

LETTER TO THE EDITOR

Use of plastinated specimens in rural medical and nursing education: a novel solution

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Dear Editor

Rural health care in India is predominantly served by primary and secondary hospitals. Secondary hospitals that have been running long term usually have a nursing school attached to them to provide a sustainable workforce of nurses. Thus, the nursing school becomes an integral component of a secondary hospital structure. The training of nurses includes a course on basic human anatomy. Although nursing schools attached to medical colleges rely on the availability of fresh cadavers or formalin-preserved prosected specimens, the permission to procure such specimens and the facilities to store them are difficult to obtain in a rural setting.

We wish to increase awareness about the process of plastination, an alternative process for the preservation of anatomical specimens. It was developed by Gunther Von Hagens in 1977 at the University of Heidelberg's Institute of

Anatomy¹. In this process, the tissues are dehydrated and the water content is replaced with a polymer. The specimen is then hardened by curing the polymer or plastic, resulting in dry and odourless specimens². Such specimens can be handled without gloves and can be stored on ordinary shelves or glass cupboards without the need for expensive and cumbersome storage facilities, as is the case with formalin- or alcohol-preserved specimens³. More importantly, they are durable and need very little or no care.

The use of plastinated specimens for anatomical education can be applied not only to nursing schools but also to medical and other health-related schools in resource-deprived areas. Thus, plastinated specimens are being increasingly used worldwide as alternative aids for teaching medical, nursing and allied health students³⁻⁵ (Fig1). The feedback from students using such specimens to learn anatomy supports their use³.



Figure 1: Plastinated specimens used as a teaching and learning tool for nursing students.

Procuring plastinated specimens for the purpose of teaching in nursing schools would be a one-time investment. In a low-cost setting where the efficiency and long-term use of specimens is important, plastinated specimens are a near-ideal alternative to a fully fledged cadaver dissection facility. The purpose of this letter is to increase awareness among secondary and rural teaching hospitals and nursing schools about plastination as an alternative means for preserving body parts and the potential for using plastinated specimens as effective teaching and learning tools.

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