Twelve tips to improve bedside teaching

SUBHA RAMANI

Boston University School of Medicine, Boston, USA

SUMMARY Bedside teaching has long been considered the most effective method to teach clinical skills and communication skills. Despite this belief, the frequency of bedside rounds is decreasing and it is believed that this is a major factor causing a sharp decline in trainees' clinical skills. Several barriers appear to contribute to this lack of teaching at the bedside and have been discussed extensively in the literature. Concern about trainees' clinical skills has led organizations such as the American Council for Graduate Medical Education (ACGME) and the WHO Advisory Committee on Medical training to recommend that training programs should increase the frequency of bedside teaching in their clinical curricula. Although obstacles to bedside teaching are acknowledged, this article in the '12 tips' series is a detailed description of teaching strategies that could facilitate a return to the bedside for clinical teaching.

Introduction

In what may be called the natural method of teaching, the student begins with the patient, continues with the patient and ends his study with the patient, using books and lectures as tools, as means to an end. For the junior student in medicine and surgery it is a safe rule to have no teaching without a patient for a text, and the best teaching is that taught by the patient himself. (Sir William Osler, Address to the New York Academy of Medicine, 1903)

Many educators have stated repeatedly that the benefits of bedside teaching are numerous and include teaching history and exam skills, clinical ethics, humanism, professionalism, communication skills and role-modeling to name a few. Yet, the frequency of this form of teaching is progressively decreasing (Ende, 1997; LaCombe, 1997). In the United States, less than 25% of clinical teaching occurs at the bedside and less than 5% of time is spent on observing learners' clinical skills and correcting faulty exam techniques (Shankel & Mazzaferi, 1986). Along with this decrease, a decline in overall clinical skills among trainees and junior faculty has been observed (Mangione et al., 1993). Numerous barriers have been mentioned in the literature as preventing teachers from venturing to teach at the bedside (Mattern et al., 1983; Wang-Cheng et al., 1989; LaCombe, 1997; Janicik & Fletcher, 2003; Ramani et al., 2003).

Clinical teachers usually do not have any briefing on the clinical curriculum to be taught and even less on the clinical teaching method. The wealth of bedside teaching opportunities is diminishing with rapid patient discharges, overabundance and over-reliance on technology (Cox, 1993; Kroenke, 2001). Bedside teaching can be frustrating and boring or absolutely riveting. What factors account for this extreme difference? One important factor might be keeping the session learner centred and not using the session to demonstrate teacher eloquence on medicine (Ende, 1997).

Since most clinicians agree that teaching at the bedside is necessary, despite the abundance of obstacles, a few teaching tips may help faculty gain confidence to start moving their teaching from the corridors and conference rooms to the patient's bedside.

Many strategies have been recommended in literature by expert educators (Cox, 1993; Ende, 1997; LaCombe, 1997; Kroenke, 2001) including a three-domain model described more recently by Janicik & Fletcher. This twelve tips article attempts to simplify key strategies and to describe them in greater depth, and has been categorized as those strategies that can be carried out sequentially before rounds, during rounds and after rounds (Table 1).

Tip 1

Preparation is a key element to conducting effective rounds and increasing teacher comfort at the bedside.

For those teachers planning bedside rounds, especially if unfamiliar or uncomfortable with the technique, a preparatory phase would be of invaluable help in raising their comfort level. The following activities could be carried out:

- The teachers need to familiarize themselves with the clinical curriculum that needs to be taught (Cox, 1993).
- It is important to investigate the knowledge and the actual clinical skill levels of all the learners to be taught.
- Teachers need to improve their own history taking, exam and clinical problem-solving skills by reading, learning from senior expert clinicians as well as use of multimedia such as CD-ROMs, tapes, videotapes etc. on specific areas of clinical examination (LaCombe, 1997).
- An ideal adjunct to this stage of preparation would be faculty training on clinical skills and teaching methods.

Tip 2

Draw a road map of what you plan to achieve at the bedside for each encounter.

It is worth investing some time and energy in planning bedside rounds (Ende, 1997). Even if this plan is not strictly followed, as is often the case during bedside encounters, a

112

Correspondence: Subha Ramani, MD MPH, Boston University School of Medicine, Section of General Internal Medicine, Department of Medicine, 720 Harrison Avenue, Suite 1108, Boston, MA 02118, USA. Tel: 617-638-7985; fax: 617-638-8026; email: sramani@bu.edu

Table 1. Key strategies involved in bedside teaching.

Pre-rounds	Preparation
	Planning
	Orientation
Rounds	Introduction
	Interaction
	Observation
	Instruction
	Summarization
Post-rounds	Debriefing
	Feedback
	Reflection
	Preparation

rough road map would enable the teacher to walk into the encounter with some confidence. Teaching at the bedside is fraught with a certain sense of "lack of control", as digressions occur often; unexpected questions arise from both the learners and patients and the answer is not always known. In contrast, a lecture is a controlled environment and the teacher can orchestrate the various steps of a lecture. This 'thin ice syndrome' can paralyze clinical teachers to the point where they avoid going to the bedside altogether. Some of the following strategies might help raise teacher confidence levels:

- Decide what particular system is to be taught at the bedside.
- What specific aspects are to be emphasized?: history taking, physical examination, patient counseling, delivering bad news etc.
- What is the main theme for the day?: observation of trainees' performance or demonstration of history taking, exam etc.
- Plan activities to keep everyone engaged and involved in the teaching and learning.
- Select patients who would make for good bedside teaching, preferably with the input of the learners.
- Decide how much time is to be spent with a given patient.

Tip 3

Orient the learners to your plans for the session and negotiate goals and objectives for the session. Tell the learners what is to be taught.

If the teacher has a plan or a road map of the intended teaching exercise, it would be wise to orient the learners to this plan (Cox, 1993). The following activities could be carried out during this orientation phase:

- Orient the learners to the objectives of the exercise and activities planned.
- Assign roles to each of the team member—this can prevent the utter chaos that sometimes invades a bedside teaching exercise and will also minimize the boredom felt by learners who may otherwise not feel fully engaged.
- Learners need to be informed of the teacher's expectations and be educated about appropriate bedside manner.
- Team ground rules need to be established.
- Any sensitive discussions need to be postponed and the entire team needs to be aware of this.

Tip 4

Introduce yourself and the team to the patient; emphasize the teaching nature of the encounter.

In large teaching hospitals patients are usually confused about who their real physicians are, as physician teams tend to make rounds in large groups and patients may see several different physicians in any given day. Physician teams are sometimes lax about introducing themselves and their team of physicians to the patient and explaining what their roles are in their healthcare.

- Introduce yourselves to the patient.
- It would also be helpful to orient the patients during the bedside encounter as to what is being planned (LaCombe, 1997). This is often a neglected step and leaves patients very puzzled during and after the encounter.
- Patients need to be told that the encounter is primarily intended for teaching and that certain theoretical discussions may not be applicable to their illness.
- Family need not be asked to leave if the patient wishes them to stay.

Tip 5

Role-model a physician-patient interaction.

One of the oft-repeated chants has been that patients are uncomfortable during bedside teaching but this myth has been dispelled by studies which reported that patients actually enjoyed bedside teaching encounters (Wang-Cheng *et al.*, 1989; Lehmann *et al.*, 1997; Nair *et al.*, 1997). They feel that physicians are actually interested in them; they are able to ask questions and feel an integral part of trainee teaching. This gives the clinical teacher a valuable opportunity to be a role model to his/her learners and teach them professionalism and bedside manner without lecturing them on those subjects in a purely theoretical mode.

Tip 6

Stepping out of the limelight and keen observation is a necessary part of learner-centred bedside teaching.

It is well worth remembering that the house officer is the patient's primary physician and the teacher does not have to take over the interaction (Kroenke, 2001). Observing the trainees' interaction with the patient at the bedside can be very illuminating. Their communication, history taking and exam skills can be assessed better by observation; their problemsolving skills, knowledge and attitudes can be evaluated. This evaluation can help teachers plan their future teaching rounds.

Tip 7

Challenge the learners' minds without humiliating, augmented by gentle correction when necessary. Do the teaching.

Expert educators have written several recommendations on the actual teaching at the bedside (LaCombe, 1997; Kroenke, 2001). Some of the suggestions are listed below:

• Avoid asking the trainees impossible questions and 'read my mind' types of questions.

- Gentle corrections can be made when needed.
- Actively discourage one-upmanship among the learners.
- Admitting one's own lack of knowledge might set the tone for trainees to admit their limitations and engender a willingness to ask questions.
- Avoid asking questions of junior learners when a senior learner has missed the question.
- Teach professionalism and observation.
- Keep all learners engaged to avoid boredom.
- Emphasize that you are willing to learn from the trainees as well as the patient.
- Demonstration of clinical skills can only be done at the bedside.
- Avoidance of lengthy didactic discussions keeps learners engaged and involved during the session.
- Capture teachable moments:
- The bedside is the perfect venue for unrehearsed and unexpected triangular interactions between teacher, trainees and patient. Examples of such interactions include demonstration of superb humanistic skills by a trainee, missed clues in history or physical exam, or exhibition of poor communication skills by a trainee. Physician teachers should be vigilant about grabbing such teachable moments and using them to applaud good work and correct or rectify deficiencies in knowledge, skills or attitudes. Optimal use of these teachable moments can often result in the most effective and satisfying bedside rounds.

Tip 8

Tell the learners what they have been taught.

Before leaving the bedside, teachers need to summarize what was taught and learned during that encounter. Patients also need a summary of the discussion, explaining what applies and what does not apply to their illness and management. Patient education and counseling can be done at this stage, albeit concisely.

Tip 9

Leave time for questions, clarifications, assigning further readings etc.

This phase takes place outside the room, out of the patient's earshot. This is the opportunity to discuss sensitive aspects of the patient's history, differential diagnosis etc. Learners have an opportunity to ask questions, resolve confusion and decompress after an intense encounter (Cox, 1993).

Tip 10

Find out what went well and what did not.

After every bedside teaching encounter, there needs to be time for feedback (Ende, 1997). It is probably not wise to let this degenerate into a prolonged, torturous session. The session should remain brief and focus on the strengths and deficiencies of the just completed teaching encounter. This will serve to improve the quality of future teaching rounds, boost team morale, give a chance for trainees to express their frustrations and their deficits in knowledge or skills, and to change or modify teaching goals for the team.

114

Tip 11

Think about the bedside encounter; evaluate what went well and what went badly and what you would do the next time.

This should happen in the mind of the teacher after every teaching encounter. There is an immense load of information to digest as a result of the aforementioned stages, particularly the observation, debriefing and feedback phases. This is also an opportunity to reflect on one's own strengths and weaknesses at the bedside and formulate goals and objectives for the rest of the rotation for self-education as well as trainee education (Ende, 1997).

Tip 12

Start your preparation for the next encounter with insights from your reflection phase.

This completes the circle of bedside teaching. Just as the initial preparation helped in planning and conducting the teaching, preparation before each encounter will serve to strengthen the teacher's clinical skills, improve his/her teaching skills, increase his/her confidence at the bedside, improve the quality of bedside teaching and ultimately make the bedside an arena of exciting learning for teachers and trainees alike (Cox, 1993).

Conclusion

Bedside teaching is an essential method of clinical teaching. There are many skills that cannot be taught in a classroom and require the presence of a patient, real or simulated. Although many clinical teachers find this an intimidating mode of teaching that bares their own deficiencies, they need to realize that all of them possess a wide range of clinical skills that they can teach their junior and far less experienced trainees. Some common-sense strategies combined with faculty development programs at individual institutions can overcome some of this insecurity and promote bedside rounds that can be educational and fun for teachers and learners alike.

It is appropriate to conclude this article with William Osler's words: "To study the phenomenon of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all" (Osler, 1903).

Acknowledgements

The author would like to thank Dr Anand B. Karnad, Chief, Hematology-Oncology, James H. Quillen College of Medicine, East Tennessee State University, for reading drafts of this manuscript and for his helpful comments.

Notes on contributor

SUBHA RAMANI is a general internist with a major interest in medical education. She is currently an Assistant Professor, Department of Medicine, at the Boston University School of Medicine. She completed Internal Medicine residencies at the Postgraduate Institute of Medical Education and Research (PGIMER), India as well as East Tennessee State University, USA, and a fellowship in General Internal Medicine at Boston University.

References

- Cox, K. (1993) Planning bedside teaching, 1: Overview (Review), Medical Journal of Australia, 158 (4), pp. 280-282.
- ENDE, J. (1997) What if Osler were one of us? Inpatient teaching today, *Journal of General Internal Medicine*, 12(Suppl. 2), pp. 41-48.
- JANICIK, R.W. & FLETCHER, K.E.(2003) Teaching at the beside: a new model, *Medical Teacher*, 25(2), in press.
- KROENKE, K. (2001) Attending rounds revisited (President's Column), Society of General Internal Medicine Forum, 24(10), pp. 8–9.
- LACOMBE, M.A. (1997) On bedside teaching, Annals of Internal Medicine, 126(3), pp. 217-220.
- LEHMANN, L.S., BRANCATI, F.L., CHEN, M.C., ROTER, D. & DOBS, A.S. (1997) The effect of bedside case presentations on patients' perceptions of their medical care, *New England Journal of Medicine*, 336(16), pp. 1150–1155.
- MANGIONE, S, PEITZMAN, S.J., GRACELY, E. & NIEMAN, L.Z. (1993) The teaching and practice of cardiac auscultation during internal medicine and cardiology training: a nationwide survey, *Annals of Internal Medicine*, 119, pp. 47–54.

- MATTERN, W.D., WEINHOLTZ, D. & FRIEDMAN, C.P. (1983) The attending physician as teacher, *New England Journal of Medicine*, 308, pp. 1129–1132.
- NAIR, B.R., COUGHLAN, J.L. & HENSLEY, M.J. (1997) Student and patient perspectives on bedside teaching, *Medical Education*, 31, pp. 341-346.
- OSLER, W. (1903) On the need of a radical reform in our teaching methods: senior students, *Medical News*, 82, pp. 49-53.
- RAMANI, S, ORLANDER, J.D., STRUNIN, L. & BARBER, T.W. (2003) Whither bedside teaching: a focus group study of clinical teachers, *Academic Medicine*, 78, pp. 1–7.
- SHANKEL, S.W. & MAZZAFERI, E.L. (1986) Teaching the resident in internal medicine: present practices and suggestions for the future, *Journal of the American Medical Association*, 256, pp. 725-729.
- WANG-CHENG, R.M., BARNAS, G.P., SIGMANN, P., RIENDL, P.A. & YOUNG, M.J. (1989) Bedside case presentations: why patients like them but learners don't, *Journal of General Internal Medicine*, 4(4), pp. 284–287.

Copyright of Medical Teacher is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.