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SIMULATION-BASED MEDICAL EDUCATION: INDIAN SCENARIO

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Dear editor,

Medical education is a specialised education and it is important to teach skills without risk to the patients. It is imperative to find alternative and/or complimentary process which fulfils learning requirement and gives realistic experience. Recently, India has witnessed considerable changes in medical education.[1] National Medical Commission (NMC) has introduced a competency-based medical curriculum, emphasising on practical learning. With increase in number of students, hands-on training is associated with challenges like availability of all types of patients including rare and complicated cases, learner time constraints and concerns for the patient's care while learning from them. In order to get confidence of the skill performance, students need similar cases to practice multiple times. During COVID-19 pandemic, the world witnessed continuously evolving treatment protocols and unprecedentedly need of training healthcare professionals in short time.

Simulation-based Medical Education (SBME) offers a solution by providing realistic, immersive and experiential environment and help learners gaining clinical experiences with accuracy and proficiency. Simulation bridges the gap between theoretical knowledge and execution. With SBME, it is possible to plan and execute multiple customisable scenarios and give an opportunity to students for same clinical scenario to be assessed multiple times and/or by multiple students, thereby, providing similar learning experiences. It also makes it easy to expose the learners to rare and complex clinical situations, while avoiding potential risks. Along with instilling confidence amongst the learners, SBME allows easy feedback and assessment. These characteristics when used with the recent technologies, can lead to widespread acceptance of SBME across different specialties and disciplines of the healthcare system.[2,3] Simulation has potential in reducing the learning gap during pandemics like COVID-19.

Some of challenges for SBME in Indian settings include need of infrastructure to set up the simulation laboratory, cost for set up and maintenance, trained and full-time instructors, skilled technical staff and integration of simulation with the medical curriculum and oversight of its execution with feedback system to improve on a continuous basis.

Currently, in India, the concept of SBME is in formative stage. Some centres like ours are well established while many are in the evolution stage. As per NMC regulations, skills laboratories are compulsory in Medical Colleges. However, simulation is beyond task training. With step-by-step evolution, future of SBME in India is exciting considering opportunity to develop clinical skills and making the learner more competent without risk to the patient.

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