Strategies to Enhance Your Lectures

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How to Present Like a PRO!

• By the end of the session, participants will be able to:
  – Prepare different types of presentations
    • Grand rounds, board review, resident lecture
  – Create effective Power Point slides
  – Deliver a lecture in an engaging, coherent and concise manner
Characteristics of the Worst Lecture
Characteristics of the Best Lecture
Why Lecture?

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
</tr>
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<tbody>
<tr>
<td>Cost effective for transmitting a great deal of information</td>
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<td>Content can be tailored to the audience</td>
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<td>The lecturer can integrate, synthesize and evaluate the data for the learners</td>
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<td>Can provide the most-up-to-date information</td>
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<td>Can bring together data from a wide variety of sources</td>
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</table>
Why Lecture?

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost effective for transmitting a great deal of information</td>
<td>Can transmit so much information as to be overwhelming</td>
</tr>
<tr>
<td>Content can be tailored to the audience</td>
<td>Audience rarely homogenous and lecture cannot be tailored to individuals</td>
</tr>
<tr>
<td>The lecturer can integrate, synthesize and evaluate the data for the learners</td>
<td>The lecturer can integrate, synthesize and evaluate the data for the learners, who may not learn to do so for themselves</td>
</tr>
<tr>
<td>Can provide the most-up-to-date information</td>
<td></td>
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<td>Can bring together data from a wide variety of sources</td>
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</table>
The Lecture

- “Lectures…can, in short, bring a subject alive and make it more meaningful. Alternatively, they can kill it” - G. Brown and M. Monague, 2001
Grand Rounds
Ground Rounds Preparation

• Select a topic/subtopic
  – Interesting, novel, innovative
  – Examples
    • Obesity in American Children vs
    • Adipocytokines and Insulin Resistance in the Obese Pediatric Population
Expected Outcomes

• What are the **GOALS** of your presentation?

• Three to Five main objectives

• At the end of my presentation, I want the participants to……
Example:

• By the end of the session, participants will be able to:
  – Prepare different types of presentations
    • Grand rounds, board review, resident lecture
  – Create effective Power Point slides
  – Deliver a lecture in an engaging, coherent and concise manner
Audience Characteristics

- Demographic features
- Participants’ prior knowledge
- Professional background

“Know your subject, know, your student.”
Organization: Structuring Your Presentation

- Three main components:
  - Introduction = 3-4 minutes
  - Body/Discussion = 40 minutes
  - Closure = 5-10 minutes
Introduction

- Introduce yourself
- Provide your qualifications briefly
- Thank the audience for coming and thank whoever invited you
- Opening remarks ("hook")
- Goals and objectives
- Overview
Body
Grand Rounds

• Background information

• Three to five major points

• Supporting details
Closure

- Review major concepts
- State a few take home messages
- If applicable, provide future plans
Transition Statements

- Two part statements

- Move your audience from one part of major point of the presentation to the next
Preparation

• Locate appropriate resources

• Present latest up to date information

• “If you fail to plan, then you plan to fail.”
Answering Questions

- Repeat the question
- Keep the answers short
- Don’t get defensive
Board Review

• Focus on what is pertinent for Board Exam
  – PREP content specifications
  – Review board questions

• Time is very limited

• To emphasize, use statements:
  – “You need to know this…”
  – “Don’t confuse this with that.”
Board Review

- Speaker’s ability to identify key points
- Engaging
- Lecture clarity
- Slide comprehensibility
- Format
- Case based

Power Point 101
Choose colors carefully

• Dark background, light text
• Poor contrast = hard to read
Carefully Choose Color Combinations
Don’t Choose Nauseating Color Combinations
Shouting

TEXT WRITTEN IN ALL CAPS IS MORE DIFFICULT TO READ THAN THE SAME SIZE TEXT WRITTEN WITH UPPER AND LOWER CAPS.
Savvy Slides (44 point)

- Arial 36
- Arial 28
- Arial 20
- Comic Sans MS 36
- Comic Sans MS 28
- Comic Sans MS 20
- Times New Roman 36
- Times New Roman 28
- Times New Roman 20
Backgrounds

• Readable, classic

• But, fatiguing over time
Pointless backgrounds are distracting.
Slide Content

• One major point per slide

• About one – two minutes per slide
  – This ratio increases as the length of the talk increases

• Simplify information (on the slide!)
Rule of 666

• Maximum of 6 words per line
• Maximum of 6 lines per slide
• Maximum of 6 sequential text slides
• For goodness sakes, don’t read your slides!

• Avoid STDs
  – Speaker/text dissonance
Savvy Slides

• Use animations sparingly

• Focus on Content, Not “Show”
• Good for lists
• Keeps audience focused on current point
• The rest of list is available for review
Effective Habits

• Prepare in advance!
  – “It usually takes more than three weeks to prepare a good impromptu speech.” *Mark Twain*

• Practice, practice, practice
Tables and Graphs
<table>
<thead>
<tr>
<th>Variable</th>
<th>Events</th>
<th>Odds ratio (95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAVE, AIRE, TRACE n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death At 6 weeks</td>
<td>184</td>
<td>1575</td>
<td>0.0059</td>
</tr>
<tr>
<td>At 1 year</td>
<td>458</td>
<td>0.76 (0.62-0.92)</td>
<td>0.0142</td>
</tr>
<tr>
<td>At 2 years</td>
<td>575</td>
<td>0.77 (0.68-0.88)</td>
<td>0.0001</td>
</tr>
<tr>
<td>At 4 years</td>
<td>679</td>
<td>0.75 (0.66-0.84)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Overall</td>
<td>702</td>
<td>0.74 (0.66-0.83)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Reinfarction*</td>
<td>324</td>
<td>0.80 (0.69-0.94)</td>
<td>0.0057</td>
</tr>
<tr>
<td>Readmission for CHF</td>
<td>355</td>
<td>0.73 (0.63-0.85)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Death or reinfarction</td>
<td>876</td>
<td>0.75 (0.67-0.83)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Death or readmission for CHF</td>
<td>914</td>
<td>0.74 (0.67-0.83)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Death/M or readmission for CHF</td>
<td>1049</td>
<td>0.75 (0.67-0.83)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Stroke</td>
<td>121</td>
<td>0.10 (0.04-0.10)</td>
<td>0.48</td>
</tr>
<tr>
<td>SOLVD n</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death At 6 weeks</td>
<td>28</td>
<td>0.42 (0.39-0.45)</td>
<td>0.046</td>
</tr>
<tr>
<td>At 1 year</td>
<td>266</td>
<td>0.86 (0.72-1.02)</td>
<td>0.088</td>
</tr>
<tr>
<td>At 2 years</td>
<td>463</td>
<td>0.81 (0.70-0.92)</td>
<td>0.0019</td>
</tr>
<tr>
<td>At 4 years</td>
<td>740</td>
<td>0.86 (0.76-0.97)</td>
<td>0.0109</td>
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<tr>
<td>Overall</td>
<td>765</td>
<td>0.87 (0.78-0.98)</td>
<td>0.021</td>
</tr>
<tr>
<td>Reinfarction*</td>
<td>247</td>
<td>0.78 (0.65-0.92)</td>
<td>0.0043</td>
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<tr>
<td>Readmission for CHF</td>
<td>521</td>
<td>0.63 (0.56-0.72)</td>
<td>0.0001</td>
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<tr>
<td>Death or reinfarction</td>
<td>849</td>
<td>0.80 (0.72-0.90)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Death or readmission for CHF</td>
<td>1048</td>
<td>0.74 (0.67-0.83)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Death/M or readmission for CHF</td>
<td>1112</td>
<td>0.70 (0.64-0.78)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Stroke</td>
<td>118</td>
<td>0.84 (0.68-1.08)</td>
<td>0.185</td>
</tr>
</tbody>
</table>

**Table 3: Summary of major clinical events**

PALS septic shock algorithm

First hour:
- Recognize altered mental status and perfusion
- Give oxygen and support ventilation, establish vascular access and begin resuscitation according to PALS guidelines
- Consider VBG or ABG, lactate, glucose, ionized calcium, cultures, CBC

First hour: Push repeated 20 mL/kg boluses of isotonic fluid up to 3–4, or more boluses based on patient response
Additional therapies:
- Correct hypoglycemia and hypocalcemia
- Administer first-dose antibiotics STAT
- Consider ordering STAT vasopressor drip and stress-dose hydrocortisone*

Consider ICU monitoring

Yes: Fluid responsive (ie, normalization of blood pressure and/or perfusion?)

No:
Begin vasoactive drug therapy and try to correct hypotension/poor perfusion; consider establishing arterial and central venous access
- Normotensive: Begin dopamine
- Hypotensive vasodilated (warm) shock:
  - Begin norepinephrine
- Hypotensive vasoconstricted (cold) shock:
  - Begin epinephrine rather than norepinephrine

Evaluate ScvO₂ goal: ScvO₂ sat > 70 percent?

ScvO₂ > 70 percent
Low BP
"Warm shock"

- Additional fluid boluses
- Norepinephrine +/- vasopressin

ScvO₂ < 70 percent
Normal BP
Poor perfusion

- Transfuse to Hgb > 10 g/dL
- Optimize arterial oxygen saturation
- Additional fluid boluses
- Consider milrinone or nitroprusside
- Consider dobutamine

ScvO₂ < 70 percent
Low BP/poor perfusion
"Cold shock"

- Transfuse to Hgb > 10 g/dL
- Optimize arterial oxygen saturation
- Additional fluid boluses
- Consider epinephrine or dobutamine + norepinephrine

* NOTE: Fluid refractory and dopamine- or norepinephrine-dependent shock defines patient at risk for adrenal insufficiency. Draw baseline cortisol; consider ACTH stimulation test if unsure of need for steroids. If adrenal insufficiency is suspected give hydrocortisone ≤2 mg/kg bolus IV; maximum 100 mg.

Approach to the initial management of shock in children

0 minutes
- Recognition of shock:
  - Diminished peripheral pulses
  - Cool, pale, or mottled skin
  - Prolonged capillary refill time
  - Altered mental status
  - Tachycardia or bradycardia

5-15 minutes
- Identify and treat life-threatening conditions
- Administer high flow oxygen
- Establish vascular access

- Infuse isotonic crystalloid 20 mL/kg over 5 to 10 minutes*
- For possible anaphylaxis, give epinephrine, diphenhydramine, and hydrocortisone
- Initiate continuous monitoring of heart rate, blood pressure, and pulse oximetry
- Obtain diagnostic studies (including bedside glucose)

Evaluate target endpoints:
- Blood pressure (5th percentile minimum)
- Quality of pulses (strong, central + distal)
- Skin perfusion (warm, cap refill <2 seconds)
- Mental status (alert)
- Urine output (≥1 mL/kg per hour, once effective circulating volume is restored)
Evaluate target endpoints:
- Blood pressure (5th percentile minimum)
- Quality of pulses (strong, central + distal)
- Skin perfusion (warm, cap refill <2 seconds)
- Mental status (alert)
- Urine output (≥1 mL/kg per hour, once effective circulating volume is restored)

15-30 minutes
- Begin treatment of glucose, electrolyte, and calcium abnormalities
- For possible cardiogenic shock, consider vasoactive drug therapy •
- For possible sepsis, give antibiotics
- Repeat isotonic crystalloid infusion in 20 mL/kg boluses as needed for persistence of decreased perfusion to a total of 60 mL/kg
- Evaluate target endpoints after each bolus

30-60 minutes
- Re-evaluate presumed cause of shock
- For possible hypovolemic shock, re-evaluate estimate of fluid losses, continue fluid replacement, consider colloid
- For possible sepsis, unresponsive to fluid, consider vasoactive drug therapy •
- For hemorrhagic shock, consider blood products
Tables, Charts, and Graphs

• Select tables & figures from journals that will project well

• Tables & figures should be clearly labeled, and make sense at a glance

• Orient the audience & walk them through the data
ACE Inhibitors and Mortality Reduction

<table>
<thead>
<tr>
<th>Trial</th>
<th>Mortality</th>
<th>RR (95% CI)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>ACEI</td>
<td>Controls</td>
</tr>
<tr>
<td>Chronic CHF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONSENSUS I</td>
<td>39%</td>
<td>54%</td>
</tr>
<tr>
<td>SOLVD (Treatment)</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td>SOLVD (Prevention)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post MI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMILE</td>
<td>6.5%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Average</td>
<td>21%</td>
<td>27%</td>
</tr>
</tbody>
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Delivery Tips
Delivery Tips
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- Energy
- Enthusiasm
- Excitement
Delivery Tips

• Energy

• Enthusiasm

• Excitement
Delivery Tips

• Always face the audience
• You are the focus of attention, not the slides
• Use eye contact
• Voice quality – pleasing, enthusiastic, and engaging
• DO NOT READ YOUR NOTES
Delivery Tips

- Be confident
- Stand up straight and firm
- Gestures – use movements with emphasis
- Nervousness – normal, plan ahead
- Observe yourself in front of mirror
Equipment

• Check out room and equipment prior to lecture
• Familiarize yourself with slide pointer and advance
• Make sure microphone functions well
• Always have printout of your slides
Take Home Points

• Be knowledgeable and enthusiastic
• Focus on a few take home points
• Legible slides
• Develop good presentation style