How to run a bedside teaching session

Teaching and learning are integral parts of being a doctor and most doctors enjoy both. However, clinical service delivery demands often crowd out these educational aspects of our professional lives. Teaching can occur in a wide variety of settings, online, large group lectures, seminars or one-to-one tuition. This article focuses on the strategies that can be used to improve inpatient bedside teaching.

Bedside teaching has the potential to be one of the most effective modalities in medical education (Garout et al, 2016; Rojí et al, 2017). It can provide all the key elements known to be associated with effectual deep learning. It can be interactive, relevant, targeted, timely, and encourage critical thinking skills. Unfortunately, bedside teaching opportunities appear to have declined in recent years, often relegated into the 'too difficult to do' category. This has been exacerbated by structural changes in the clinical environment. Patient pathways have been designed to be as streamlined and rapid as possible, promoting admission avoidance and early discharge with little attention paid to educational opportunities. There are no longer large numbers of relatively well patients convalescing in hospital and available for teaching. Inpatients have become more unwell, frailer and more elderly, and considered less suitable for teaching. In addition, the ever-increasing size of medical schools has resulted in larger groups of students which is a significant barrier to effective bedside teaching.

There has been a shift towards the use of simulated patients, simulated environments or larger-group structured sessions away from the wards (Cleland et al, 2009; Cook et al, 2011; Lighthall et al, 2016). While all these have their place, the value of bedside teaching remains undiminished. Bedside teaching provides the opportunity for students to hear the patient's story of his/her life, health and disease in a real-world, unfiltered manner. It allows teachers to role model interactions with not only patients but the wider health-care team and this can be observed and assimilated by the learners. Indeed, as the number of students on wards has increased rather than decreased, there is a need to teach increasing numbers of medical graduates and non-medical clinical staff at the bedside.

There is an extensive literature concerning learning theories, including neurobiological and behavioural constructs (Kolb, 1984; Brandsford et al, 1999; Kaufman, 2003). Such theories give a valuable insight into the mechanisms of learning and can help frame learning interventions at the bedside, for example, by focussing on the importance of social interactions. However, it is not necessary to have an understanding of these theories to be an effective clinical teacher and they will not be covered further in this article.

Developing a teaching mind-set

As a doctor, you should develop a teaching mind-set. Teaching should be an integral part of all your inpatient clinical activity, not an optional add on. While there is a place for dedicated teaching rounds, make teaching an explicit objective of every bedside interaction. Remember, you are not only teaching medical colleagues (undergraduates and postgraduates) but also non-medical clinical staff, support workers and, importantly, patients and their relatives and carers.

Preparation and planning

Having cultivated a teaching mind-set, you and your learners will have an expectation that education will be part of every bedside encounter. Although many of the specifics will appear opportunistic, a degree of conscious planning will significantly improve the experience.

You should have some familiarity with the needs of your learners. Many doctors feel intimidated by a lack of detailed knowledge about the curriculum. The quickest and simplest strategy is simply to ask the learners what they want to see and learn. Do not be surprised if you do not get a clear answer from them, but explore possibilities until you arrive at an agreement, e.g. 'Shall we learn about the diagnosis and management of chest pain today?' or 'Would you like us to concentrate on the investigation of chest pain?'. Some doctors, especially more junior trainees, are concerned that their own clinical knowledge is insufficient to be effective teachers and are anxious that students will expose their ignorance. This is rarely a problem since teachers and students can learn from each other; be ready to admit if you do not know the answer to a specific question asked by your learners.

Think about negotiating a 'safe space' for your teaching. Much of it will occur as part of routine clinical work. If you are planning a longer teaching session around a bed, ensure the patient is happy, that visitors are not due, that lunch is not about to arrive, or that the porters will not be waiting to take the patient to X-ray. Give explicit permission and reassurance to your learners that they are 'allowed' to take time to learn. Wards are rich learning environments but it is important to identify patients who can provide the best teaching experience. Most patients are more than happy to be involved in teaching. Those who are reasonably well, are able to give a clear history and have stable clinical signs are ideal.

You should always seek consent from the patient for your teaching. For a formal bedside teaching session, approach the patient beforehand and explain that you would like to bring a group of students to see him/her. Give an indication of how long the session is likely to take and agree a signal that the patient can give if he/she wishes to draw the session to an end. If teaching is occurring as part of a routine ward round, make sure you introduce the students and

Professor John Alcolado, Deputy Head of School, University of Nottingham Medical School, Royal Derby Hospital, Derby DE22 3DT
(John.Alcolado@nottingham.ac.uk)

that they introduce themselves and seek permission before they carry out any physical examination or procedures.

Some patients will be too unwell to explicitly consent to be involved in teaching. This does not preclude students seeing them or learning from them as part of their hospital admission but you should proceed with caution and supervise the learning interactions to ensure the rights of the patient are preserved. Always act in the best interest of the patient. If a patient lacks capacity, ask a relative, carer or member of the nursing staff whether they feel it is appropriate for the patient to be seen by students. Some situations, for example patients being barrier-nursed, require additional preparation but also provide the opportunity to observe and teach good hygiene and the use of gowns and gloves. Often patients being barrier-nursed in a side room will welcome the interaction that a bedside teaching session with some students will bring to them.

Bedside teaching often occurs in a mixed group, including medical students and trainees of varying abilities and needs. It is possible for this to work well, but extra effort is required to keep everyone engaged. Ideally, learners will learn from each other as a result of interactions between themselves. You should be beware of any one-upmanship and sometimes (e.g. when teaching basic physical examination) a more homogenous group is required.

The art of bedside teaching

The most important aspect of bedside teaching is the communication of enthusiasm, attitude and behaviours. Learners will vary in their assimilation and recall of any factual knowledge that you impart to them, but will unconsciously absorb your actions as a teacher.

Spend at least as much time listening as talking. A powerful method is the 'flipped ward round', where you ask one of the learners to lead the clinical encounter and you take the role of the scribe, writing in the medical notes. Become one of the learners; even if you lead the clinical encounter, end it by asking: 'Is there anything I have forgotten?'

It is important not to replicate a lecture, seminar or even a small-group teaching session that could be delivered away from the bedside. The bedside is a privileged space. It is one of the few places learners will witness how doctors and patients interact. If the session starts to lose this focus, do not be afraid to bring it back by saying '…this is an important point but we will discuss it later at the desk'.

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The patient is the sine qua non of bedside teaching and should take centre stage. If more than a few minutes pass when you are teaching at the bedside without involving the patient, ask yourself whether you could not be achieving your goal in a more appropriate environment.

Asking questions of learners is an important tool as it encourages recall of prior knowledge and elaboration. However, it is one of the hardest skills to master. A poorly framed question can become little more than a mind-reading task for learners, increasing anxiety and leading to disengagement. Learners are generally all too aware of their shortcomings and little is served in exposing these to their peers, teachers or patients. Questions should encourage critical thinking and expose gaps in knowledge or logical flaws in a way that encourages learning. As a rule of thumb, always ask questions starting with 'why' or 'how' rather than with 'what'. *Table 1* gives some examples of useful questions to ask in this situation.

Consider actively encouraging learners to look things up during a bedside teaching encounter. Historically, students and trainees had the *British National Formulary* and a variety of clinical handbooks stuffed into their white coat pockets. Now the white coats have gone and the knowledge is often stored on apps or in clinical guidelines on the hospital website. It should be easier rather than more difficult to access information. For example, when assessing a patient with a hospital-acquired pneumonia, if a trainee cannot recall the appropriate antibiotics, he/she should be encouraged to look them up, then and there, and then a discussion can ensue as to why the particular antibiotics are preferred over other options. This is likely to be far more effective than asking the trainee to go away later and 'learn' the antibiotic guidelines.

Table 1. Useful questions to ask during bedside teaching

What do you think is the thing the patient is most concerned about?
What is the most important thing the patient has told you?
How would you deal with this situation if you were a GP?
How would you make this patient more comfortable?
What do you think we need to do next?
What have you learnt from the patient so far?

Throughout the teaching session, be aware of signs of non-engagement, especially in larger groups. Consider why learners may become less involved. It may be that the session is being pitched at the wrong level for them, that others are dominating the discussion, or that they are anxious because they feel that they need to be elsewhere. In particular, some trainee doctors become overwhelmed by their clinical service commitments and feel they should be doing the next job rather than spending some time learning.

If possible, link different bedside teaching opportunities with a theme. For example, while attending to a series of patients on a ward round, you could emphasize how fluid balance, plasma electrolytes and fluid charts reflect the different clinical presentations, or you could focus on the different characteristics of pain. Remind learners of previous sessions, e.g. 'do you remember the man we saw with an acute confusional state? Let's go to see someone with a different type of memory problem'.

Feedback, evaluation and reflection

Giving feedback to learners is an important teaching tool. There is a place for detailed feedback but just a few short comments about how a student or trainee performed during a bedside teaching session are also an opportunity to reinforce learning. There are some excellent resources that explain how to give constructive feedback (Pendleton et al, 1984; Archer, 2010).

KEY POINTS

- Develop a teaching mind-set.
- Seize opportunities but also plan.
- Create a 'safe space'.
- Keep the patient at the centre.
- Communicate enthusiasm, attitudes and behaviours.
- Listen rather than speak.
- Encourage critical thinking.
- Give feedback and reflect on evaluation.

Teaching and learning is a collaborative process. After giving feedback, always ask learners to evaluate your teaching as well, specifically, ask them what they enjoyed and went well and what you could do to make things even better. Many institutions will also have their own systems for students to evaluate their teaching and provide you with feedback.

Reflection has become a rather trite concept in medical education. However, you are unlikely to improve as a clinical teacher unless you consciously take time to consider how your bedside teaching sessions have gone and how they can be improved in the light of evaluation from learners and others. **BJHM**

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