

# Effectiveness of Various Learning Modalities and their Value in Education and Training of Residents in Neonatology

Saishree Pradhan<sup>1</sup>, Umamaheswari Balakrishnan<sup>2</sup>, Prakash Amboiram<sup>3</sup>

<sup>1-3</sup>Department of Neonatology, Sri Ramachandra Institute of Higher Education and Research, Chennai

**Background:** Indian medical education system has undergone a paradigm shift in the learning methodology from time-based, knowledge-centric curriculum to competency-based, outcome and context-oriented system.<sup>1,2</sup> The efficacy, students-perspective and teachers-perspective of this is not studied, which will help in fine-tuning the education system, more learner-centric in Indian context.

**Aims & objectives:** To determine the effectiveness of various learning modalities conducted in our department and their value in education and training of residents in neonatology as perceived by students

**Methodology:** This was a prospectively conducted web questionnaire-based study, conducted in department of neonatology at a tertiary care centre among the neonatology trainees who undergo training for 1-3 years. The questionnaire consisted of questions to evaluate various learning methods in four domains – knowledge, day-to-day decision making, clinical-skill, communication-skills and behavioural skills, each scored in Likert scale. The past trainees were also included and asked about whether learning methods helped them in current practice.

**Results:** 32 trainees out of 43 participated in this study. 20 (62.5%) are neonatology fellows (one year training).13 (40.6%) have undergone 24 – 36 months of training with us. For “acquiring knowledge”, perinatology multidisciplinary meet blended learning (PMMB) method was most acceptable (87.5%) among trainees. In terms of “day-to-day decisions making”, clinical case discussions (CCDs) and simulation sessions were scored higher than other modalities. Amongst the alumni students, CCDs (81.2%), simulations (75%) and PMMB (68.7%), helped them in their current day to-day practice. 24(75%) felt that a new method could be added to the existing modalities.

**Conclusion:** Clinical case discussions, simulations & perinatology multidisciplinary meet with blended learning should be prioritised as the learning methodologies for neonatology trainees. Personalised teaching methods should be thought of as another mode of learning tailored to each trainee.

**Keywords:** Learning modalities, Trainees, Students perspective

## References

1. Abraham G, George TK. Rethinking postgraduate medical education in today's India - a comparison with western systems. *Future Hosp J.* 2016;3:s24. doi:10.7861/futurehosp.3-2s-s24
2. Narayanan, Varsha. (2022). The New Medical Education Curriculum in India: A Great Initiative with Scope for Further Enhancement. *The Indian practitioner.* 75. 6.