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Effective bedside teaching as a foundation doctor

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ABSTRACT

Bedside teaching is a key component of education at medical school, particularly in the clinical years. It provides an invaluable opportunity for students to practise examining patients, and further develops their communication and professional skills. Doctors who have newly graduated from medical school are often expected to provide such teaching to medical students placed on their wards. However, foundation doctors often receive little to no training for bedside teaching and there is limited literature on practical tips on how to enhance bedside teaching. Here we consider the three stages of effective bedside teaching: preparation, teaching and evaluation.

KEYWORDS: Foundation doctors, bedside teaching, clinical teaching

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Introduction

A distinct feature of clinical teaching in medical school is the shift from the lecture hall to the hospital or clinic setting. This is a valuable tool for developing communication skills, examination techniques and professionalism, which are integral to being an excellent clinician.

Bedside teaching has been impacted by the COVID pandemic, with most teaching taking place online to minimise the infection risk to both students and patients. While the pandemic has accelerated the development of many creative remote 'work-around' teaching tools, studies have shown that most students still show a preference for face-to-face learning, highlighting the unique role of bedside teaching in medical school.[1]

Bedside teaching specifically led by foundation doctors can also be very beneficial to medical students. While juniors may not have specialist knowledge or experience, they can help to highlight key concepts that are directly relevant for medical school examinations and the students' own future as a junior doctor. Foundation doctors are often more familiar with the students, which can facilitate a more relaxed learning environment and encourage better student engagement.

However, bedside teaching is time- and labour-intensive. Student groups are limited in size – contrast this to a lecture format where information is taught in one sitting to hundreds of students. Bedside teaching is more likely to be waylaid by factors beyond the doctor's control. Most of all, a busy ward with high clinical demands can make it difficult for doctors to set aside time for a break, and it may feel even more impossible to dedicate an extra hour to teaching.[2]

Therefore, we have set out some practical tips on effective bedside teaching that we have found to be helpful ourselves as foundation doctors.

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Before: preparation

Prepare the teaching material – pitch it at the right level to the intended audience

It is key to identify your students' learning objectives. A medical student in their first clinical year may find it intimidating to approach patients and would benefit from learning the basics, such as introducing themselves to patients and asking for consent. A more senior medical student who is comfortable on the wards may be more focused on picking up clinical signs to formulate a list of differential diagnoses.

Liaise with your local clinical teaching fellows or teaching department, who can provide more information on the intended learning outcomes of your students. Many hospitals also host students from various medical schools with different curricula; hence discussing this with the local teaching department can help you structure your teaching.

Tailor your teaching according to the examination format. For example, focusing on clinical examinations would be important for students sitting OSCEs. Similarly, if the students are examined in a 'viva' format, it would be useful to simulate this by creating a session where students can practise presenting cases.

Prepare the logistics and environment for teaching

Identify the number of students attending the session. Bedside teaching is most effective with a small group of 3–4 students. Identify patients who would be happy to be involved in teaching medical students early on. Keep an anonymised patient log of interesting cases and collaborate with colleagues across different wards on this. Gain the patient's consent early and manage their expectations of when teaching is likely to occur.

It may be helpful for teaching to take place in more than one setting. Focus on history taking and examination at the patient's bedside and discuss the case away from the patient. This minimises interruption and unnecessarily worrying the patient with use of medical jargon. Students may then also feel more

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comfortable exploring a wider range of differential diagnoses, facilitating further discussion on the subject.

If your bedside teaching is focused on performing a clinical skill like cannulation, set up all the equipment and explain the technique away from a patient's bedside. This can then be reinforced with your demonstration of the clinical skill in practice. At later stages, when the student has gained competence in a simulated setting, they can perform the clinical skill with your close supervision, allowing real-time personalised feedback.

Arranging teaching on better-staffed days reduces distraction from clinical responsibilities. If possible, ask a friendly colleague to cover your bleep for the duration of your teaching. Your clinical or educational supervisor can also help you identify suitable times for dedicated bedside teaching at the start of your placement.

There is a real need to ensure equity and accessibility within medication education, particularly with students who have a disability. Seeking support from the teaching faculty within the hospital or university can be helpful, as they may be able to offer further resources and accessible spaces for teaching. Most importantly, be open to listening and learning. It would be useful to offer an initial private discussion so that the student can share their lived experience and highlight any accommodations they need to facilitate their learning. For example, a D/deaf person may benefit from case discussion and feedback in a quiet room, and they may use assistive technology such as amplification stethoscopes. Students who use wheelchairs will need to have accessible spaces, ramps and elevators – wards on the ground floor may be more suitable. Other students may require more extensive, creative solutions, as highlighted by Jauregui *et al* in a novel student clerkship assistantship model.[3]

Prepare the students

Focusing on active recall and information retrieval simulates a realistic clinical environment.[4,5] Working through cases helps students to identify gaps in their learning. However, being questioned on the spot can be intimidating.[6] Informing students on the 'topic of the day' can reduce anxiety around being quizzed and help to increase student engagement. Equally, deciding which students will be examining the patient early on can help to alleviate anxiety.

Set ground rules at the start of any teaching session so that students are comfortable with asking questions. Make it an environment where students are comfortable saying 'I don't know'. Take it a step further by helping them to work from first principles from what they already know, thus building confidence and deductive skills.

During: teaching in progress

Set learning objectives at the start of the session

One of the key advantages of small group bedside teaching is the flexibility to tailor to the students' requirements. Furthermore, unlike self-directed learning, bedside teaching includes input from a teacher to identify areas of learning that the students may not previously have been aware of (otherwise known as their 'blind self' according to the theory of Johari's window[7]). Limit the learning objectives to only a few key points tailored to the students' learning needs and avoid overloading them with information.

Teaching aids

Foundation doctors may wish to incorporate visual teaching aids into their bedside teaching session to illustrate key learning points. Furthermore, it would be helpful to provide printouts so that students can focus solely on the teaching in the session instead of being preoccupied with making notes. Multimedia learning has immense benefits to engaging a learner's sensory, working and long-term memory.[8]

Make the most of the opportunity

There are learning moments that are unique to bedside teaching. For more junior medical students, it provides the encouragement they need to overcome the initial apprehension of examining patients and teaches them to smoothly transition between the different parts of an examination. For more senior students, there may be an emphasis on developing their skill sets of assimilating signs and symptoms to arrive at a good list of differentials. At all stages, the soft skills of medicine should also be emphasised.

Have a backup plan

Sometimes even the best prepared bedside teaching plans can be waylaid. Identify one more patient than planned for teaching if possible. It is important to return and thank the patient at the end of the teaching session, especially if they were eventually not involved in your teaching session. Where no suitable patients can be identified, having a list of interesting cases or investigation results – such as chest X-rays or arterial blood gas results – can facilitate an interesting case-based discussion which is still primarily patient centred.

After: evaluation

Feedback for yourself

Feedback is vital to the teaching process and may be given in an informal or formal manner. Formal feedback is often more useful and constructive as it allows for review and reflection and can be collected via free websites such as Google Forms, Survey Monkey and MedicalFeedback.org. Send it out to students immediately after, or better yet, ask them to do it on the spot to ensure a good response rate. For feedback to be useful, it is important to listen to what the students have to say and act on it; do not hesitate to keep what works and change what does not!

To further enhance your teaching skills and gain formal accreditation, seek opportunities within your hospital or deanery. This may include going on to apply for a clinical teaching fellow job or obtaining a PGCert. There are also shorter medical education courses; for instance, the University of Cambridge provides a free Integrated Foundations of Medical Education course for doctors involved in clinical teaching at its linked hospitals.

Feedback for students

Feedback should ideally be given away from the patient's bedside. Recognising their emotions is important. For example, if a person is particularly upset at themselves for a mistake they have made, encourage them and be kind. The best way to phrase feedback is

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to provide specific, objective examples followed by your subjective opinion and suggestions for improvement.[9]

The most common model for delivering feedback is the feedback sandwich. This theory advocates for 'sandwiching' negative feedback between two positive praises, which can create balance and make it easier to deliver criticism.[10] However, this model has been criticised for being potentially ineffective if constructive criticism is too subtle and overshadowed by praise. On the other hand, teachers may be over-critical and deliver feedback in a patronising manner, emphasising deficits with minimal praise.[11] Instead of the feedback sandwich, a new method of providing feedback has been proposed: the feedback WRAP.[12] The WRAP emphasises 'wonder, reinforcement, adjusting and planning', where the student is involved at each stage and actively reflects on the next steps they can take to improve.

Revisit the learning objectives set out in point 4 and link feedback to them. This will encourage self-reflection, which deepens learning.[13] At the next teaching session, it would be useful to consolidate the key learning points from your last bedside teaching session. Whether that involves revisiting examination structure, signs, or management of conditions, testing them will promote their memory retention and provide a flow to your tutorials.[14]

The One-Minute Preceptorship (OMP) model is particularly useful for clinicians juggling teaching and clinical commitments simultaneously. This brief teaching tool highlights the five microskills for providing concise, structured and high-quality feedback to the students. This is best used as part of a case-based discussion. For example, a student may present the history and examination findings after clerking a patient. The five micro-skills are: getting a commitment from the student (eg 'What do you think is the most probable diagnosis?'), probing them to establish their reasoning (eg 'What supports this diagnosis?'), reinforcing positive behaviours, providing guidance on areas that can be improved on, and summarising this with a general teaching pearl that the student can take away and apply in future cases.[15]

Conclusion

Bedside teaching plays a unique role in medical education in shaping future doctors. Foundation doctors can be readily involved in organising bedside teaching sessions and are in a unique position to be close to students' stage of training. The nine suggestions listed in this article will help the foundation doctor to be a more confident teacher and enhance bedside teaching sessions for students. ■

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