E-Learning in Medical Education: Indian Working Model in Practice

We read with interest the recent review on e-learning by Dhir, *et al.* [1]. The review introduces the concept of e-learning, and discusses its need and scope in medical education in India. It also supports the adoption of e-learning as an add-on tool to traditional learning; the advantages far outweighing the possible limitations. It also highlights the importance of smartphones as a common modality for knowledge dissemination; the potential advantage being a point-of-care tool, and improved networking and collaboration.

We would like to appraise the readers that World Health Organization Collaborating Centre (WHO-CC) for Training and Research in Newborn Care, All India Institute of Medical Sciences (AIIMS), New Delhi has created smartphone apps on standard treatment protocols (STP) for management of sick newborns, and essential newborn care (both android and iOS versions, details available at *http://newbornwhocc.org/smart_phon. html*). The content of these apps is based on evidence-based practices, and has been validated at AIIMS WHO-CC. The efficacy of the App on standard treatment protocols (STP) for management of sick newborns in small hospitals has been reported in nursing students and physicians working in special newborn care [2,3]. Recently, a WHO report described our smartphone apps as an innovation for service delivery to disseminate best practices [4].

In addition, our center has been involved in e-learning through an online platform (*www.ontop-in.org*) since 2010. Our experience [5] suggested that online learning is feasible and effective for training health care professionals in acquiring knowledge and skills related to essential newborn care. So far, we have trained nearly 3500 physicians and over 1000 nursing professionals in 12 sick newborn care courses and five essential newborn care courses. The platform also hosts courses on quality improvement and continuous positive airway pressure (blended course), which are undergoing further refinement. We shall soon be starting few other courses for professionals working in small hospitals. We have over 30 centers spread across India and the South East Asian region. Hence the statement in the reviews [1] that "most of the e-learning activity done by the residents in the medical colleges is limited to data search for their thesis and research work" may be an underestimation of the penetration and value of e-learning.

Over the last few years, we have been able to overcome most of the issues listed by the authors as the limitations of e-learning: namely, hardware and software issues, (using free customized platforms) connectivity (giving the material to students on a thumb drive so that heavy files can be seen and reviewed before they come online for participation in quizzes and chats), faculty and support staff shortage (the faculty from nodal centers are also the mentors of students and keen learners themselves), technical support (once functional minimal technical support is required by empowering them to create local IT solutions) and lack of face-to-face interaction (weekly online live webinars and chat sessions). We have been running a successful model for nearly a decade now, and the interested professionals are welcome to learn from our model.

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