Conference Abstract

DAY 1 15th September 2023 (Friday)	ORAL 1	2.00-3.30 pm	Scientific Session 5

3D Models using 3D printer and its advantages in teaching and learning

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Background: Models have played a great role in learning Anatomy. Models helps in the better understanding the anatomical structure of a tissue or a organ. Commercially 2D and 3D models are available and these models are made of wood, plaster of paris, general purpose resin, and other materials. With advancement in the technology, 3D printers have become latest equipment for making 3D models incorporated with all the features.

Materials and Methods: In our study we have customised and designed a low cost 3D printer with help of an engineer to make the models. These models are printed using UV cured resin filaments. These models were designed using an app incorporating all the required specifications. Two models of right and left lungs were made using the above technique.

Results and Conclusion: Teaching and learning with 3D models helps the students to understand the subject in a deeper way and also to remember for a longer duration. The right and the left lung 3D models made using the above technique had all the surface details and was light weight. The Anatomy of the External features of both right and left lungs were taught using these 3D models to the slow learners and their performance were analysed. There was substantial improvement in their understanding and their performance.