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Cross-border knowledge transfer via collaborative virtual training programme during the Covid crisis

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1. Introduction

COVID-19, a severe respiratory infection, was an international public health emergency. Like many other countries, the crisis shattered most states of India during its peak in April 2021 (WHO, 2021). The unfolding emergency caused by the pandemic created a crucial need to initiate projects that strengthened the health care system for the safe provision of quality patient care to COVID-19 patients. It came to light that Indian healthcare professionals required support with appropriate skills, relevant knowledge and the related resources to manage the scale and severity of the pandemic which caused intense pressure and unexpected challenges to the nurses (Ford, 2021). The British Indian Nurses Association (BINA) were proactive and took the lead in initiating a project to rapidly upskill the Indian nurses by addressing the immense skills and knowledge gap issue and began to seek out for volunteers. Around 65 British Indian nurses working across the UK expressed interest to contribute to the initiative (Ford, 2021). The authors consisting of experienced nurse educators and researchers volunteered to coordinate and collectively led BINA's project and facilitated the successful fulfilment of the aim and vision of the project. The primary aim of the project was to expeditiously upskill the nurses working in India to mitigate the gap in COVID-19 related knowledge and skills and hence, equip them to meet the challenges faced at the time and in the ensuing months (NHS England, 2020). The project was implemented by use of virtual platform (zoom) and involved delivery of timely and high-quality educational training programme of 12 sessions to around 400 nurses working in small to large multi-speciality hospitals in India to manage COVID-19 patients.

2. The project

The project necessitated partnership working through bringing together individuals who expressed interest. The authors acted as the key liaison between the Nurse Leads from the Indian Hospitals and the BINA volunteering trainers. Despite having no prior connections, within a limited time of one week, the authors worked cohesively and collaborated with educators and practitioners with acute care experience to create a training package incorporating 16 topics to address the knowledge and skills required to provide safe and quality nursing care for patients with COVID-19. This was achieved by establishing an educators' working group where ideas were brainstormed for content, design and delivery. The topics were cross checked with experts in the educator's working group to ensure quality and relevance. Consideration was given to the lessons learnt during the COVID-19 waves in the UK. Educators and practitioners shared their experiences and thoughts of what worked and what did not work for them and their organisations. This was valuable and

essential information, as it enabled use of the best and most effective ways to upskill the Indian nurses.

Simultaneously, the authors liaised with the nursing leads and managers of the interested Hospitals in India and identified the specific needs of their workforce along with information about their existing capacity, equipment and skillset including the scope of use of technology for the training sessions. This vital information facilitated the knowledge transfer activity with particular emphasis on the local needs. The design and direction of this project was learner centred, therefore tailored as per the requests of the Hospital. Each session was evaluated using Microsoft forms and the feedback from the Indian nurses was used by the coordination team to rearrange and reorganise the content and delivery for the later sessions. This co-creation approach led to the effective implementation and uptake of the project.

The pandemic compelled the educators to a pedagogical shift from conventional methods of teaching to digital, which led to development of skills and competency to teach online remotely. Similarly, in response to COVID-19, the UK practitioners learnt to apply rapid evidence-based guidelines in clinical setting and developed awareness and experience in management of COVID-19 patients. Due to COVID-19 related infection control measures, even the nurses in the UK adapted to digital training and learning process. Consequently, due the aforementioned exposure, both the co-ordination team and trainers felt equipped and were prepared to facilitate and deliver the training sessions virtually. Zoom was identified as a suitable platform for the cross-border knowledge transfer of best practice around COVID-19 management due to its ease of use and familiarity amongst the users (Carrillo and Assunção, 2020).

2.1. Delivery

The innovative education programme was delivered to provide bespoke support to three hospitals located in three different states (Kerala, Andhra Pradesh and Maharashtra). In two of the organisations, projectors were used in auditoriums to capture training sessions on a big screen to accommodate additional staff attendance. Three 1-hour sessions were delivered weekly for 4 weeks and the training reached out to hundreds of nurses as most sessions were projected in auditoriums with mass attendance of senior nurses, nurse leaders, educators, newly qualified nurses and final nursing student nurses. Co-ordination team members and the key link nurses from Indian Hospitals were present in each training session to ensure continuity, facilitate effective delivery and address troubleshooting. The co-ordination team devised a teaching plan to ensure consistency and quality as most sessions were delivered by different trainers. The plan included specific instructions such as time allocation for each activity, recommended evidence-based resources and the use of scenarios for application of the knowledge. The structure and order of topics in the training

package was mostly underpinned by A to E assessment framework used in assessing and responding to changes in COVID-19 patients' vital systems, however, the package also included the critical topics such as infection control guidelines, medication, escalation framework (iSBAR), Sepsis care bundle, pulmonary rehabilitation (Almomani et al., 2020). Specialist input was sought from other disciplines such as physiotherapists and ICU biomedical technicians who shared their expert knowledge. To reinforce best practices and enhance provision of safe nursing care, emphasis was given to practical information and relevant posters and guidance were provided via emails after the sessions. The local nurse links laminated the provided flow charts and assessment tools and made it readily available at the bedside to maximize the uptake of the knowledge transferred. In addition, local guidance published by the Indian government for various aspects of COVID-19 management was shared with the audience based on its availability. The recordings were made available on YouTube, following due consent, to enhance sharing the training resource with wider audience.

3. Evaluation

The sessions evaluated exceptionally well, and the Indian nurse leaders valued the outstanding contribution. It enabled them to upskill their nursing workforce to deliver care safely and bridge the knowledge-skills gap. The qualitative and quantitative feedback highlighted that the training sessions were fit for purpose. One nurse lead's comment captured this: 'Well coordinated, excellent and friendly faculty, apt topics and for those who attended, it is a life-time learning'. Another nurse lead expressed: '...I really liked the scenarios and the assessment tools. The photos and pictorial presentation are very useful.' The project's vision was to ensure that the training was relevant and of high quality. The captured comments, both verbal and written, reflect the impact of the project.

Multiple factors contributed towards the success of the project. The BINA leaders, the authors and the volunteering UK based Indian nurses shared a strong sense of moral and social obligation to support their Indian counterparts. They had their family members and loved ones residing in India and felt emotionally devastated when COVID-19 hit India in April 2021. Participating in the project helped them to channelise their anxiety and fears into a positive and impactful activity and enabled in the professional development and empowerment of Indian nurses. Secondly, the project adopted a flexible approach in teaching, such as use of simple language. English was the main medium of delivery, but native language was used as per the situational requirement. This strategy was to ensure clear understanding and relevance to the attendees who were of varied levels of knowledge, skills and experience (Chen et al., 2016). Hence, the multilinguistic skills of the trainers and authors facilitated maximum uptake of the information shared. Furthermore, the authors were aware of the differences in the socio-cultural competence that exist in professional practice between UK and India; for example, the Indian nurses are heavily dependent on the Physicians' instructions to carry out interventions, whilst the UK nursing

practice allows more autonomy. These differences were considered in the planning and delivery of the training sessions. Existing professional hierarchies potentially influence inter-professional interactions in countries like India, therefore guidance focused on early recognition, escalation and reporting and response only as per local protocols and within the scope of nursing practice in India (Philip et al., 2019). Lastly, the training considered a holistic and humanistic approach in planning and delivery of the session. The psychological impact due to COVID-19 was discussed and relevant guidance on psychological first aid was provided during the session. The live training sessions provided an opportunity to discuss self-care, with an aim of encouraging resilience amongst the nurses which has become imperative during COVID-19 pandemic (Duncan, 2020).

The project faced many challenges including time pressures, variable engagement from trainers, mixed level of proficiencies of the audience and the need to research the right guidance that was applicable for the Indian practice setting. Delivery of training sessions was complex as the hospitals varied in size, capacity and availability for the training session. The time zone difference of 4.5 h between UK and India was one of the significant barriers in organising the training time. Some trainers were available only in the evening, which is night-time in India. In addition, training for equipment was challenging as the participating hospitals had different equipment. As the project's intention was to prepare Indian nurses for managing COVID-19 patients, some hospitals were in the process of ordering ventilators and hence the UK models were used as examples. Consequently, a separate training session was recommended after receiving the shipments of the equipment.

4. Reflection

On reflection, one of the key factors that led to the success of the project is the strong passion and adoption of collective leadership approach which resulted in cohesive and effective team working. The authors were volunteers for this project and ensured an accommodative, flexible and empathetic work ethos which led to the establishment of trust and respect within the co-ordination team and across border with the nursing teams in India. The content and delivery of the training evolved over the period of the project, as it enabled innovation and new ideas through partnership, also involving input of the end-user. The efficiency overcame barriers with adoption of strategies where identification of gaps was an ongoing process. The post session feedback and evaluation process supported in effective delivery of subsequent session.

Another key factor that enhanced the teaching and learning process was the social and cultural connections that the trainers and coordinators made with the attendees. This was evident in the pre and post informal conversations with the Nurse Managers, as well the formal evaluations (Baran and AlZoubi, 2020). The previous experiences of the coordinators and trainers in India enabled them to deliver the sessions at a level that was most suitable

for the Indian nurses (Baran and AlZoubi, 2020). The authors consider this whole process of developing a detailed educational programme and implementing it effectively to meet the challenges of the crisis as novel (Shivangi, 2020). Some of the unintended positive outcomes includes further collaboration and networking amongst the co-ordination team and Indian Nurse Leaders for sharing good practice and to influence future practice.

5. Conclusion

In conclusion, this project presents novel insights into effective cross-border knowledge transfer via a collaborative virtual training programme at the peak of COVID-19 pandemic in India in May 2021. The project highlights the effective use of digital technology for nurse education leading to professional development and inclusive empowerment of nurses from a diverse background during a crisis period. The concerted efforts complemented and targeted to mitigate knowledge, skills gaps for better clinical outcomes. It enhanced networking across borders, allowed to share best practices across borders and had an impact on all involved for the better in the field of nursing practice and education. Additionally, it provided an opportunity for the UK nurses of Indian origin to reflect on their skillset and contribute positively at a time of crisis in India. The project is globally replicable, with its potential to offer flexibility in meeting the education and training needs in any acute crisis posed during situations such as the COVID-19 pandemic. The project coordination team will be more than willing to share and support anyone interested.

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