

CHANGING ON HOW WE LEARN ANATOMY: A DESCRIPTIVE STUDY ON USING 3D PRINTED MODELS FOR TEACHING ASD

Kristofan Adiwicaksono Hartono¹

¹ International Undergraduate Program of Medicine, Public Health, and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

ABSTRACT

Background: Teaching cardiovascular anatomy traditionally had been very hard due to the limitations of existing forms of teaching materials. Atlases are a 2D image with limited visibility. Cadaveric materials are difficult to acquire, with the added cost of storage maintenance. Using 3D printed model can answer the disadvantages of traditional learning aid.

Method: A group of 5 students will learn using a 3D printed model in an online learning session. Focused Group Discussion (FGD) will be conducted afterwards, and the results will be recorded, transcribed, and grouped with a closed coding method. Thematic analysis will be conducted to obtain the result.

Result and Discussion: FGD shows 4 dominant topics. Online learning is compared to offline learning, 3D printed model are compared to traditional learning aids, Improvements that needs to be done to the 3D printed model, and future implementation in medical education.

Conclusion: 3D printed model have an advantage in anatomical education, especially in online learning situations and in viewing pathological structures. Improvements to the model are the coloring, labeling, and ability to disassemble. Feasibility studies should be done to assess the future implementation.

Keyword: Anatomy, ASD, Cardiology, 3D Print, Education