Learning to be an effective teacher

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Why care about teaching?

1. Doctor (docere) = to teach

2. You do a lot of teaching

3. When you teach, you learn twice
   - TWO-WAY PROCESS
What is teaching and learning?

- In medical education, learning =
  - Knowledge
  - Skills
  - Attitudes
Outline

1. Medical education and adult learning

2. Pearls for bedside teaching and evaluation

3. Practice
Developmental stages in medical education

- Med school years 1 & 2
  - “dualism” - memorize info, right or wrong answers
Developmental stages in medical education

- Med school years 1 & 2
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- Med school years 3 & 4
  - “multiplicity” - not always one right or wrong answer
Developmental stages in medical education

- **Med school years 1 & 2**
  - “dualism” - memorize info, right or wrong answers

- **Med school years 3 & 4**
  - “multiplicity” - not always one right or wrong answer

- **Residency**
  - “relativism” - consider alternatives in context of specific patient
Principles of Adult Learning

1. Use info soon
2. Concepts and principles for problem solving
3. Active participation in learning process
4. Best if learners help to set objectives
5. Feedback
Adult learners should be viewed as users, not recipients.
Active vs Passive Learning

- Lectures
- Grand Rounds
- Seminars, journal clubs
- Teaching rounds, morning report
- Bedside
Lectures

Lecture dos

- Prepare with your audience foremost in mind
- Be lively, enthusiastic
- Involve audience
- Use time effectively – you can’t say it all
- Organize content
Lectures

Lecture don’ts

- Talk to your slides
- Crowd your slides
- Try to be too cute or fancy
- Stand in one place
- Use a monotonic voice
<table>
<thead>
<tr>
<th>Organ/Tissue</th>
<th>Drug Name</th>
<th>Route of Administration</th>
<th>Dose</th>
<th>Indications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain/Tissue</td>
<td>Methadone</td>
<td>Oral, IM, IV</td>
<td>30-120 mg/day</td>
<td>Pain management, opioid withdrawal</td>
</tr>
<tr>
<td>Kidneys</td>
<td>Acyclovir</td>
<td>Oral, IV</td>
<td>10-15 mg/kg</td>
<td>Herpes zoster, herpes simplex infections</td>
</tr>
<tr>
<td>Liver</td>
<td>Rifampin</td>
<td>Oral</td>
<td>600 mg/day</td>
<td>Tuberculosis, acne, legionnaires disease</td>
</tr>
<tr>
<td>Liver</td>
<td>Ursodeoxycholic acid</td>
<td>Oral</td>
<td>13-25 mg/kg/day</td>
<td>Primary biliary cirrhosis, primary sclerosing cholangitis</td>
</tr>
</tbody>
</table>

**Notes:**
- Dose ranges may vary depending on age, weight, and individual response.
- Routes of administration vary based on the specific medication and indication.
- Always consult a healthcare provider for personalized treatment recommendations.
- This information is based on common use and may not cover all potential adverse effects or interactions.
Lectures

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Lectures

- Lecture don’ts
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Teaching rounds

- Patient care needs vs educational objectives
- Potential interferences with the process
- Wide range of learners; best if everyone participates
- Avoid mini-lecture
Principles of teaching during rounds

1. Format for time constraints
2. Do not try to cover all points
3. Use hypothesis-driven testing for clinical reasoning
4. Prevent 1 or 2 people from dominating discussion
5. Involve all learners
6. Open-ended, divergent questions; alter clinical scenario to enhance experience of learners
7. Closure
6 Teaching Microskills

1. Get a commitment

2. Probe for supporting evidence
   - What’s going on here?
   - Why do you think that?
   - What’s your evidence?
6 Teaching Microskills (cont’d)

3. Teach general rules
   - “Rule of thumb”
   - “In most cases, these lab results point to…”
   - In general, there are 2 common diagnoses for these symptoms…”

4. Reinforce what’s done well

5. Correct errors

6. Feedback
6 Teaching Microskills (cont’d)

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6. Feedback: “This is feedback!”
Evaluation
(“The feedback sandwich”)

Achieved competency
Evaluation

Achieved competency

Reinforce
Evaluation

- Achieved competency
- Reinforce
- Future learning goals/practice
Practice case
Summary

- We all teach and learn, all the time
- Better teaching techniques can be learned, practiced
- Opportunities abound in medicine for teaching in varied settings, to wide diversity learners
- Teaching can be fun and rewarding