Teaching and learning in out-patient clinics

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Clinical supervisors need to balance educational and service commitments

SUMMARY

Background: Out-patient clinics offer trainees one of the most varied clinical experiences within the hospital setting, but they are often chaotic and over-stretched, with limited time for teaching. An awareness of how to improve this learning environment by both trainers and trainees may enhance learning opportunities.

Context: Clinical supervisors need to balance educational and service commitments, while maintaining a high quality of patient care. Supervision features observation and the sharing of clinical and continual feedback, which can improve clinical performance. Trainers must closely monitor the abilities of the trainee and gradually increase their responsibility and clinical load.

Innovation: The application of learning theory to the workplace can improve learning opportunities. Trainers should have some control over the environment, both the physical attributes (room availability, staffing levels and allocated consultation time) and the harder to measure aspects, such as the ethos of the department and attitudes to teaching. The creation of a community of practice within out-patient clinics can strengthen both the collective knowledge of the team and its role in treating patients. The active involvement of trainees within this social environment (for example, by performing independent consultations) validates their role in the care of patients and enhances their learning.

Implications: To maximise the learning opportunities within out-patient clinics there needs to be a shift in culture to promote learning in a safe and non-threatening environment. The establishment of a community of practice may validate the role of trainees in the management of patients and facilitate social learning by all members of the clinical team.

INTRODUCTION

The implementation of the 48-hour working week has considerably diluted the clinical exposure of trainee doctors. As a result, training based on an apprenticeship model cannot guarantee that trainees will receive a sufficiently deep and broad enough experience to equip them for independent practice.[1] Thus, this model has changed to a competency-based programme, requiring regular assessments against speciality-specific criteria.[2] To ensure that high standards of training occur, trainees must actively identify and set their own learning objectives. In addition, self-motivation, self-direction, and collaboration between trainees and their educational supervisors must be emphasised.[2]

Given the current time constraints, all work-based activities should be considered as learning opportunities. Optimal learning occurs when undertaking medical practice under appropriate supervision in an appropriate environment.[2,3] Perhaps the most important but underused learning environments within the workplace are out-patient clinics.

OUT-PATIENT CLINICS

Out-patient clinics are a unique and increasingly important learning environment for trainees, providing the most varied clinical material within the hospital setting.[4] Out-patient clinics can be considered as a supervised apprenticeship, where trainees can learn both technical aspects of practice and professional attributes.[1,5] Learning in out-patient clinics is patient focused, and incorporates key adult learning principles: it is meaningful, relevant to work and allows active trainee participation.

Although the use of out-patient clinics has been advocated to enhance learning, questions about the suitability of these environments exist.[4] Out-patient clinics are often under-resourced, chaotic and over-stretched, with limited time available for consultation.[5] The learning environment will be influenced by room availability, staffing levels, attitudes to teaching, and the balance between service and education commitments.[1]

THE ROLE OF THE SUPERVISOR

The role of the supervisor in out-patient clinics is difficult: not only do they have to manage the clinic and see patients, but they have to oversee the learning opportunities for their trainees. The learning environment will depend on each individual consultant, and will vary depending on speciality, unit, location and the structure of the clinical team.[1,3] Establishing the trainee's abilities (entry criteria) and what they hope to learn from the session (learning objectives) allows a supervisor to tailor the learning experience provided.[3] Supervisors need to be aware of the importance of being a good role model, as trainees can pick up many hidden messages about clinical practice from their trainer.

Supervision features observation, continual feedback and sharing of clinical judgement.[6] High-quality feedback can change clinical performance, and should be considered as a two-way process: evaluation ensures that objectives are reached and that the trainer's style of teaching is adequate. An awareness of learning styles is paramount for both trainer and trainees so as to ensure that a varied methodology of teaching occurs.[7] A balanced teaching style ensures that trainees are not too uncomfortable to learn effectively, but are stretched in directions that they may otherwise be inclined to avoid.[7]

Work-based assessments (WBAs) can have a beneficial impact on training by identifying what learning opportunities can be used in out-patient clinics.[8] Moreover, they do allow for an evaluation of performance to occur within a clinical context (as opposed to collegiate examinations), and for verbal feedback to be given. WBAs attempt to standardise learning within a clinical context; for this standardisation to be successful, both trainers and trainees need to be familiar with this assessment tool. Variations in how WBAs are applied can result in inconsistent feedback being given and disengagement with the learning process by trainees. This trainee apathy may be why the use of WBAs has not been shown to improve knowledge, skills or attitudes of trainees.[8]

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LEARNING IN OUT-PATIENT CLINICS

Effective educational and clinical supervision must have patient safety and quality of patient care as its primary purpose, but also must educate the trainee, promote high standards, identify trainee problems, support the trainee and monitor their progress.[3] The exact nature of supervision will both depend on what the trainee is doing and how experienced they are.[1] A trainer must closely moni-

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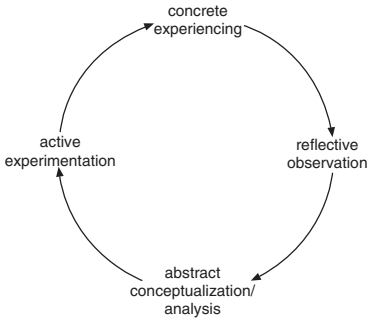

Figure 1. Kolb's learning cycle, adapted from Kolb and Fry (1975)[10]

Box 1. The increasingly distant levels of supervision

1. Modelling (observing the consultation).
2. Interaction (asking questions and debriefing).
3. Direct supervision (supervisor present).
4. Arm's length supervision (supervisor nearby and immediately available).
5. Local supervision (supervisor on the premises, available immediately via telephone and able to come within a short period).
6. Distant supervision (supervisor on call and available for advice, able to come to assistance in an appropriate time).

tor the abilities of the trainee and gradually increase their responsibility and clinical load.[3] This gradual removal of supervision is mirrored by Vygotsky's theory of a 'zone of proximal development'. This theory suggests that new learning can develop with guidance and encouragement from a trainer. Different levels of support 'scaffolding' have been proposed (Box 1).[1,4]

The first two scaffolding levels are for students, and are intended to create shared meanings and common understandings of clinical problems.[1,8] They are examples of a patrimony model of learning (Table 1), and share some similarities with Skinner's model of radical behaviourism.[9] An example of a learned response to a stimulus could be the basics of history taking and the examination of patients. A successful supervisor should initially provide frequent praise for students when they first demonstrate these abilities, which is gradually withdrawn as they gain competence.[9] This style of learning is purely one of repetition and is likely to be merely superficial, and may not equip learners with 'lifelong' learning.

The higher levels of supervision relate to both cognitivism and humanism. Cognitivism, by its very nature, allows trainees the opportunity to develop their learning by building on previous experience when they are exposed to a new situation. Trainees need to be able to reflect on their experience to complete a learning cycle (Figure 1).[10] Supervisors can help build bridges to enable students to learn by providing information prior to the learning experience (for example, reading a referral letter and advising what key points the trainee should identify within the consultation). This style of learning provides trainees with an experimental model on how to address a new situation that is based on previous expertise. An example would be where a trainee manages a patient with an unfamiliar condition based on their previous experience and then asking for assistance when required. The trainee will develop into the role of specialist as they complete their training, thus supporting the notion that education is linked to social growth.[10]

Humanistic theories focus on the personal growth of the trainee, and thus a humanistic teacher ensures that the learning environment is tailored to allow the trainee to reach their learning goals. Trainees must be active learners to allow this mode of teaching to succeed, and they should use trainers as facilitators of learning. Learners and educators collaborate as partners in horizontal 'learning communities' rather than hierarchical learning relationships (Table 1).[8]

Table 1. Models of workplace learning[8]

	Patrimony model	Facilitation model
Mode of learning	Apprenticeship	Learning communities
Mode of teaching	From master to novice	Learning partnership and collaboration
Sources of values professional identity	Social/professional status	Organisational mission and core values
Learning outcomes	Reproduction of traditional knowledge and skills	Empowerment and collective agency
Identity	Expert practitioner	Capable lifelong learner

SOCIAL LEARNING

The individual learning styles discussed do not fully provide an accurate model of the learning that occurs within out-patient clinics. Within this setting, learning occurs within a social context: an individual will learn from patients, supervisors, nurses and allied health professionals. Thus, the clinics should be considered as a community of practice (CoP): a group of health care professionals interacting to the benefit of patients (Figure 2).[1,11] Within this CoP, team members can learn from each other the knowledge, skills and attitudes of successful patient diagnosis, management and interaction. Active involvement of trainees within this social environment (for example, by performing independent consultations) validates their role in the

Figure 2. The community of practice, adapted from Lave and Wenger (1991)[11]

care of patients and enhances their learning. The social learning that occurs within out-patient clinics can strengthen both the collective knowledge of the team and its role in treating patients. How a trainee is perceived within the group is likely to develop with experience and training, from an individual with a limited role in the management of patients to a competent clinician with respected clinical acumen. Thus the social dynamics of this group are fluid, which affects the trainee's role within the learning environment and can help prepare them for individual practice.[11]

CONCLUSION

Part of a doctor's professional identity is that they are capable lifelong learners, equipped to respond to future changes. To ensure that future doctors maintain this key attribute, training needs to be reconfigured. This reconfiguration has implications for the culture of the workplace, and the nature of the learning and teaching experience.[2] If the UK National Health Service (NHS) is to recruit and retain high-calibre doctors, more attention must be paid to getting the right balance between service commitment and education through resolving the conflicting tensions, and attending to the welfare and career development of trainees.

In order to improve out-patient clinics as learning environments, three main elements need to be addressed. Firstly, trainees need to become more concerned with their own learning, which should be trainee centred. Trainees must own the curriculum, collaborate with trainers in how and what they learn, and focus on personal growth throughout their training.[2] Secondly, the role of the trainer needs to change from one of supervisor to one of facilitator of learning, who works in harmony with the trainee to identify and enhance learning. Thirdly, the culture within out-patient clinics must promote learning in a safe and non-threatening environment.[1,4]

Clinics should be considered as a community of practice

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