



Every Physician is a Teacher: Bedside Teaching in the Emergency Department

All physicians are called on to teach. We think of bedside teaching as being limited to medical students and residents. Although this is often the case, we are called on every day to teach patients, families, and ED personnel in the course of our work. Many of the techniques taught in this course will help you to become an excellent teacher not only of medical students and residents but of others as well.

- List effective communication strategies.
- Describe methods of making information concise and clear.
- Recognize body language that indicates confusion and list ways to deal with it.
- List effective strategies to use when confused or overwhelmed by information.

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(+)Diane M. Birnbaumer, MD, FACEP
Professor, Department of Medicine,
UCLA School of Medicine; Associate
Residency Director, Department of
Emergency Medicine, Harbor/UCLA
Medical Center, Torrance, California

Bedside Teaching, The Teaching Microskills and the Teachable Moment

*Diane M. Birnbaumer, M.D., FACEP
Professor of Medicine
David Geffen School of Medicine at UCLA
Associate Program Director
Department of Emergency Medicine
Harbor-UCLA Medical Center*



What IS Bedside Teaching?

- Teaching when the patient is present



Current State of Bedside Teaching

- Little (nothing!) published in EM
- Literature sources for information on bedside teaching
 - Hospital-based specialties
 - Ambulatory medicine settings
- There is much potential for research here!!

Challenges to Bedside Teaching

- Declining skills
 - Teachers are concerned about their own ability to teach bedside skills
- Need for unattainable skills level
 - Teachers feel the need to be "perfect" in their clinical skills
- Teaching viewed as not valued
 - Focus on generating \$\$ versus education
- Erosion of teaching ethic

• Ramani, S Acad Med 2003 78:4, 384

The Decline (Demise?) of Bedside Teaching

- There has been a decline in bedside teaching
 - 30 years ago...
 - Bedside teaching comprised 75% teaching time
 - By 1978... had decreased to 16%
 - In 2007... ????????
- Much of education is now technology based
- This trend has compromised the clinical exam skills of young physicians

Bedside Teaching Why Do It?

- How do we make a diagnosis?
 - 56% based on comprehensive history
 - Up to 73% after physical exam
 - Labs / imaging / etc. only adds last 20-25%

Benefits of Bedside Teaching

- Direct observation
- Use of all senses – sometimes ALL the senses!
- Clarification of the history and physical exam
- Teaching history and physical
- Opportunity to “mold” the learner’s clinical skills
- Role modeling
 - Compassionate care
 - Interactive skills



Reality in Bedside Teaching

- Bedside teaching skills CAN be achieved
- Learners DO NOT expect perfection
- Teaching is why many of us went into academics!

- So... why don't we do it more?

Barriers to Bedside Teaching

- Teacher-related
- Teaching climate-related
- System-related
- Patient-related
- Miscellaneous

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- Teacher-related
- Teaching climate-related
- System-related
- Patient-related
- Miscellaneous



“To be conscious that you are ignorant is a great step to knowledge.”

- Benjamin Disraeli
(1804 - 1881), Sybil,
1845

Barriers to Bedside Teaching

Teacher-Related

- Declining bedside teaching skills
- Inexperience
- Performance pressure
- Lack of control (the “thin-ice” syndrome)
- Difficulty engaging all team members
- Lack of motivated teachers
 - Is it *really* worthwhile?

Barriers to Bedside Teaching

- Teacher-related
- Teaching climate-related
- System-related
- Patient-related
- Miscellaneous

Barriers to Bedside Teaching

- “The skill and art of teaching are not recognized in academic medicine, it’s taken for granted... it’s assumed that you’ll do it and do it well. The system really needs to value teaching.”

Barriers to Bedside Teaching

Teaching Climate-Related

- Time constraints
 - Clinical responsibilities
 - Research
 - No dedicated time to teach
- Lack of faculty training in bedside skills
- Lack of rewards for teaching (faculty perceptions)
- Lack of teaching role models – anywhere!

Barriers to Bedside Teaching

- Teacher-related
- Teaching climate-related
- System-related (the logistics)
- Patient-related
- Miscellaneous

Barriers to Bedside Teaching

System-Related

- Interruptions (phone calls, pages, etc)
- Short patient stays
- Too much technology
 - Focuses discussion on data, not the patient
 - Belief that technology provides all the answers
- Need for extensive documentation

Barriers to Bedside Teaching

- Teacher-related
- Teaching climate-related
- System-related
- Patient-related
- Miscellaneous

Barriers to Bedside Teaching

Patient-Related (MD Perceptions)

- Perceived patient discomfort
- Ill patient – too sick / unstable
- Absent patient
- Patient misinterpretation of discussion
- Patient privacy (ahhh... HIPPA!)
- Uncooperative / angry patient

Barriers to Bedside Teaching

- Teacher-related
- Teaching climate-related
- System-related
- Patient-related
- Miscellaneous

Barriers to Bedside Teaching

Miscellaneous

- Large crowd in a small space
- No blackboard / viewboxes / etc
- Inability to refer to a textbook
- Teacher / learner hesitation in discussing differential diagnosis
- Fear of undermining housestaff
- Learner fatigue

Bedside Teaching

Obstacles Specific To EM

- Need for immediate expert stabilization of critically ill patients
- Maintenance of patient flow
- Maintenance of patient care quality
- Assurance of patient satisfaction
- Not trained as teachers
- Not paid to teach

Clinical Teacher's Roles

- Patient care delivery (diagnose the patient)
 - Legal responsibility to provide highest quality of care
- Teach the art and science of clinical practice
 - Target the teaching to specific needs
- Evaluate the learners (diagnose the learner)
 - Assure that residents acquire the knowledge, skills, and attitudes to become competent emergency physicians

Bedside Teaching

- Okay, so now we know all the problems, obstacles, etc...
- Obstacles, schmobstacles!
- We're in this because we love to teach... so let's learn how to do this well

Who Are Our Learners?

- Adult learners
- Minimal medical experience
- Much data available (unusable form)
- Little processing skills

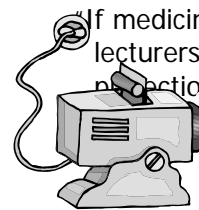
Principles of Adult Learning

- A sense of incongruity
 - The need to know, a deficit, a reason to change, a *learning imperative*
- Active involvement in a safe and supportive learning experience
- Feedback to determine success or failure of the learning endeavor

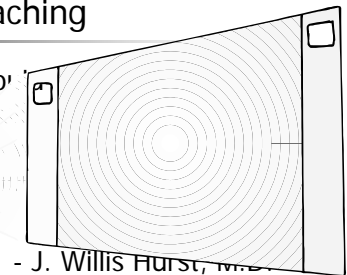
Adult Learning Deals With...

- Consequences of action
- Analyzing and solving real problems
- Seeking out information in response to problems
- Immediate feedback

Bedside Teaching



"If medicine comes from lecturers, it is no action."



- J. Willis Hurst, M.D.



"Medicine is learned best by the bedside and not in the classroom."

- Sir William Osler

"... there should be no teaching without a patient for a text, and the best teaching is that taught by the patient himself."



Sir William Osler

The Clinical Educator

- As with all teaching, to be effective the teacher must know the “ground rules”
 - Principles of adult learning
 - Types of formal and informal education
 - Teaching “microskills”
 - The teachable moment
 - Use of feedback

What is a Clinical Teacher?

- A teacher
 - Has knowledge
 - Has experience
 - Has the role of teacher, role model, mentor
- A teacher’s natural urge is to share all that you know, however....



What is a Clinical Teacher?

- **RESIST THAT URGE!!!**
- A clinical teacher needs to learn how to be a good clinical *educator*
 - Not necessarily a natural talent
 - Not necessarily intuitive

What is the Best Way to Teach?

- Focus on the learner
- “Diagnose” the learner
- Give the learner appropriate feedback
- Understand the principles of adult learning



Setting the Stage

- Find out what the learner needs and expects
- Tell the learner what is expected of him or her
- Assure a safe and supportive environment
- Reinforce the need for intellectual honesty
- Tell the learner that “thinking out loud” is encouraged
- Inform the learner that you will provide feedback

The Microskills of Clinical Teaching

- Can be applied to virtually any teaching situation, but best for
 - One-on-one teaching (e.g. the teachable moment)
 - Small group teaching
- Ideally, should only last 5 minutes or so
- Has several basic components...

The Microskills

- Step 1: Get a commitment
- Step 2: Probe for supporting evidence



The Microskills

- Step 3: Teach general rules
- Step 4: Reinforce what the learner did well



The Microskills

- Step 5: Correct mistakes
- Step 6: Identify the next learning steps



The Microskills

- Step 1: Get a commitment
 - When the learner asks for your guidance or waits for your response...
 - Do not just give them the answer!
 - "Get a commitment"
 - Elucidate what the learner is



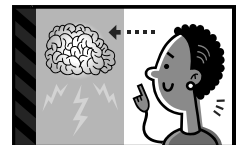
The Microskills

- Step 1: Get a commitment
 - Examples
 - What do you think is going on?
 - Why do you think the patient is here?
 - What do you want to do next in the workup?
- AVOID the urge to agree or disagree at this point
- You need more information about the learner to be an effective teacher, so...



The Microskills

- Step 2: Probe for Supporting Evidence
 - Need to know WHY the learner thinks WHAT they think
 - Need to understand the learner's reasoning



The Microskills

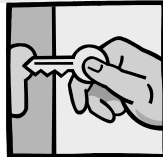
- Step 2: Probe for Supporting Evidence
 - Good types of questions to ask
 - What are the findings that led to your conclusion?
 - What else did you consider?
 - Why did you rule out ____?

The Microskills

- Step 2: Probe for Supporting Evidence
 - Types of statements to avoid
 - I don't think that's right. Any other ideas?
 - Wow. This is a classic case of ____
 - What were the vitals? What are the meds?
 - (Can get this by asking "Is there anything else you need to know?")

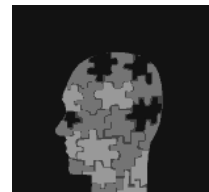
The Microskills

- Now, after you...
 - Get a commitment, and
 - Probe for more information
- You can discern...
 - What the learner knows
 - What the learner needs to learn
- Time to apply some general concepts about the case for the learner



The Microskills

- Step 3: Teach general rules
 - Teach case-specific bits of information
 - Give bite-sized pieces



The Microskills

- Step 3: Teach general rules
 - Avoid taking over the case
- Avoid a long didactic session... this is not the time for the mini-lecture or monologue
- Keep it short and sweet – the educational "hit and run"

The Microskills

- You're not finished...
- The learner may not know what they did well or could improve upon
- Now come the next microskills...



The Microskills

- Step 4: Reinforce what the learner did well
 - Repeated reinforce what the learner did right
 - Builds the learner's self-esteem
 - Make the reinforcement behavior specific



The Microskills

- Step 4: Reinforce what the learner did well
- Example: Ectopic pregnancy case
 - "Your H&P were complete and appropriate for the patient's complaint. Putting together the history of syncope and right lower quadrant pain and getting the additional menstrual history were crucial to your making the correct diagnosis of ectopic pregnancy."

The Microskills

- Step 4: Reinforce what the learner did well
- Another example: Patient's financial status
 - "Your sensitivity to the patient's concerns about the cost of hospitalization showed how aware you are of the financial implications of your medical care, and you handled it professionally and caringly."

The Microskills

- Step 4: Reinforce what the learner did well
 - Don't offer useless reinforcement
 - "You did a good job with that patient."
 - "Nice intubation."
 - Wouldn't it be nice to stop here?
 - Most of us do, you know...
 - BUT... You're not finished yet... Now comes the hard part...

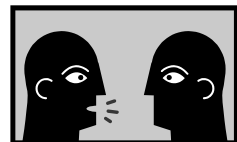
The Microskills

- Step 5: Correct mistakes
 - As not every case goes perfectly, now is the time to correct mistakes
 - Make sure the learner was warned ahead of time that correction is a part of learning



The Microskills

- Be nonjudgmental
- This step is near the end on purpose
 - Do not want to discourage learners
- Assure appropriate time and place for correction



The Microskills

- Step 5: Correct mistakes
 - Start by having the learner self-evaluate
 - Now, it's your turn
 - Comment on the learner's self-assessment
 - Offer observations
 - Offer suggestions for improvement
 - Be specific



The Microskills

- Step 5: Correct mistakes
- Example: "Difficult historian"
 - "I understand how difficult it is to discern if something is significantly wrong with a patient who cannot give a coherent history, but we should try to perform a careful physical exam and get some information from other sources such as the patient's primary care physician."

The Microskills

- Step 5: Correct mistakes
- Useless feedback
 - "That was not the way to handle that consultant."
 - "You clearly need to do more reading."
 - "That subclavian line didn't go very well."

The Microskills

- Step 6: Identify the next learning steps
 - Ask the learner
 - What do you think you learned?
 - What more do you think you need to know?



The Microskills

- Step 6: Identify the next learning steps
- Offer resources for learner to get more information
- Decide on an action plan with the learner
- If possible, schedule a follow-up session to assure step is taken

PubMed

National Library of Medicine



The "Teachable Moment"

The Teachable Moment

- Reality
 - Every case has many, many teachable moments
 - Requires close attention from the teacher
 - Best done immediately
 - Best done gently
 - Don't tackle too much in one moment
 - Educational "hit and run" – hit your point and move on

The Teachable Moment

- Should follow sound bedside teaching principles
 - Be sensitive to learner's needs / issues
 - Also, be sensitive to patient care issues
 - Make it pertinent to the learner
 - Never, *never* embarrass the learner

The Teachable Moment

- Identification of a teachable moment
 - Some areas you can "mine"
 - Patient history
 - Physical exam findings
 - Charting and documentation
 - Medical decision-making
 - Explication of information

The Teachable Moment

- Identification of a teachable moment
 - Some sources
 - From charts
 - From presentations
 - From bedside teaching and observation
 - From management plans

The Teachable Moment

- Identification of a teachable moment
 - Some sources
 - From charts
 - From presentations
 - From bedside teaching and observation
 - From management plans

The Teachable Moment

- Examples – from charts
 - E.g. - Documenting tetanus prophylaxis in wound care
 - Teach importance of documentation
 - Discuss indications for passive and active immunization

The Teachable Moment

- Identification of a teachable moment
 - Some sources
 - From charts
 - From presentations
 - From bedside teaching and observation
 - From management plans

The Teachable Moment

- Examples – from presentations
 - E.g. – Disjointed presentation
 - Teach how to give organized presentation
 - Allow presenter to try it again immediately
 - Teach formal presentation versus presentation to a consultant

The Teachable Moment

- Identification of a teachable moment
 - Some sources
 - From charts
 - From presentations
 - From bedside teaching and observation
 - From management plans

The Teachable Moment

- Examples – from bedside teaching
 - E.g. – observe history-taking from a difficult patient
 - Teach bedside manner techniques
 - Teach alternative sources of medical information

The Teachable Moment

- Examples – from bedside teaching
 - E.g. – observing a pelvic exam
 - Teach patient comfort measures
 - Teach techniques to improve exam findings
 - Discuss utility of pelvic exam – limitations and value of exam

The Teachable Moment

- Identification of a teachable moment
 - Some sources
 - From charts
 - From presentations
 - From bedside teaching and observation
 - From management plans

The Teachable Moment

- Examples – from management plans
 - E.g. – Stabilization of patient in acute respiratory distress
 - Teach airway evaluation
 - Discuss evaluation of adequacy of oxygenation and ventilation
 - Delineate uses and limitations of pulse oximetry
 - Teach only when appropriate for current patient's care

The Teachable Moment

- Examples – from management plans
 - E.g. – Patient in ventricular tachycardia
 - Discuss stable versus unstable VT
 - Explain recognition of VT versus aberrancy
 - Discuss management approach depending on type of VT – cardioversion, drugs, etc.

The Teachable Moment

- Make it brief – educational “hit and run”
- Use facilitated learning techniques versus didactic approach
- Keep it focused
- Address learner's needs – tailor to individual learner
- Give feedback in a timely fashion

How Can We Improve Beside Teaching?

- Strategies to Improve Bedside Teaching
 - Improve bedside teaching skills
 - Faculty training
 - Diminish the “aura” of bedside teaching
 - Reassure clinical faculty they possess the skills for teaching
 - Make it fun for everyone – you AND your learners
 - Enhance the value of teaching
 - Establish a teaching ethic

Bedside Teaching – The Process

- Before going to the bedside
 - Prepare
 - Formulate goals for session
 - Read before rounds
 - Orient learners and make learners aware of goals
 - Demonstration of clinical findings
 - Communication with patient
 - Modeling professional behavior
 - Orient patients and fit into patient's situation
 - In ED, may want to purposefully evaluate difficult patients

Bedside Teaching – The Process

- During rounds / at the bedside
 - Establish environment
 - Comfortable environment
 - Asking questions encouraged
 - Okay to say “I don't know”
 - Respect Learners
 - Defer to them as primary caregiver to patient
 - Challenge intellectually without humiliating

Bedside Teaching – The Process

- The patients
 - Treat as human beings, not object of teaching exercise
 - Excellent opportunity to demonstrate / observe / teach professionalism
 - Be sensitive to how disease is affecting patient's life
 - Engage everyone
 - Aim teaching to all levels of learners and encourage all to participate

Bedside Teaching – The Process

- Involve patient
 - Encourage patient to correct / contribute to details of history
 - Encourage patient to ask question about management, etc
 - Explain medical jargon in lay terms
 - Match teacher-learner goals
 - Find out what learners want to get out of the session
 - Cater to their needs and deficiencies

Bedside Teaching – The Process

- After bedside teaching
 - Debrief
 - Time for questions
 - Time to get and give feedback
 - Ascertain that session was mutually beneficial

Bedside Teaching

The Mechanics

- Setting the ground rules
 - Make sure everyone knows what is expected of them
 - Teach professionalism
 - Cover bedside etiquette
 - Limit interruptions if possible
 - Okay it with the patient, if possible
 - Invite patient's nurse if feasible
 - Limit use of medical jargon at bedside

Bedside Teaching

The Mechanics

- Introduction
 - Have patient's doctor (resident, student, etc) introduce all members of the team
 - Explain purpose of visit
 - Allow patient polite refusal
 - Family members: Introduce; allow to stay only if okay with the patient
 - Explain to patient / family that much of what you discuss at the bedside may not directly apply to the patient
 - Invite participation of patient and family
 - Position patient appropriately; position team around bedside

Bedside Teaching

The Mechanics

- The Presentation (History)
 - Avoid statements about gender / race
 - Do not refer to patient by first name
 - Avoid sitting on patient's bed
 - Do not avoid sensitive material - just treat it sensitively
 - Allow interruptions by the patient, students and residents, and by yourself to highlight important points or to get more detail
 - Never embarrass the patient's doctor!

Bedside Teaching

The Mechanics

- The Presentation (Examination)
 - Examine pertinent or illustrative parts yourself
 - Invite students / residents to examine the patient
 - Allow patient to participate (hear murmur, feel liver, etc)
 - Ask team members to demonstrate proper techniques
 - Allow time for team members to appreciate findings - it may take a while (and ingenuity on your part) to truly hear / appreciate some findings, especially for the first time

Bedside Teaching

The Mechanics

- The Presentation (Labs, etc)
 - If possible, stay at bedside
 - Have x-rays, ECG available
 - Allow patient to review and participate



Bedside Teaching

The Mechanics

- Discussion
 - Remind patient that not everything discussed will apply to them - let them know when it is applicable
 - Question junior team members first
 - Avoid asking theoretical questions of primary doctor
 - Do not allow "one-upmanship" to occur
 - Avoid "What am I thinking?" questions

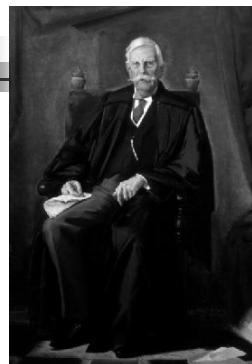
Bedside Teaching

The Mechanics

- Discussion
 - "I don't know" is an appropriate answer - use opportunity afterward to look up answers
 - Allow time for patient's questions before leaving bedside
 - Ask patient for feedback about the bedside teaching process
 - Thank the patient

The Teachable Moment

- The Excellent Clinical Educator...
 - Works with a positive attitude toward teaching
 - Integrates bedside teaching into their daily practice
 - On a continuous and ongoing basis
 - Looks for and recognizes teachable moments
 - Constantly drops clinical "pearls"



"The most essential part of a student's instruction is obtained...not in the lecture-room, but at the bedside. Nothing seen there is lost; the rhythms of disease are learned by frequent repetition; its unforeseen occurrences stamp themselves indelibly in the memory."

- *Oliver Wendell Holmes, M.D.*



- "To study to phenomena of disease without books is to sail in uncharted seas, while to study books without patients is not to go to sea at all."

- Sir William Osler

*Thank You For Your
Attention!*

Any Questions??