Tips for Teaching Procedural Skills

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We have all heard the phrase "see one, do one, teach one" but is this really the best way to learn procedural skills? Is it even safe for patients? Errors in procedural skills can lead to morbidity and mortality. A 2007 study looked at surgical malpractice claims and found technical errors accounted for 133 cases of the 258 claims involving serious injuries, representing 49% of patients with permanent disability and 16% of deaths[1]. So how do effectively teach clinical skills and reduce errors?

Important tips for teaching procedural skills:
- Include the fundamentals
- Provide clear demonstrations
- Integrate theory with practice: explain the evidence behind the action
- Break skills/procedures down into steps (Peyton's four steps, see below)
- Use collaborative problem solving: allow learners to work together towards a solution
- Provide immediate feedback

In order to effectively teach clinical skills, the procedure must be broken down into small, discrete steps and advanced in a particular way with the learners. There are many methods and models for doing this, but Peyton's four step approach has been shown to be superior to a standard approach and produces faster performance of a skill[3].

Peyton's four step approach
1. ***Demonstration:*** Instructor demonstrates the skill at normal speed and without additional comments.
2. ***Deconstruction:*** Instructor demonstrates the skill by breaking it down into simple steps, while describing each step.
3. ***Formulation***: Instructor demonstrates the skills whilst being 'talked through' the steps by the learner.
4. ***Performance:*** Student demonstrates the skill, while describing each step.

Then learners will move through the following stages before finally becoming competent at a skill: 1) Unconsciously incompetent, 2) Consciously incompetent, 3) Consciously competent, 4) Unconsciously competent[2]. It can be difficult to determine when someone is competent in a skill. Having clear expectations, looking for common errors, and multiple observations of the skills can help determine if competency has been achieved. And finally, the importance of immediate feedback and ongoing deliberate practice is essential to maintaining and improving upon a skill, and reducing errors.

For more information and tips, see the resources below.

References:

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