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# The Role of Using Social Media and Technology Applications in Continuous Health Education Programs Following COVID-19 Crisis

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### ABSTRACT

**Background:** Social media usage became more widespread in the aftermath of the COVID-19 crisis. There is a shortcoming in addressing the issue of continuous health education after health crises and disasters. **Purpose:** To evaluate the role of social media and technology applications in continuous health education programs following the COVID-19 crisis. **Methods:** This short communication paper provides insight based on the available recent literature (2019-2023). **Results:** There is a fundamental need for new strategies to keep health professionals engaged and active in professional development programs, particularly in remote and isolated areas. Combining didactic learning strategies with face-to-face and distance education may provide additional benefits in continuous health education programs. There is still a need to develop more participatory strategies for health professionals. **Conclusion:** The paper concludes that evidence-based practice requires further development, and should generate dialogue and engagement with stakeholders. Collaboration with partners from local and international associations may garner political support, leading to achievements that are more significant in terms of health professional development. **Implications for Nursing:** Using social media applications has widely spread in health information sharing in particular in times of pandemics and crises. Healthcare providers including nurses should be able to handle modern education tools, not only for the sake of education among themselves, but also to practice their important role in continuing to educate patients.

**Keywords:** Learning Strategies, Health Policy, Education, Disaster, Crisis, Public, Society, Digital Technology, Evidence-Based Practice.

### What does this paper add?

1. This paper discussed the issue of continuity of health and medical education in the modern era and showed the importance of keeping pace with the development in modern education methods, especially following health disasters and crises.
2. This paper recommends the importance of the role of health policy and decision-makers in activating continuing medical education and developing health professions through continuing education programs, especially in primary centres and remote areas outside cities.

### Introduction

Nowadays, healthcare professionals have a responsibility to maintain proficiency in practice by achieving minimum hours of continuing professional development. Social media usage became more widespread in the aftermath of the Corona pandemic. More recently, blended learning using a combination of traditional face-to-face learning and online learning (asynchronous or synchronous) grew rapidly and widely in education after the COVID-19 crisis (Hamadneh, 2022). The COVID-19 pandemic has had an impact on the education of health professionals. The COVID-19

pandemic has restricted face-to-face teaching, leading to increased online learning (Frenk et al., 2022). The pandemic also increased the demand for health services, which led to the use of information technology and the expansion of the use of telehealth, providing health care using telecommunication technology, which indirectly affected the competencies required for medical staff (Frenk et al., 2022).

There is a deficiency in addressing the subject of continuing health education after health crises and disasters. Few references were published in this regard after the Corona pandemic. This short communication paper provides insights based on recent literature to evaluate the role of social media and technology applications in continuous health education programs following the COVID-19 crisis.

### **Findings and Discussion**

Social media is a widely used way to search for and share health information among people (Sumayyia et al., 2019; Hamadeh et al., 2021; Hamadneh & Raffee 2022; Bittle-Dockery & Hamadneh, 2022). A cross-sectional study was conducted among Syrian refugee mothers who are pregnant or have children. Data was collected through an online questionnaire through social network messaging services in northern Jordan. The results of this research confirm the great impact of social media, such as Facebook and WhatsApp, on knowledge and attitudes. This is a further evidence on that the use of media has become very important in disseminating health information, especially at the time of pandemics, to enhance knowledge and to dispel myths and misinformation (Hamadneh et al., 2021:5).

Incorporating multidisciplinary methods, including social network analysis and ethnographic observation, Bittle-Dockery and Hamadneh (2022) examined the intersection between infrastructure communication technologies, information networks, and the chronic disease experience among Syrian refugees in Jordan. Moreover, this research study addressed the lived experiences and informational challenges facing Syrian refugees in Jordan as they attempt to obtain, store and retrieve useful health information. Social and technical infrastructures, such as refugee information networks, have emerged from the collapse of humanitarian infrastructures, and aid organizations can develop a more permanent information infrastructure that can be built on top of these successful sociotechnical practices

to help refugees find clarity in a confusing information environment for the human health and care system (Bittle-Dockery & Hamadneh, 2022).

Furthermore, several strengths and limitations were noted in using platforms for distance learning. While using these platforms provides time flexibility and finds a wide range of information, several challenges were identified, such as a lack of face-to-face interaction with trainers, an insufficient internet connection, and technical issues (Al-Alami et al., 2022). In addition, social media markedly influences patient education and healthcare research (Jeyaraman et al., 2023). Platforms, such as Meta and WhatsApp, are effectively improving individual's knowledge, compliance and outcomes (Jeyaraman et al., 2023). However, the quick spread of fake news and misleading information at social media poses risks (Hamadneh et al., 2021; Jeyaraman et al., 2023). Therefore, we must consider potential risks associated with incorrect information in platforms. Health professionals and researchers should consider risks associated with using social media platforms to gain maximum advantages and minimum potential disadvantages (Jeyaraman et al., 2023). Health professionals could foster health education, health research, patient health outcomes and health care experiences and systems (Jeyaraman et al., 2023).

Nurses and midwives can support health promotion programs in their communities, by strengthening their role as educators, and being confident (Bahri Khomami et al., 2021). Therefore, blending instructional learning strategies using face-to-face and distance education may provide an additional benefit (Hamadneh, 2022), especially with adapting the new technology applications that were widely spread following the COVID-19 crisis (Renu, 2021).

Literature before the world COVID-19 crisis supports the effectiveness of using blended education in health professions. Liu et al. (2016) concluded that blended learning appears to have a consistently positive effect compared to no intervention, and is more effective than, or at least as effective as, blended learning for knowledge acquisition in health professions (Liu et al., 2016). In addition, blended learning was statistically better than traditional learning in all domains of the learning environment, except social cognition (Makhdoom, 2013). More recent literature also strongly supports continuing to use blended education for healthcare education programs by adopting more

modern tools (Jebraeily et al., 2020; Hege et al., 2020; Kang & Kim, 2021; Hamadneh, 2022). Healthcare providers can engage with modern education tools, not only to educate each other, but also to exercise their important role in continuing to educate patients. An online, hospital-based intervention program for pregnant women in northern Jordan, aimed at increasing women's self-esteem, determination, and courage to prevent exposure to secondhand smoke, resulted in a positive outcome (Hamadneh & Hamadneh, 2023). Multicomponent interventions, including counselling, motivation, one-on-one communication, and group instruction using different media, appeared to be most effective (Hamadneh & Hamadneh, 2023). While healthcare providers are recognized as useful resources for health education programs, there is a need to promote effective strategies to achieve the desired effect in the community and to strengthen their role as educators (Hamadneh et al., 2020). Multifaceted health education programs, using more than one strategy, could offer marked benefits (Hamadneh, 2022). Such programs integrated individuals and service providers, and health institutions reinforce each other to expand health capacity and health equity achievements. Healthcare professionals feel empowered by implementing multifaceted interventions in the hospital. A conceptual model by Klooster et al. (2022) demonstrated that the implementation of a hospital-based multifaceted intervention by healthcare professionals empowers their beliefs and improves their awareness, skills, professional roles, teamwork, and work routinization. These values are typically overlooked, despite potentially being important facilitators for long-term implementation (Klooster et al., 2022:1).

Nowadays, healthcare professionals have a responsibility to maintain proficiency in practice by spending maximum hours of continuing professional development. More attention is needed on implementing strategies that focus on curriculum structure, content, and program delivery (Lehane et al., 2019). Regardless of teaching settings, educators need to be able to extract evidence-based components from the aspects of curriculum content and incorporate them into assessments and examinations (Lehane et al., 2019). In particular, the incorporation of evidence-based practice into clinical curricula has been important to sequence learning objectives and practice outcomes (Lehane et al., 2019). It is important to generate active participation

from educators, clinicians, and policymakers (Lehane et al., 2019). Moreover, teachers, educational institutions, health services and healthcare providers should be supported to have the capacity and competence to meet the challenges of providing education (Lehane et al., 2019). Nursing leaders and policymakers need to improve their nursing guidance and training programs so that they are competency-based (Al-Maaitah et al., 2023). Healthcare professionals should integrate knowledge, attitudes and skills for necessary evidence-based practice at health educational programs (Lehane et al., 2019). Experts have made several recommendations to enhance evidence-based teaching and learning strategies, including: (1) clinical integration of [Evidence-Based-Practice] EBP teaching and learning, (2) a conscious effort on behalf of educators to embed EBP throughout all elements of healthcare professional programmes, (3) the use of multifaceted, dynamic teaching and assessment strategies which are context-specific and relevant to the individual learner/professional cohort, and (4) 'scaffolding' of learning (Lehane et al., 2019:4).

It has been noted that social media applications support health education and sharing of health information and have been widely used during disasters and crises (Hamadneh 2021). Refugee mothers get information about healthcare during pregnancy and lactation mostly through social media and mobile phone awareness programs, during Covid-19 (Hamadneh et al., 2021). Mobile technology is an active strategy now for health counselling, supporting collection of timely, precise and comprehensive health data (Sharma et al., 2022; Haleem et al., 2022). Using telephone conversations for counselling and education provides a suitable technique for health awareness and health promotion (Nasiriani et al., 2017). Social media provides wide capabilities of communication to promote health education (Haleem et al., 2022). This reflects the rapid revolution of telecom companies, especially following the COVID-19 crisis, as well as the wide spreading of internet coverage. Collaboration with partners from local and international associations may gain political support that will provide better achievements (Hoffman et al., 2019). Furthermore, the health faculty's readiness to begin advanced, competency-based programs must be assessed, as well as reviewing existing graduate programs (Al-Maaitah et al., 2020). While a great deal of evidence-based-practice

activity throughout health professions education is evident, the effective incorporation of evidence-based practices across the curriculum needs further development, with a 'real' hands-on procedure stimulating stakeholder engagement in the development process (Lehane et al., 2019).

Faculty students of professional courses in healthcare and health profession workers in different disciplines, including medicine, dentistry, pharmacy, nursing, midwifery, and allied health sciences engaged in blended education courses recently following the COVID-19 pandemic. The blended learning approach can be creative in developing learning activities (Hege et al., 2020). More investigation on the strengths and weaknesses of using e-learning education for health professions is recommended (Hamadneh, 2022). Health education institutions and health service facilities need to find effective strategies to develop allied education professions and to keep pace with the rapid technological developments in the world these days. Furthermore, we need to find more strategies that support health educators, clinicians, educational institutions and health institutions to have the recommended capacities and competencies to deal with challenges associated with providing an evidence-based practice education (Lehane et al., 2019).

Social media have become greatly active in spreading health information, particularly in times of epidemics, disasters and crises (Hamadneh et al., 2021; Hamadneh & Rafee, 2022). For quality control and regulatory purposes, it is essential to address potential risks and misleading information in social media and the healthcare system (Jeyaraman et al., 2023). Further actions are required to educate healthcare providers and reduce challenges to being involved in health education programs. In addition, we should prepare healthcare providers to handle modern education tools, not only for the sake of education among themselves, but also to practice their important role in continuing to educate

people, particularly patients. Furthermore, we must prepare healthcare providers to deal with health education tools in crises and critical situations for the country.

### Conclusion and Implications

Research emphasizes the high impact of social media on individual's knowledge, beliefs, and attitudes. Social media represent a very active way in spreading health information in times of epidemics and crises. We should prepare healthcare providers to handle modern education tools, not only for the sake of education among themselves, but also to practice their important role in continuing to educate people, particularly patients. The blended learning approach can be creative in developing learning activities. There is a need to incorporate principles of evidence-based practice into all elements of the healthcare professions' curricula. The benefits of technology were remarkable in receiving health information, and it has become an active method following the COVID-19 pandemic. Individuals should use social media judiciously, considering associated risks, in order to maximize advantages and minimize potential disadvantages. There is a fundamental need for new strategies to keep health professionals active and to engage healthcare providers in professional development programs, particularly in remote and isolated areas, especially with the increase in disasters and crises in the world, which may affect the way we consider the effectiveness of the available communication and education methods. However, more research is still required in this field.

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There is no conflict of interest.

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