resources/Social_Media.pdf
- [5] Chicca J, Shellenbarger T. Connecting with Generation Z: Approaches in nursing education. *Teaching and Learning in Nursing*. 2018; 13(3): 180-184. <https://doi.org/10.1016/j.teln.2018.03.008>
- [6] Tuominen R, Stolt M, Salminen L. Social media in nursing education: The view of the students. *Education Research International*. 2014. <https://doi.org/10.1155/2014/929245>
- [7] Welsh V, Petkovic J, Pardo Pardo J, et al. Interactive social media interventions to promote health equity: An overview of reviews. *Health Promotion and Chronic Disease Prevention in Canada*. 2016; 36(4). PMID:27077792 <https://doi.org/10.24095/hpcdp.36.4.01>
- [8] Alharbi M, Kuhn L, Morphet J. Undergraduate nursing students' adoption of the professional identity of nursing through social media use: A qualitative descriptive study. *Nurse Education Today*. 2020.

- PMid:32679508 <https://doi.org/10.1016/j.nedt.2020.10.4488>
- [9] Stephens T, Gunther M. Twitter, millennials, and nursing education. *Nursing Education Perspectives*. 2016; 37(1). PMid:27164773 <https://doi.org/10.5480/14-1462>
- [10] Ross J. (2015). Integration of social media into nursing education. *Pennsylvania Nurse*70(1): 4-10.
- [11] Ross J, Myers S. The current use of social media in undergraduate nursing education. *Computers, Informatics, Nursing*. 2017; 35(7). <https://doi.org/10.1097/CIN.0000000000000342>
- [12] Gruzd A, Mai P. The state of social media in Canada. Ryerson Social Media Lab. Version 5. 2020. <https://doi.org/10.5683/SP2/XIw8EW>
- [13] Middleton A, Beckingham S. Chapter: Social media for nursing – a framework to inspire innovation. In *Smart Learning: Teaching and learning with smartphones and tablets in post-compulsory education*. MELSIG Publishing. 2015. Available from: https://www.researchgate.net/publication/277309878_Social_media_for_learning_-_a_framework_to_inspire_innovation
- [14] Eghtesadi M, Florea Adrian. Facebook, Instagram, Reddit and TikTok: A proposal for health authorities to integrate popular social media platforms in contingency planning amid global pandemic outbreak. *Canadian Journal of Public Health*. 2020; 111(3): 389-391. PMid:32519085 <https://doi.org/10.17269/s41997-020-00343-0>
- [15] Green J, Wyllie A, Jackson D. Social networking for nurse education: Possibilities, perils and pitfalls. *Contemporary Nurse*. 2014. PMid:28288034 PMid:25267140 <https://doi.org/10.1080/10376178.2014.11081919>
- [16] Khan ML. Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*. 2017. <https://doi.org/10.1016/j.chb.2016.09.024>
- [17] Smith S, Buchanan H. Integrating social media into an online academic program. *Nursing Education Perspectives*. 2019; 40(6). PMid:30095732 <https://doi.org/10.1097/01.NEP.0000000000000387>
- [18] Westrick S. Nursing students' use of electronic and social media: Law, ethics, and e-professionalism. *Nursing Education Perspectives* (National League for Nursing). 2016; 37(1). PMid:27164772 <https://doi.org/10.5480/14-1358>
- [19] Melrose S, Park C, Perry B. Creative clinical teaching in the health professions. 2015. Available from: <https://clinicalteaching.pressbooks.com>
- [20] Seemiller C, Grace M. Chapter one: Who is generation Z? in *Generation Z goes to college* (pp. 124). San Francisco, CA: Jossey Bass; 2016.
- [21] Andre S. Embracing generational diversity: Reducing and managing workplace conflict. *ORNAC Journal*. 2018; 36(4): 13-35.
- [22] Valdez GFD, Cayaban ARR, Al-Fayyadh S, et al. The utilization of social networking sites, their perceived benefits and their potential for improving the study habits of nursing students in five countries. *BMC Nursing*. 2020; 19(1): 1-14. PMid:32549785 <https://doi.org/10.1186/s12912-020-00447-5>
- [23] McGrath L, Swift A, Clark M, et al. Understanding the benefits and risks of nursing students engaging with online social media. *Nursing Standard*. 2019; 34(10).
- [24] Canadian Nurses Association. Code of ethics for registered nurses. Ottawa: ON. 2017. Available from: <https://www.cna-aiic.ca/~media/cna/page-content/pdf-en/code-of-ethics-2017-edition-secure-interactive>
- [25] Smith G, Knudson T. Student nurses' unethical behavior, social media, and year of birth. *Nursing Ethics*. 2016; 23(8). PMid:26169881 <https://doi.org/10.1177/0969733015590009>
- [26] Oducado R, Sales M, Magarzo A, et al. Perceptions and attitudes on using social media responsibly: Towards social media literacy in nursing education. *Belitung Nursing Journal*. 2019; 5(3). <https://doi.org/10.33546/bnj.789>
- [27] Thalluri J, Penman J. Social media for learning and teaching undergraduate sciences: Good practice guidelines for intervention. *Electronic Journal of E-Learning*. 2015; 13(6): 455-465.