

Use of low-cost alternative anatomical models in the teaching and learning of human anatomy

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INTRODUCTION

The teaching of Anatomy for health courses occurs through predominantly expository theoretical classes, followed by practical classes in the laboratory. On the other hand, practical classes favor the visualization and identification of anatomical structures. However, there are many challenges in anatomical teaching, such as the complexity of anatomical terminology and difficulty in acquiring, preserving, and using cadavers. In this context, new tools for the study of the human body are sought. Some of these new strategies are digital tools, synthetic anatomical models, 3D printing, and the elaboration and use of alternative anatomical models from low-cost material.

OBJECTIVE

The objective of this review was to describe the advantages of using alternative anatomical models from low-cost material in the teaching of Human Anatomy.

MATERIALS AND METHODS

Literature review study conducted in February and March 2024, with articles published between 2019 and 2023. A bibliographic search was carried out in the electronic databases PubMed (National Library of Medicine, NCBI) and Scielo (Scientific Electronic Library Online) through the Descriptors in Health Sciences/Medical Subject Headings - DeCS/MeSH: Anatomical models, Alternative. The Boolean operator *AND* was used to combine the search terms.

All research papers that deal with the elaboration and use of alternative anatomical models from low-cost material in the teaching of Human Anatomy and published in English and Portuguese were selected. Literature reviews, meta-analyses, letters, theses, and dissertations were excluded.

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RESULTS AND SPEECH

In the study of the human body, in the absence of a cadaver, synthetic models are often used in the classroom or laboratory. Considering that the acquisition of these models, especially by public institutions of higher education, requires very high investments. The making and use of didactic models produced with low-cost material is positive in the teaching-learning process of the human body, causing better Anatomical knowledge in students. In addition, low-cost anatomical models have threedimensional characteristics similar to synthetic models, thus allowing a good visualization and identification of their anatomical structures.

As for the type of material used in the elaboration of low-cost models, the literature shows that biscuit, white glue, strings, paints of different colors and different brands, pen, styrofoam, pencil can be used, which can be easily purchased in a bookstore at very low monetary values, leading to the production of models with anatomical characteristics of the human body.

In this way, the use of these anatomical models by students will contribute to the identification of important anatomical structures, in addition to arousing their curiosity and attention to the study of the human body.

CONCLUSION

In summary, the use of anatomical models from low-cost material is positive in the teachinglearning process of Human Anatomy. Therefore, it should stimulate the implementation of new alternatives for the teaching of Anatomy.

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Keywords: Anatomy, Anatomical models, Alternative, Teaching.