



Teach in the Clinical Setting

Clive J Gibson

Clinical Teaching is a critical part of Medical Education. Without Clinical Teaching, students and trainees would be unable to place their theoretical learning into a practical context. Whether it takes place in Primary or Secondary Care, these exchanges will frequently occur within the clinical setting along with patients present. This can present additional challenges to both the teacher and the student with regard to professionalism and clinical and educational governance.

Consultants and others are seen as effective role models who demonstrate professionalism, but the literature implies that there is wide variation in the quality and reliability of teaching in respect to venue, setting and speciality. With adequate preparation, junior students are able to reflect upon both social and healthcare experiences and the actions of healthcare professionals using the GMC Duties of a Doctor as a framework (Stark et al 2006). If learners are removed from the clinical environment, isolation from patients can lead to a dislocation of theory from practice.

Teaching and learning in any clinical setting is difficult to plan, highly dependant upon context, and is under ever increasing pressure from service provision. However, it can provide unique opportunities for educational contact when used appropriately. Advance planning, by learners and teachers as described later in this article and also in the accompanying 'How to' publication: "Make the most of learning moments and Hot Reviews" by Smail et al. should facilitate teaching within the clinical surrounding. It is imperative that students are given time to reflect upon learning events. If unplanned teaching occurs that is not scoped to the explicit curricular and assessment programme, then perverse outcomes may arise. (Hays 2005)

The theme of the 1999 Cambridge Conference was 'Clinical Teaching and Learning' and academic medical educators (Gordon et al 2000) identified four major issues which could improve learning in the clinical environment:

1. Integration of the learner into authentic clinical settings
2. Equipping learners with survival skills
3. Better use of the clinical environment and resources for learning
4. Expertise in using information technology.

Senior doctors often bemoan the fact that students seem unable to recall facts and apply knowledge to patients' problems. Research suggests that separation of the basic sciences from clinical care compounds this problem, and that integrating the curriculum and bringing students into contact with patients early will engage them as active learners. A problem based learning course will attempt to link the basic and clinical sciences and has a more patient-centred curricular. There is further evidence that by placing students into Primary Care environments within General Practice or Community attachments, greater opportunities are available for quality educational events compared to within hospitals where clinical problems may be too complex for junior students and short admissions may leave very little time for reflection.

Learners need proper briefing before moving into new environments, they also need adequate time to reflect upon the experience. Ideally previous students and faculty should mentor new learners and there should be some continuity and point of contact over an extended period. Challenges for students and teachers can be grouped into:

- ▶ Interpersonal skills such as giving and receiving feedback, dealing with abuse
- ▶ Coming to terms with illness and dying and dealing with other ethical problems
- ▶ Identifying positive coping strategies (and avoiding negative ones)
- ▶ Making effective use of time and resources
- ▶ Obtaining and managing information.

Although it is recognised that work-place learning in Primary Care may represent the ideal clinical environment, there is an historic reliance upon Secondary Care where procedures may be narrower and less diversified. Moving the emphasis of teaching into General Practice will require funds to be moved into the community. Although direct observation and immediate personal debriefing may be the ideal, time and financial constraints may compel other strategies such as using Simulated Patients trained to give feedback, or utilising video. Sometimes simple measures such as ensuring access to computers during 'down time' will enable literature searches or completion of e-portfolios to be carried out during time that would otherwise be wasted if patients fail to attend clinics. Advance Organisers may add context or take the form of mini-assignments serving to better structure clinical time.

In many areas of the world, information technology can provide enhanced communication, and provide rapid access to knowledge data bases. It is essential that teachers integrate IT systems into the curriculum and align the educational design and final assessment to the medium. Systems can be developed to allow remote access to improve time management and effectiveness. Monitoring and evaluation are key aspects of the educational process; electronic feedback can be utilised to provide rapid feedback to faculty. The use of IT in clinical teaching can facilitate:

- ▶ Self-directed learning
- ▶ Remote delivery of teaching materials
- ▶ Electronic communication between teachers and students
- ▶ Self-assessment
- ▶ Accessing databases on the internet
- ▶ Logging progress on e-portfolios
- ▶ QA and evaluation of educational events.

Parsell and Bligh (2001) found in a thematic review of the literature on teaching and learning in clinical settings that clinical teaching is 'variable, unpredictable, immediate and lacks continuity'. Staff and faculty development are key elements to ensure that medical teachers deliver effectively. It is imperative to ensure that everyone is well prepared, that the intended learning outcomes are identified and known by students and teachers alike and that the teaching and assessment methods chosen are appropriate. They describe a three stage process for Clinical Teaching, which must engage both learners and teachers:

1. Prior planning and preparation
2. Teaching with patients
3. Charting, giving feedback and reflection

Prior planning and preparation should include assessing the learners' knowledge and educational needs, along with their clinical skills at that point in training. The environment should be prepared to allow both appropriate privacy and confidentiality to patient and learner during the clinical examination and subsequently during feedback. Students may be given increasing roles in patient management as they develop.

Patients should be chosen carefully in order that more common illnesses are understood before exposing them to more complex clinical problems. This can be difficult to achieve in Secondary care when by the nature of referrals, more difficult cases are treated within the specialist environment. It is helpful if patients are articulate and can communicate well whilst students are developing their own communication skills and developing their individual strategies for conceptualising problems.

Reflection is the key aspect of adult learning, and giving good feedback is seminal to this process. Evaluation and feedback to the learners should be given immediately after the learning event, outside of the examination room, but in a safe and private area for the student.

Custers et al (2000) identified six common errors in student clinical thinking:

1. Not generating plausible hypotheses
2. Collecting too much information
3. Incorrect interpretation of cues
4. Overemphasis on positive findings
5. Premature closure
6. Ordering too many investigations.

They argue that students should be given defined models to analyse problems and apply to patient cases. These models can be applied to monitor case progress and form the basis of communication with other health care professionals.

Finally, faculty development is essential in order to optimise the effectiveness of clinical teaching. Teachers should be well prepared for each teaching exchange. They should be able to assess the learning needs of students, and subsequently set (and deliver) optimum learning outcomes for their students. Teaching should be aligned when appropriate to the assessment methods which are to be applied.

Further Information

Azer, S. (2013). *Making Sense of Clinical Teaching: a hands on guide to success*. Florida: CRC Press.

Dobson, S., Bromley, L., Dobson, M. (2011). *How To Teach: a handbook for clinicians*. Oxford: OUP.

Dornan, T. Norman, G. (2011). *Medical education: Theory and practice*. Edinburgh: Churchill Livingstone.

McKimm, J. Swanwick, T. (2010). *Clinical Teaching made easy: a practical guide to teaching and learning in clinical settings*. London: Quay.

Stark, P., Roberts, C., Newble, D. and Bax, N. (2006). *Discovering professionalism through guided reflection*. *Medical Teacher* 28(1): 25-31

Clive Gibson is a former Deputy Postgraduate Dental Dean in the West Midlands Deanery. He is currently a part time practitioner and a senior lecturer at Keele University Medical School, and their Director of Academic Staff Development.

Interested in learning more about this and other educational topics? Why not professionalise your role with an academic qualification at PGCert, Dip or MSc in Medical Education via e-learning or attendance courses.

Contact: medicaleducation@cardiff.ac.uk

Series Editor: Dr Lesley Pugsley, Medical Education, School of Postgraduate Medical and Dental Education, Cardiff University.

Wales Deanery

Cardiff University, 9th Floor, Neuadd Meirionydd,
Heath Park, Cardiff CF14 4YS

Tel: +44 (0)29 2068 7451 Fax: +44 (0)29 2068 7455

E-mail: medicaleducation@cardiff.ac.uk

Wales
Deanery
Deoniaeth
Cymru

