

Curing Neurophobia: A Feasible Suggestion for Low-resource Settings

Sir,

We read the exhaustive review on preventing neurophobia by Shelley *et al.*^[1] with great interest and would like to ovate the magnificent effort of the authors, for providing us a 360° enlightening about the issue. Being anatomists, we have felt that the foundation stone for neurosciences for Indian medical graduates is often not laid properly. From teacher's perspective, we would like to represent that the main shortcoming in imparting an effective neuroanatomy teaching is largely due to the shrinkage of the time earmarked for preclinical curriculum. Most Indian colleges, if not all, could allot only 15–20 days amidst the hectic schedule for exclusive neuroanatomy teaching. Squashing lot of contents, interlinking the functions

at different levels, and not giving enough time to adjust and acquaint to the whole of newer terminologies often diminish the “perceived knowledge status” of the students below the critical limit. Case-based instructional methods and other pedagogical strategies to actively engage the learners often require its own time, which is seldom feasible in many low-resource settings, owing to a panoply of causes. Second, students often complain about the conversion of two-dimensional (2D) structures into 3D structures and vice versa. Unfortunately, the examination pattern in most universities demands the students to prove their perception in 2D and textbooks cater the same. This mismatch often perplexes the students, particularly those with low visual-spatial abilities to cope up.^[2]

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In spite of understanding the inception and existence of neurophobia, we are left with a question, “how to cure neurophobia in a low-resource and time-constrained settings?” First, it is mandatory to develop a concrete hour to hour objectified work plan for the neuroanatomy teaching, after taking into account the views of various stakeholders.^[3] Second, a systematic review by McCarron *et al.*^[4] offers nine solutions for curing neurophobia, the first being implementation of a team-based learning strategy with immediate feedback. In a study by Javaid *et al.*,^[5] 81.4% of participants agreed that understanding of the clinical aspects of neuroanatomy was enhanced using web-based resources and computer-assisted learning.

Based on these suggestions and banking upon the advantages of asynchronous learning, we used mobile-based learning^[6] for supplemental neuroanatomy teaching. Using WhatsApp social messenger (WhatsApp Inc.) as a platform, we had divided the students into groups, contents (including 3D tutorials, clinical vignettes, annotated images, and worksheets) were circulated, and active discussion was promulgated in the presence of a moderator. The success of the modality depends on the fact that the contents delivered should be able to recruit as many cognitive domains of learning as possible. We could sense that majority of the students (78%) felt that M-learning for neuroanatomy was more effective compared to E-learning platforms, as it had offered a ubiquitous and individualized learning.

We would like to conclude that, even in settings with stringent resources and time constraints, neurophobia can be cured to an extent, provided if we use the platforms which are well acquainted to the “digital native” population. Curing neurophobia is obviously a challenge; however, as a silver lining, this challenge opens up opportunities for devising newer methodologies in medical education.

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Conflicts of interest

There are no conflicts of interest.

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