Synthetic devices for training students and physicians rather than directly with patients minimize the chance of error and greater suffering for the ill.

Simulators for mitigating risks

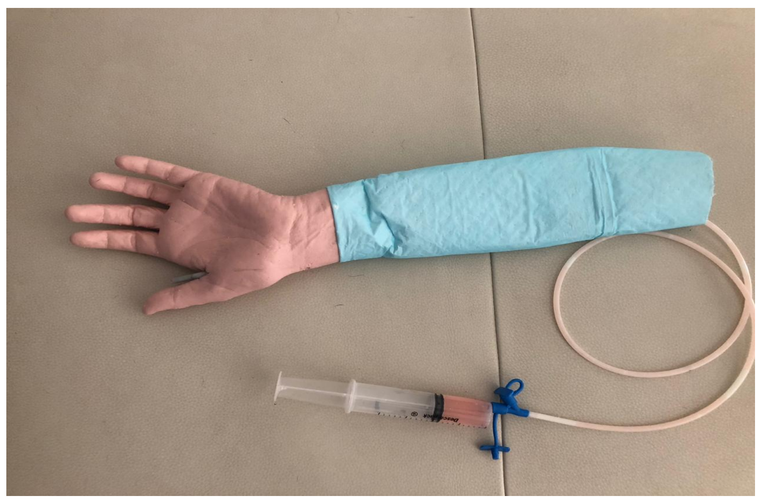
The use of synthetic simulators in medical education is already a reality in many universities, but the cost with these devices is often impracticable for public institutions of education in low-income countries. This work aims to provide a view based on the best current evidence of the use of this type of education and presents alternatives with low cost, feasible in places of scarce resources.

Methods

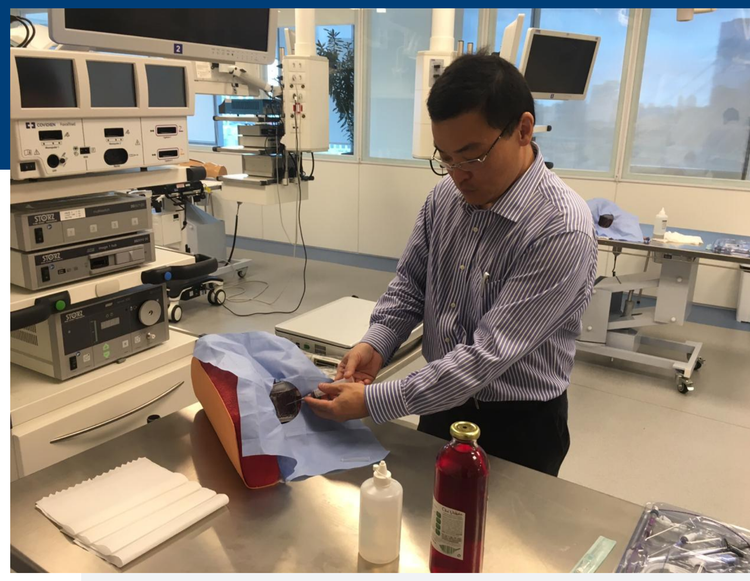
This study is a narrative review of Cochrane Reviews of physical non-alive models in medical teaching.
We also describe low-cost models that are feasible in resource-poor settings, developed in the Vascular Surgery Department, Escola Paulista de Medicina, São Paulo Federal University.

Key Results

Seven Cochrane Reviews were included in this report, investigating a broad range of training settings. None of the included reviews provided high-quality evidence for any of the outcomes. They did not describe harms from using these models.



Synthetic simulator for arterial blood gas sample collection training, developed by Dr. Luis U. Nakano/UNIFESP/Brazil.



Dr. Luis U. Nakano/UNIFESP/Brazil.

The use of synthetic devices instead of patients for training students and young physicians to make are extremely important for the ill, because, when a patient is in a setting of pain and worries, procedures performed by inexperienced hands can worsen your pains and your confidence in the treatment. Low-cost training models for various procedures make the assess democratic.

Physical synthetic models for medical education: a Cochrane vision and simulators for low-income countries

Flumignan C[1], Flumignan R[2], Nakano L[2], Batista M[1], Saconato H[1], Atallah A[1], Oliveira-Neto J[1], Trevisani V[1]
[1] Evidence-Based Health Program, Universidade Federal de São Paulo (UNIFESP) and Cochrane Brazil, Brazil [2] Division of Vascular and Endovascular Surgery, Department of Surgery, Universidade Federal de São Paulo (UNIFESP) and Cochrane Brazil, Brazil

Take a picture to get a demonstrative video