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TWELVE TIPS

Twelve tips to improve medical teaching rounds

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Abstract

The ward round is the bread and butter of internal medicine. It forms the basis of clinical decision making and reviewing patients' progress. It is fundamental to the role of the internal medical physician. It allows for the review of the patients' notes, signs and symptoms, physiological parameters and investigation results. Most importantly, it allows for an interaction with the patient and their relatives and is a means of relating medical information back, answer queries and plan future medical management strategies. These should be integrated into the teaching round by a senior clinician so that time away from the bedside is also used to enhance the teaching and learning experience. Here, I would like to draw on my experience as a learner as well as an educator, together with the available literature, to draw up a simple 12-step teaching strategy that should help the ward round serve the dual purpose of teaching medical students and junior doctors.

> Observe, record, tabulate, communicate. Use your five senses. Learn to see, learn to hear, learn to feel, learn to smell, and know by practice alone you can become an expert.
>
> William Osler (1849–1919)

Introduction

Bedside teaching has been the cornerstone of teaching methods for both medical students and junior doctors through the ages. It has survived the test of time but it is not used as often as necessary. Despite the absence of studies validating the effectiveness of bedside teaching, learners, patients and educators alike value its educational importance (Nair et al. 1997, 1998). Bedside teaching inherently encompasses most of the clinical and communication skills required to be a good doctor (GMC 2006). Tremonti and Biddle (1982) showed that trainee doctors spent far much more time learning in the classroom than at the bedside. Williams et al. (2008, p. 257) sum up the research and show that the proportion of time devoted to bedside teaching is 8%–19% of the total clinical education time. They go on to explain the barriers to bedside teaching for both learners and teachers.

With the numerous constraints (Williams et al. 2008) and the ever diminishing time spent at the bedside, there comes an opportunity to view bedside teaching in a wider setting such as forming part of a "Teaching Round" rather than as a stand-alone activity. "Teaching Rounds", in this context, refers to a ward round led by a senior member of the team such as an attending physician or fellow (i.e. middle grade or consultant in the UK), which will take the team through the process of going over the notes and investigations away from the patient before actually proceeding to the bedside to review the patients. The round includes more junior members of the team as well as medical students. Studies show that both educators (Nair et al. 1998) and learners (Nair et al. 1997) prefer bedside teaching as part of a wider learning experience which includes case presentations and discussions away from the bedside.

As medical education turns its focus to "Self-Directed Learning", "Simulation" and "Effective Communication Skills", what better way to supplement and consolidate learning than by conducting such teaching rounds? Not to use this wealth of teaching opportunities as a substrate for experiential learning (Talbot 2000) would be foolish. Hence, this article attempts to be a guide on how to provide structure and minimise the barriers to conducting teaching rounds. It notes Ramani's (2003) "Twelve Tips to improve Bedside Teaching" and develops the theme with more detailed practical tips and up-to-date references. It also acknowledges new approaches to medical education and the teaching and learning which needs to occur away from the bedside.

Tip 1

Preparation

The best way to conduct a teaching round, at least in the beginning, is to have a defined structure for this maximises the achievement of learning outcomes as discussed by Stanley (1998). Preparation sets the mood for the whole encounter. It instils confidence in both the teacher and the learner and facilitates the learning process. Group size and the educational

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level of learners tend to vary between sessions so the teacher is expected to:

- know the patients to facilitate the clinical history presentation
- know the level and prior experience of the audience so that pitching is appropriate
- be aware of the curriculum so as to make the experience relevant
- assess what is achievable in the time-frame with respect to number of patients to be involved in the teaching round

Tip 2

Prime the patients

Patients need to be prepared beforehand to be the subject of clinical or communication skill encounters. Appropriate consent needs to be sought and it suffices that this is verbal. It is a good idea to address any sensitive issues or answer any questions prior to the teaching round. It is also good practice to make the patients aware that not all of the discussion that will happen in their presence applies to them and that the discussion might diverge into theoretical scenarios.

The same applies to physical examinations. Consent should be sought in the absence of students so that the patient does not feel coerced into accepting what could be distressing or embarrassing for them in the name of medical education.

Tip 3

Assignment of roles

Assign specific roles to each member of the team consisting of junior doctors and medical students and ensure adequate rotation between them. This has multiple purposes namely:

- involves everyone
- breaks down barriers between educator and learner
- engages the audience
- maintains interest
- ensures efficient rounds
- adds value to the learner's input
- allows equal opportunities between learners

The preparation of a hand-out which outlines what roles need to be undertaken and how to rotate between team members is good practice and adds structure to the teaching round.

Tip 4

Establish expectations

Nowadays, the role of the teacher has evolved into a facilitator of and for learning. This puts the learner in charge and the latter's learning needs have to be elicited before the session starts. Some pre-prepared broad objectives can also be outlined by the teacher but it is important that this is a collaborative effort with the learner. Hence, the agenda is to be set by both the teacher and the learner.

The teacher's expectations of the ward or team rules and appropriate bedside manner in specific circumstances also need to be clarified from the outset.

Tip 5

Roadmap

Devise a plan beforehand on what can be taught to act as a guide but still be flexible to improvise and steer discussion away and towards the main themes. Irby (1992) alludes to this being the beauty of teaching rounds and should not be belittled or feared but celebrated as no two teaching rounds will ever be the same. It also allows for good time management and organises the teaching round in prioritising educational opportunities and focussing on the learner's needs.

Tip 6

Focus of encounter

Clinical practice is so diverse and unpredictable that not all patients will lend themselves to a standard model of clinical encounter. Hence, it is important to vary the focus of the encounter to the patient (Irby 1992). This can take the form of:

- medical history taking
- clinical examination
- communication with the patient
- communication skills with relatives
- breaking bad news

This is particularly important as some patients offer better educational opportunities compared to others. The setting of a focus for the encounter will only be possible if there has been adequate prior preparation with a structured roadmap.

Tip 7

Patient's notes

These contain a wealth of information and this aspect can take over the teaching round altogether if one is not careful. Documentation has become such a key part of our practice especially as litigation has become more widespread. The teaching opportunities include but are not limited to:

- how to ensure good documentation
- interpretation of physiological parameters
- planning of investigations
- interpretation of investigation results
- devising management plans
- exploring clinical reasoning
- formulating differential diagnoses

This is the opportune time to present the patient, either by the teacher or the learner. However, to augment the learner-centred experience, a more appropriate approach is to have

the student or junior member of the team present the patient. In one study, out of a mixture of 194 medical students and house staff, 95% preferred case presentations away from the bedside (Wang-Cheng et al. 1989). Similarly, in Australian studies only 2% of learners (Nair et al. 1997) and, surprisingly, 4% of teachers (Nair et al. 1998) favoured presentations at the bedside. This is a good time to start questioning the learners in a familiar and safe environment away from the bedside. This will then pave the way for questioning in the presence of the patient at a later stage. When the case is presented away from the bedside with a preliminary discussion, then further pertinent points of the history and subsequent clinical examination can be done in presence of the patient.

Tip 8

Bedside teaching

This is the crux of the teaching round. It is the time for activities such as further history taking, patient communication and clinical examination. Bedside teaching per se has been covered in numerous other papers and this article cannot do it justice as part of a 12 tip outline of how a medical teaching round should be conducted. Suffice it to say that it combines and draws upon two major learning theories, namely experiential learning and action learning as described respectively by Kolb and Kolb (2005) and Revans (1998). It is important that this happens in a safe environment where the student feels comfortable with mistakes and criticism in a social situation. Kroenke (2001) highlighted the fact that the teacher should not take over the interaction and that skills can be assessed better by observation alone. These simple steps adapted from Gonzalo et al. (2010) should improve the encounter as a whole:

- introduce all members of the team to the patient and vice-versa
- allow interruptions by all parties
- encourage patient to correct and contribute
- challenge learners with open-ended questions
- scale questions up the hierarchy, i.e. easy questions for junior members of the team and harder questions for the more experienced team members or even start by accepting answers to difficult questions from the junior members and work your way up the team hierarchy
- teach to all levels of understanding

Moreover, the learner should not feel picked on and substandard as compared to the group. Barriers develop in the group and divisions form between the ones who do and do not perform well under pressure. People who perform badly under pressure and who are generally shy can descend into a downward spiral of low self-esteem and poor self-confidence. This is be supported by Maslow's hierarchy of motivation (Maslow 1943). To get to the higher levels of self-actualisation as summarised by Tennant (2006), there needs to be an instilment of "confidence, independence, reputation and prestige" by the teacher.

Tip 9

Role-model

This is interchangeable with Tip 8 and depends on personal preference. As a teacher in the modern age, there has been a shift towards facilitating learning and correcting mistakes rather than imparting knowledge in a didactic and fixed manner. Due to the expanding raw medical knowledge base and the ease with which information can be accessed, the teacher's role has moved away from just being the guardian of knowledge.

Learning from other people in the way they do things well is the foundation of the observational learning through modelling as described by Bandura (1991). This is supported by the social learning theorists Merriam et al. (2007). Learning through role-modelling (Paice et al. 2002; Cruess et al. 2008) is extremely effective when the learner is taught by a master in his particular subject. Role-modelling in the context of bedside teaching can take one of the two main forms; communication or clinical examination skills. The medical student learns a technique that has been honed through years of practice and experience when taught by an expert in the field. The teacher should also realise the impact of modelling positive attitudes such as teamwork, effective and empathetic communication together with the professionalism that comes with experience.

Tip 10

Summarise

End the bedside teaching and move back to the notes to continue the interaction. This is the time to:

- Revisit sensitive issues
- Address questions from the learners
- Resolve confusion
- Summarise lessons learnt
- Prepare for the next patient
- Rotate learner roles between patients

Tip 11

Feedback

Feedback is a two-way process between learner and teacher coupled with a cycle that improves the performance of each member of the team. It reinforces good performance and modifies poor performance (Hargreaves et al. 1997). Giving and receiving feedback consist of a set of skills and techniques that are worthy of an article in their own right. However, it may be worthwhile to consider the techniques below when giving students feedback:

- give feedback promptly
- allow time for discussion
- allow the learner to review their performance first
- encourage reflection and self-appraisal
- start with positives
- teacher comments after learner

- clarify criteria for desired performance
- use specific examples
- limit to a few items at a time
- use constructive criticism
- end with a plan of action
- set learning objectives for independent study

Providing feedback to learners is important and it is equally as important to receive feedback for one's own performance. This aids reflection as is discussed in the next tip.

Tip 12

Reflection

Activities that promote reflection are now being incorporated into undergraduate and postgraduate education across a variety of health professions. Reflection on the event is an integral part of any teaching experience, let alone a rich one such as the teaching round (Irby 1992). This allows the lessons learnt about what went well or badly to be looped back into the next event. Such reflection is enhanced by receiving and analysing feedback from learners. It is a reiterative process that draws on both the teacher's and learner's experiences. The reflective outcomes then link into the preparation and hence improvement of the subsequent teaching rounds. This is best illustrated in an adapted version of Kolb's (1984) learning cycle in Figure 1.

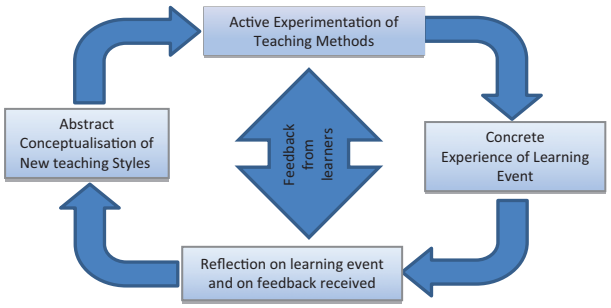

Figure 1. An adapted version of Kolb's (1984) learning cycle.

Summary

The value of planning for teaching rounds should not be underestimated as emphasised by Cox (1993). As time goes by and with more practice, the planning gets quicker and more efficient so that teaching on the ward round becomes fluid and seamless. The rounds then move on to a discussion about the patient and the notes followed by the all-important patient encounter. After this comes the summary of the experience and the session concludes with feedback between the learners and the teacher. By following simple steps and a logical approach together with some flexibility, the whole experience is made more enjoyable, efficient and effective.

Conclusions

Teaching Rounds are here to stay. No doubt that there are proponents of a pure bedside teaching approach where the bedside encounter dominates the learning event. However, there are behaviours that need to be avoided at the bedside such as excessive use of jargon, criticism or arguments or even discussing differential diagnoses or prognoses that could cause distress to the patient. Hence, the role of discussions away from the bedside and the potential for learning prior to the bedside interaction should not be underestimated. There is scope for research into these two methods of teaching. More evidence is needed to compare the effectiveness and value of either style of clinical teaching. The premise for a blend of teaching methods is that both learners and teachers should seize each opportunity, whether at the bedside or not, to strive to improve on their own skills.

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References

Bandura A. 1991. Social cognitive theory of moral thought and action. In: Kurtines WM, Gewirtz JL, editors. Handbook of moral behavior and development, Vol. 1. Hillsdale, NJ: Lawrence Erlbaum. pp 1–46.

Cox K. 1993. Planning bedside teaching. Med J Aust 158:355–357.

Cruess SR, Cruess RL, Steinert Y. 2008. Role modelling – Making the most of a powerful teaching strategy. Br Med J (Clinical Research ed.) 336:718–721.

GMC 2006. The duties of a doctor registered with the General Medical Council. London, UK: General Medical Council.

Gonzalo JD, Chuang CH, Huang G, Smith C. 2010. The return of bedside rounds: An educational intervention. J Gen Intern Med 25:792–798.

Hargreaves DH, Southworth GW, Stanley P, Ward SJ. 1997. On-the-job training for physicians: A practical guide. London, UK: Royal Society of Medicine Press.

Irby DM. 1992. How attending physicians make instructional decisions when conducting teaching rounds. Acad Med 67:630–638.

Kolb DA. 1984. Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall.

Kolb AY, Kolb DA. 2005. Learning styles and learning spaces: Enhancing experiential learning in higher education. Acad Manage Learn Educ 4:193–212.

Kroenke K. 2001. Attending rounds revisited.(President's Column). Society of General Internal Medicine Forum. pp 8–9.

Maslow AH. 1943. A theory of human motivation. Psychol Rev 50(4):370–396.

Merriam SB, Caffarella RS, Baumgartner LM. 2007. Learning in adulthood: A comprehensive guide. San Francisco, CA: John Wiley & Sons Inc.

Nair BR, Coughlan JL, Hensley MJ. 1997. Student and patient perspectives on bedside teaching. Med Educ 31:341–346.

Nair BR, Coughlan JL, Hensley MJ. 1998. Impediments to bed-side teaching. Med Educ 32:159–162.

Paice E, Heard S, Moss F. 2002. How important are role models in making good doctors? Br Med J 325:707–710.

Ramani S. 2003. Twelve tips to improve bedside teaching. Med Teacher 25:112–115.

Revans RW. 1998. ABC of action learning. London: Lemos & Crane.

Stanley P. 1998. Structuring ward rounds for learning: Can opportunities be created? Med Educ 32:239–243.

Talbot M. 2000. An interview study of the working ward round as an instrument of experiential learning in postgraduate medical education: A preparatory exploration. J Vocat Educ Training 52:149–159.

Tennant M. 2006. Psychology and adult learning. New York, NY: Taylor & Francis.

Tremonti LP, Biddle WB. 1982. Teaching behaviors of residents and faculty members. J Med Educ 57(11):854–859.

Wang-Cheng RM, Barnas GP, Sigmann P, Riendl PA, Young MJ. 1989. Bedside case presentations: Why patients like them but learners don't. J Gen Intern Med 4:284–287.

Williams KN, Ramani S, Fraser B, Orlander JD. 2008. Improving bedside teaching: Findings from a focus group study of learners. Acad Med: J Assoc Am Med Coll 83:257–264.