Learning in lockdown: exploring the impact of COVID-19 on interprofessional education

Abstract

The COVID-19 pandemic has had a significant impact on the learning experiences of students undertaking health and social care programmes across the globe. In the UK, the Nursing and Midwifery Council introduced emergency standards for undergraduate programmes in 2020, making significant short-term changes to programme delivery. However, the mandate for all students to undertake interprofessional education remained. Interprofessional education is key to preparing students on health and social care programmes, as it enables students to work as effective members of multi-agency/multi-professional teams on qualification. It is an important element of training, as it has a direct impact on quality of care and service user experience.

This series of articles will explore the experiences of 'lockdown learning' from the perspective of academics, students and service users from a global perspective in relation to the delivery of interprofessional education during the pandemic, which necessitated a wholesale move from face-to-face, blended and online learning to include emergency remote teaching. The series was written by members of the Centre for the Advancement of Interprofessional Education Research Subgroup (Interprofessional Education Experiences) and aims to identify barriers and facilitators to successful shared learning and provide suggestions for how lessons learned can be taken forward to further enhance this important element of pre-registration education. The perceptions and attitudes of academics and students on such comprehensive changes are a unique and rich data source to explore and inform future provision.

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The World Health Organization (WHO, 2020) declared COVID-19 as a global pandemic in March 2020. In response to the highly contagious nature of the virus, the UK government put in place stringent measures to slow down its spread, including social distancing (Gov.uk, 2020). Social distancing had a significant impact on all higher education institutions as campuses were closed and face-to-face teaching was replaced with emergency remote teaching (Power, 2020). Emergency remote teaching is defined as 'a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances' (Bozkurt and Sharma, 2020; Hodges et al, 2020). Consequently, the implementation of interprofessional education programmes globally had to move from face-to-face or blended learning to emergency remote teaching. This introductory article aims to give historical context to interprofessional education provision and provide an overview of the contextualised experiences of academics and learners on interprofessional education development, delivery, and evaluation during the liminal period brought about by the pandemic.

Who are we?

The Centre for the Advancement of Interprofessional Education (CAIPE) was established in 1987 and is a UK-based charity, whose main aim is to champion the importance of interprofessional education in the provision of safe and effective health and social care. The CAIPE Experience Research Subgroup includes academics and research students from a variety of professions and countries who have collaborated to write this series of articles to share experiences of interprofessional education during the COVID-19 pandemic from a global perspective.

Background: taking the long view

Online learning is not a new phenomenon in interprofessional education. A wide range of UK and international developments in technology to enhance interprofessional learning, initiated during the first decade of the 21st century, were showcased in Bromage et al's (2010) treatise on interprofessional e-learning and collaborative work. These early initiatives benefited from the growing use of digital technologies in colleges and universities. Since their introduction in the 1990s, learning technology platforms, known as virtual learning environments or learning management systems, have been deployed by many higher education institutions to provide learning content repositories, communication and administration, with links to other systems including libraries, student records and timetabling (Ucisa, 2019). These virtual learning environments, together with web technologies and growing use of social networking (for example, Facebook, Twitter, Flickr, YouTube, blogs, wikis), and social writing platforms, such as Google docs and Padlet, have contributed to further developments across the sector. Many higher education institutions embraced the advancements in technology, in order to offer new and innovative ways to deliver interprofessional education, including the introduction of problem-based e-learning (Dearnley et al, 2010). Technology mediated approaches adopted in interprofessional education have also included bespoke online learning modules, reusable learning objects, and citizen-focused virtual communities developed to provide more authentic person-centred learning experiences (Barr et al, 2017).

It is into this milieu, where the pace of technological change is already rapid, that understanding and effective deployment of online technologies for learning during lockdown is so vital. While these developments have placed some higher education institutions in favourable positions, such as being able to build on standard provision that may have previously offered a blend of face-to-face and online learning, the situation for interprofessional education in lockdown is made more challenging by the necessity for developing remote emergency teaching and learning strategies, coupled with the speed with which the management of change was demanded. Moreover, it is also important to recognise the considerable burden emergency remote teaching placed on higher education institutions from middle- and low-income countries as they tried to balance the rapid changes in classrooms, technological infrastructures, educational management, and educational priorities.

The usual rationales for change informing curriculum development and the readiness of staff and students for alternative modes of interprofessional education delivery and facilitation have been severely compromised. The imperative to continue delivery and facilitation of interprofessional education for students and teachers, forced to work at a distance has usurped the slower and more considered pace of curriculum developments introducing technology mediated and blended learning strategies previously designed to address some of the educational, logistical, and organisational problems faced in interprofessional education

(Edelbring, 2010). Readiness for change tends to lag behind the introduction of innovations and new ways of working (Rogers, 2003). Building the understanding and familiarisation required to embrace new learning and teaching approaches is further compromised during lockdown by the necessity of finding and rapidly implementing different ways of working.

The pressures to enhance education provision in more cost-effective ways without placing the student experience at risk remain (Hutchings and Quinney, 2015). Some fundamental principles identified in early developments of online learning merit consideration here. While educators and practitioners have been forced to engage with a variety of technology-mediated learning and teaching strategies as a result of lockdown, it is important to be explicit about the assumptions held about designs for learning. Borrowing from the CAIPE (2002) definition, where interprofessional education is defined as 'occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care', Edelbring (2010) identifies three different conceptions of learning mediated by technology for informing curriculum design and for improving and evaluating interprofessional education:

- 'Learning from technology', where technology can be viewed as objects or artefacts containing knowledge
- 'Learning with technology', where technology is used for learning with others to improve collaboration
- 'Learning about technology', where educators, practitioners and students gain familiarity with tools and techniques that contribute to teaching and learning.

Interprofessional education: current learning context

Emergency remote teaching has taken over higher education in light of the changes brought about by the COVID-19 pandemic. While both learners and educators in health professions' education had no choice but to embrace teaching and learning online (Reich et al, 2020), there was concern relating to the associated impact on students' opportunities for authentic communication and collaboration (Rabe et al, 2020). Educational programmes that include practice placements, such as midwifery, are especially challenged in incorporating interprofessional education within the emerging curricula.

At this point, it is important to distinguish between online learning and emergency remote teaching. By definition, online learning or e-learning is characterised by four categories, including the use of technology to deliver learning and training programmes, the delivery of programmes by electronic means, learning and interactivity being facilitated by digital tools, and information and communication technologies being used to support and improve student learning (Sangrà et al, 2012). An effective online education is a result of careful instructional design and planning, considering nine dimensions of design including modality, pacing, student-instructor ratio, pedagogy, instructor role online, student role online, online communication synchrony, role of online assessments and source of feedback (Means et al, 2014; Branch and Dousay, 2015; Hodges et al, 2020).

High-quality distance/online learning requires time to develop platform-appropriate resources in a careful and systematic way (Hodges et al, 2020); conversely, emergency remote teaching is effective in times of crisis management where all teaching, irrespective of its planned mode of delivery, is facilitated remotely at very short notice. Emergency remote teaching has no theoretical underpinnings, whereas distance/online learning is a distinct pedagogical concept, not just the geographical separation of learners and educators (Moore, 1973; 1991). Emergency remote teaching entails the use of fully online teaching solutions such as video- conferencing applications and e-learning management systems for instructional delivery that would otherwise be provided in face-to-face or blended mode. Emergency remote teaching will usually return to previous modes of teaching once the emergency situation is over. That said, in the context of education, emergency remote teaching has also fast-tracked the optimal use of online learning and opened up new opportunities and reflections towards transformative education (Ferri et al, 2020).

By establishing these definitions, case studies of interprofessional education provision can be examined to differentiate emergency remote teaching from distance/ online learning to then evaluate how interprofessional education has been impacted by the pandemic.

The impact of COVID-19 on midwifery pre-registration education

The Nursing and Midwifery Council (NMC, 2019) state that they 'will only approve programmes where the learning culture is ethical, open and honest, is conducive to safe and effective learning that respects the principles of equality and diversity, and where innovation, interprofessional learning and team working are embedded'. The Standards of Proficiency for Midwives (NMC, 2019) stipulate that midwives are responsible for 'collaborating with and referring to interdisciplinary and multi-agency colleagues' as appropriate, which reinforces the importance of effective interprofessional education at pre-registration level.

The emergency standards for midwifery education (NMC, 2020) were put in place in response to the COVID-19 pandemic to temporarily supersede the 2019 standards, making significant short-term changes to programme delivery. Final year students were given the option to spend the final 6 months of their programme in clinical practice. Second year students, third and/or final year students in their first 6 months of study and first year postgraduate students were given the option to spend no more than 80% of their hours in clinical placements and 20% of their hours in theoretical learning. Students in the first year of their programme would spend 100% of their programme in theory/academic learning, with clinical placements being temporarily paused (Nicholas, 2020; NMC, 2020). In addition, social distancing measures implemented by the government necessitated a move from 'traditional' modes of delivery such as face-to-face or blended learning (a combination of face-to-face and online learning) to a fully online provision for theoretical input.

Indeed, interprofessional education was not spared from the upheaval of the transition to emergency remote teaching. Langlois et al (2020) suggested that from a global outlook, interprofessional education has developed in one of two ways:

- Interprofessional education has moved to emergency remote teaching resulting in the conceptualisation and implementation of new approaches to collaborative teaching and learning
- Interprofessional education has been put aside to prioritise profession-specific learning.

The first development can be seen in institutions where interprofessional education has been well-established and part of the curriculum. The second development can be expected in institutions where interprofessional education is still developing or where the impact of COVID-19 is severe. That said, irrespective of mode of delivery, all midwifery pre-registration providers in the UK must ensure their students 'have opportunities throughout their programme to collaborate and learn with and from other professionals' (NMC, 2018).

Conclusion

It is vitally important to the success of technology-mediated learning and teaching approaches in lockdown and beyond to appreciate the distinctions drawn by Edelbring (2010) between 'learning from technology', which is focused on content, and 'learning with technology', which is focused on collaboration. Virtual learning environments have frequently been criticised for their propensity to act as content repositories at the cost of promoting active learning and collaboration (Ucisa, 2019). While the learning content provides valuable resources for promoting learning, it is learning with technology, facilitated through remote synchronous video conferencing and asynchronous communication channels using discussion boards, blogs, wikis and social networking platforms, that can promote active student collaboration for interprofessional education learning. The third concept, 'learning about technology', highlights the importance of educators and practitioners to understand how students learn, recognising the possibilities offered and gleaning tips and techniques for making best use of the different learning and teaching strategies and technology tools available as key components within a carefully designed and planned curriculum.

Building resourcefulness and readiness for managing change in interprofessional education provision in the future will continue. Lessons can be learnt from the benefits and challenges of learning in lockdown, drawing on past experience of technology-enhanced interprofessional education, developments that are underpinned by theory and evidence-based to guide the design, delivery and evaluation of interprofessional education curricula (Barrr et al, 2017; Hean et al, 2018). This series of papers will

identify where current practice has been built on, what is new, and what to take forward.

Upcoming articles

Article 2: impact of COVID-19 on delivery/ process of interprofessional education

This article will focus on the changes that occurred in the delivery of interprofessional education during COVID-19. In considering the 3P (presage, process, and product) model of teaching and learning proposed by Biggs (1993) and discussed within the context of interprofessional education by Freeth and Reeves (2004), the aim of this paper is to focus on 'process'. It will provide an international perspective through educators' case reports and consider the key factors that enabled a rapid shift from in-person to online interprofessional education, and the key aspects that had to change.

Article 3: students' experiences

This article aims to explore the extent of student experiences in doing online interprofessional education at the pre-registration level. In this article, the characteristics of online interprofessional education are described, online teaching and learning activities that target interprofessional education competencies in midwifery education are identified, and the nuanced experiences of students in online interprofessional education are discussed. The article concludes with how to make online interprofessional education more interactive, effective, and relevant especially in the midst of the changing landscapes of health professions and midwifery education.

Article 4: academics experiences

This article will explore the move to emergency remote teaching for interprofessional education programmes, from the perspective of academics through the use of personal reflections. The role of reflective practice in healthcare is well documented and this article will explore the experience of learning alongside students that came as a consequence of emergency remote teaching in the interprofessional education arena.

Article 5: practice-based learning and the impacts of COVID-19

This article will explore changes in provision and approaches to practice-based learning and student placements, drawing on case studies and examples, to identify the challenges for incorporating interprofessional practice learning (Barr et al, 2017), opportunities for innovation and guidance for future practice.

Article 6: impact on assessment of interprofessional education

This article will focus on the considerations and adaptions aligned to the assessment of interprofessional education, including examples of the alternative assessment strategies employed by faculty, the modality of assessment and the tools utilised, the student and faculty experience of remote/online assessment and the challenges faced by both during the rapid pivot to remote learning and assessment.

Article 7: impact on service users' contribution to interprofessional education

This article will discuss the theory behind service user and carer involvement in teaching and learning as well as providing real-life examples, as well as focusing on some of the lessons learned to ensure this involvement could be successfully achieved.

Article 8: lessons learned and future planning

This final article consolidates the key points from the series and considers what lessons can be learned from experiences of emergency remote teaching during the COVID-19 pandemic. Consideration is given to the practicalities of emergency remote teaching, including the preparation as well as the delivery and proposed outcome. The paper is written as a guide for others to draw on for future use.

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