Chapter 1

Introduction to Social Media in Nursing Education

This chapter included the literature review, objectives, aim and research question. The knowledge gap has been identified by reviewing the previous literature. Hence, this suggested mixed systematised review will study the literature in depth to critically analyse empirical evidence on the efficiency of SM as a learning tool for undergraduate nursing students. In order to see whether online technology can help with learning and other elements of nursing students at the undergraduate level, social media platforms are being explored. Three objectives have been identified for this study as follows: (1) to examine the ability of social media to influence nursing student's learning and the expected learning outcomes from using it. (2) to examine the various effects of social media, both positive and negative. (3) to gain an understanding of the social media platforms that are being used in nursing education programmes. This study aimed to bring together the most recent studies that have been conducted on the use of SM in nursing education, in sequence to establish a body of evidence supporting the use of these technologies in this setting. It will look for knowledge gaps and then provide recommendations on is: What are the potential impacts of different social media platforms on undergraduate students in nursing education?

1.1 Background

Over the past two decades, the extensive usage of internet technology has contributed to its significant development and the multiple ways to use it. While the internet started to become widely available in the United States in the early 1990s, it was not well known to the general public until several years later, However, by 2020 over half of the world's population had an internet connection (Dennis et al., 2021). The National Research Council, Computer Science and Telecommunications Board (1999) states that the internet has risen to the role of a prominent driver of information access and distribution in society today. It is used for day-to-day tasks, to provide local community-based strategies, and for larger challenges in international issues (Dutton, 2013). Internet technology can be defined as "a widely distributed network of computer servers, which allow users to communicate and exchange data" (McInerney, 2010, p. 854). Morris and Ogan (1996) confirmed that 25 million individuals are believed to be connected to the internet through their electronic devices. Since the dramatic development of the second generation of Web (Web 2.0) and the Web 2.0 conference in 2004, which was co-hosted by O'Reilly Media and MediaLive, the term "Web 2.0" has gained widespread acceptance (Huang et al., 2010). This permitted communication and interaction online, and social network sites (SNSs) have become an essential element of the 21st century (Ross & Myers, 2017). According to Edosomwan (2011), the advent of SNSs began in the early 2000s and globally, the use of social media (SM) has skyrocketed (Kizgin et al., 2018). SNSs can be defined as "virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests" (Griffiths et al., 2014, p. 119). The term 'social media' is used to refer to platforms that allow sharing of information and content, and interacting (McBride & Tietze,

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2016). According to the Global Digital Report (2019), there are around three and a half billion users of SM platforms globally and this number is growing by 313 million users yearly.

SM can be defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0" (Kaplan, 2018, p. 2768). All SM platforms, either on smartphones or a stationary device, rely on some form of digital application to operate, and use these electronic technologies to build highly immersive channels in which individuals and groups post, debate, and change the posted content is an important feature of SM (Kietzmann et al., 2011). However, the term 'social media' is not only about video streaming and sharing services, or online encyclopaedias such as Wikipedia, but also other SM platforms that provide an opportunity for communication among individuals (Ross & Myers, 2017). Collaboration, group building, engagement, and information exchange are all considered to be enhanced by SM (Mbodila et al., 2014). SM platforms allow individuals to establish unique profiles, in which they can include a variety of identifying markers (such as their nickname or location, profile avatar), and many other customisation features. SM gives the users the capacity to create, share and alter engaging posts with other users. A digital environment can be generated in which communication can take place via these shared contents such as pictures, videos and user comments (Fuchs, 2013).

SM can take on a variety of different forms, for instance Facebook, Twitter, Snapchat and Instagram. Each has a special attribute. To illustrate, on Twitter, users can post quick tweets that consist of 140 characters, and Facebook is a platform that enables users to interact but in a much more detailed manner, and is therefore perfect for communication (Voorveld et al., 2018). SM can be defined and described in a broad and comprehensive manner; therefore, for the sake of this review, the term 'social media' will be used to refer to any SM platform that matches the description of an SNS. However, there are many differences in how SM platforms can be used; some are complicated while others are easy to use (George et al., 2014), some allow swift interaction (Trifiro & Gerson, 2019), while others facilitate information spreading (Radwan et al., 2020). However, SM decreases the level of confidentiality, which gives users the opportunity to manipulate posts (Moreno et al., 2013). SM offers different multiple uses for its users, so it can be used for entertaining (Alhabash & Ma, 2017), or for business, commercial and marketing purposes (Appel et al., 2019), or even in education (Ansari & Khan, 2020).

Education was changed significantly when formal traditional education was linked to Electronic Learning (e-learning) (Ellis & Goodyear, 2013). E-learning is a substitute for learning that can be used alongside traditional learning (Basak et al., 2018). It can be defined as an educational approach that uses information technology and communication to help students study by giving them access to all the required educational materials (Golband et al., 2014). McBrien et al. (2009) state that various gadgets such as smartphones and computers are used to provide e-learning experiences, and students can learn from any place independently, while also being flexible about when, where, and how to learn (Cojocariu et al., 2014). Moreover, it is impossible to guarantee that pupils are learning if education is delivered through technology in isolation, unless they are supported by pedagogical approaches (Button et al., 2014). As e-learning becomes more widely used in higher education (Garrison, 2003, 2011; Laurillard, 2005). A review by Valverde-Berrocoso et al. (2020), most education sectors receive benefits from e-learning. However, concerns have been raised by Regmi and Jones

(2020) about whether e-learning in medical, health science and nursing education will genuinely improve learning outcomes in these fields. E-learning has indeed been incorporated into nursing education in a variety of nations, such as the United Kingdom (UK), the United States of America (USA), Australia, Canada, Greece, Ireland, and New Zealand (Button et al., 2014). According to the American Association of Colleges of Nursing (AACN, 2021) the nursing education community has identified the need to integrate information technology learning sources and tools into their education programmes for nursing, in order to teach students the necessary technological skills needed to succeed in the healthcare industry. However, this prompts enquiries into how the procedure is influenced by experiences of e-learning in nursing, which naturally occur in various contexts other than studying in person (McKenzie, 2010).

With regard to the educational purpose of SM, e-learning is associated with SM platforms (Gunawan et al., 2018), as it is assisted by digital electronic tools and SM platforms that can be used as an educational tool (Basak et al., 2018). For many reasons, such as the fact that it is easy to use, accessible, most applications are free, and no funding is required, SM has been popular in education (Sarwar et al., 2018). A few previous studies have drawn attention to many types of applications and mediums being used in education in general, such as Twitter and Facebook (Beemt et al., 2019). A huge portion of the young population that uses SM consists of students, and students have altered the way they use SM since it allows them to research information and share their findings with others. This also alters how technology is utilised in the classroom (Gunawan et al., 2018). It is no longer a novelty to integrate SM into the process of learning, and students increasingly have access to SM platforms (Dahlstrom & Bichsel, 2014; Karal & Kokoç, 2013). According to the Pew Research Center (2013), an academic survey in the USA found that nearly 67 per cent of higher education students are using SM for educational purposes. However, SM's capacity to be utilised as an educational resource is up for debate (Zachos et al., 2018). The time spent on using SM apps is estimated to be between 10 minutes and one hour every day, and this is commonplace among higher education students when they are studying (Rosen et al., 2013). Students who are studying nursing will be the main focus in this review, as SM platforms are increasingly being used in nursing education (Elder & Koehn, 2009; Jetté et al., 2010). Information and communication technology (ICT) has become a critical component of nursing education for the next generation of practitioners, and it is the responsibility of nursing colleges and universities to prepare nursing students for today and the future (Jetté et al., 2010; see also the National League for Nursing (NLN, n.d.)). Additionally, nursing education was discussed in depth in a report by the Canadian Nursing Association (CNA, 2006) and the importance of incorporating ICT and SM into undergraduate nursing education programmes was highlighted. Additionally, as stated by Rashid and Asghar (2016), students with internet access have a greater link to their studies than those without access to SM platforms. However, this obviously is not proof of the positive and definitive effect of media and social networks in promoting academic success (Mahdiuon et al., 2020).

According to previous research studies, frequent and addictive usage of networking platforms has been shown to have negative consequences in some cases (Camilia et al., 2013). Furthermore, research findings also show a negative impact on the academic performance of students, which is related to the connection between using social networks and student engagement (Mahdiuon et al.,

2020). However, the study by Mahdiuon and colleagues did not involve undergraduate nursing students. According to the National League for Nursing (NLN ,2014) nursing students are estimated to be younger than thirty years, with 82 per cent studying at the undergraduate level. This means that they are classified as members of the millennial generation (Nielsen, 2014), and they are the first generation of native digital users (Peck, 2014). The integration of technology into the academic experience is valued by millennial students (Ross & Myers, 2017); however, it does not guarantee successful learning results (Button et al., 2014). The role of a nurse has changed dramatically during the period of the twenty-first century, and a nurse's career could now include jobs in multiple locations, such as hospitals, classrooms, community health departments, commercial offices, care facilities and laboratories. However, despite these differences in jobs, all professional nurses should view themselves as their patients' advocate and strive to offer them the best treatment possible (Tingen et al., 2009). Therefore, attention should be paid to the educational aspect, which establishes a firm basis for nursing students and teaches them how to act in the required manner. There should also be a search for tools through which it is possible to develop the education of nursing students and the extent of their impact. One of the most important of these tools is SM. The National Health Service (NHS, 2020) highlights that the nursing field is one of the most important sectors in education. The purpose of nursing education is to assist undergraduate students in developing professional nursing characteristics (Kahraman, 2016). According to the World Health Organization (WHO, 2016), nursing educators are responsible for providing high-quality nursing education. Nevertheless, according to (AACN, 2012) not surprisingly, the typical ages of professionals in various nursing faculty positions, like assistant professors (51 years old), associate professors (57 years old) and professors (over 60 years old) could affect the awareness of SM and the way that it is used. Thus, making sure that the educator has sufficient knowledge in this domain will aid in the development of nursing education (Mthiyane & Habedi, 2018). Education in nursing should be improved; therefore how to raise the quality of teaching needs to be understood (Qalehsari et al., 2017). Knowing how to enhance nursing education will give students the opportunity to improve the overall quality of their knowledge as a professional nurse in the future (Kahraman, 2016). It is necessary to make improvements in nursing education; however, it is crucial to highlight that making amendments to the nursing education system can be a difficult task for some countries to undertake (Lahtinen et al., 2014). It is critical to understand the impact of SM on nursing students at the undergraduate level, in order to gain the necessary knowledge of which social platforms should be used by educators and students, and how. Some studies such as that by Santoveña-Casal (2019) have reported significant evidence for SM's impact on the learning process; nonetheless, this latter study was not conducted with undergraduate nursing students. The initial literature search on the effectiveness of utilising SM with undergraduate nursing students as an educational tool to promote academic performance suggested limited empirical evidence.

Thus, this study is conducted to shed light on this topic. A number of nursing researchers and educators in the nursing education field have published descriptive papers on this topic to this day. They describe a wide range of SM technology and educational techniques in relation to nursing. For instance, studies have been published by Ashton (2016), Clifton and Mann (2011) and Schmitt et al. (2012). Some studies have been published on the same topic as that under study here, but some

groups were concerned with midwifery students, for example that by Stewart et al. (2012). As midwifery students graduate with a diploma, there are significant distinctions in the curriculum offered to them and that offered to nurses, as well as the level of their educational degree (Bogren et al., 2020). There is also strong research conducted by employing a quantitative and qualitative methodology that addresses the usage of SM in nursing education (e.g., Booth, 2015; Richardson et al., 2016; Tower et al., 2015; Watson et al., 2016), and these should be considered as they examine and explore different forms of SM platforms. Some previous review studies have also been undertaken to summarise how SM technology has been employed in nursing education in the past, such as the review by Bassell (2010). However, this review aims to use SM platforms to find strategies to help nursing faculty mentors. In addition, an integrative review of the literature by Arrigoni and Alvaro (2016) illustrates how instructors and learners on nursing training programmes are utilising SM. Similarly, a systematic review was conducted by Smith and Lambert (2014). Although the goal of this review was to examine how healthcare educators and students think of SM through two SM platforms, Facebook and Twitter, and how they employ it in their practice, the review did not discuss the effects of SM in education. Up until that moment, the majority of the synthesising attempts by researchers had relied on a broad, generic definition of SM to guide their work; to illustrate, wikis, blogs, social networking sites, podcasts, and other similar online platforms are all examples of technology that fall under this umbrella term (Bassell, 2010). Some reviews have limited the study to midwifery students; for example, a recent review by O'Connor et al. (2020) was conducted with the overall goal of finding and compiling existing research on the usage of podcasts in nursing and midwifery education. Similarly, a scooping review by Downer et al. (2021) was also limited to midwifery students. Some reviews may have used inadequate methodology, for instance the study by Arrigoni and Alvaro (2016). Moreover, a recent review by Siegmund (2020) synthesised the recent evidence for the impact of SM in nursing, but the review was conducted in the healthcare field with professional nurses. There is therefore a current and significant gap in the synthesis of research addressing the effectiveness, impact, or usefulness of SM in undergraduate nursing education. Because of the distinctiveness and high degree of communication accuracy that SM provides, a mixed systematised literature review was judged necessary to learn more about SM platforms in nursing education, especially with regard to how they may be used and their potential impacts on the learning process of nursing students. It is intended that the results of this systematised literature review will provide useful evidence for educators to better understand of the role of SM platforms in nursing education. Taking into consideration the increase in the number of these types of SM platforms in recent years, a systematised literature review on the usage of SM in nursing education is an important and vital contribution to the literature that will help to shape future nursing education, practice and regulation.

1.2 Rationale

The teaching and learning processes in nursing education have undergone major transformations around the world (Aiken, 2011; Benner, 2012; World Health Organization, 2013). The ability to recognise which tools can be used effectively to support students to achieve a high level of learning is a fundamental component of any education programme and a primary responsibility of nursing teachers (Mthimunye & Daniels, 2019). As a result, there are numerous possible nursing education

approaches that can be employed to achieve this goal (Overstake, 2017). However, in the contemporary environment, SM is taking over as the dominant mode of nursing education (Gorea et al., 2016). Hence, this suggested mixed systematised review will study the literature in depth to critically analyse empirical evidence on the efficiency of SM as a learning tool for undergraduate nursing students.

1.2.1 Objectives

- To examine the ability of social media to influence nursing student's learning and the expected learning outcomes from using it.
- To examine the various effects of social media, both positive and negative.
- To gain an understanding of the social media platforms that are being used in nursing education programmes.

1.2.2 Aim

This mixed systematised review aims to bring together the most recent studies that have been conducted on the use of SM in nursing education, in sequence to establish a body of evidence supporting the use of these technologies in this setting. It will look for knowledge gaps and then provide recommendations on how to use SM in nursing education to the greatest extent possible.

1.2.3 Research question

What are the potential impacts of different social media platforms on undergraduate students in nursing education?

A general summary of the subject matter covered in this review has been presented in this chapter, detailing how nursing in education has seen a massive transformation because of the change in how nursing is delivered. It also outlined the starting point for technology in nursing education and the development of supportive tools, such as SM, as well as the need to understand the effect of SM on undergraduate students' education process. The methods that have been used in this review will be discussed in next chapter.

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