

Teaching and learning in outpatients' settings

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This paper was first written in 2003 as part of a project led by the London Deanery to provide a web-based learning resource to support the educational development for clinical teachers. It was revised by Judy McKimm in 2007 with the introduction of the Deanery's new web-based learning package for clinical teachers. Each of the papers provides a summary and background reading on a core topic in clinical education.

Aims

This paper:

- Reviews the special nature of teaching and learning in outpatient settings
- Considers the advantages and disadvantages of teaching and learning in outpatient settings
- Provides ideas for teaching and learning methods that might be used in Outpatients
- Discusses outpatient clinics as learning environments and how their potential can be maximised

Learning outcomes

After studying this paper, you will be able to:

- Enhance the teaching and learning opportunities in your own Outpatient practice
- Demonstrate awareness of ways in which you might manage your clinics to promote their function as educational environments

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Introduction

Outpatient departments and other ambulatory care facilities sit at the interface between primary and secondary care and offer a particular educational experience for students and doctors in training. Changes in hospital practice and the case-mix of patients admitted to hospital over the last 10 – 20 years mean that outpatient teaching has become increasingly more important. However, the available literature suggests that outpatient clinics remain under-utilised as educational environments and that still we have only limited understanding of what constitutes effective education in ambulatory care (Bowen & Irby, 2002).

Teaching and learning in outpatients presents a number of challenges to the clinical tutor, not least in maintaining the balance between education and clinical service provision. The wide range of outpatient facilities and specialities mean that there is no “right way” to conduct outpatient teaching. The aim of this short module is to describe the benefits of teaching in hospital – based ambulatory settings, discuss ways to minimise the difficulties encountered in this type of clinical teaching and offer some suggestions for managing the process within the framework of clinical service delivery.

The basic rules for effective clinical education should be followed. See e-learning modules *Facilitating learning in the workplace*, *Setting learning objectives and Workplace based assessment*. Other papers in this series such as ‘Teaching and learning in the clinical context’, ‘Teaching and learning through active observation’, ‘Using the consultation as a learning opportunity’ and ‘Teaching and learning at the bedside’ also provide more information about various aspects of clinical education.

Examples of different types of hospital – based ambulatory care

<i>Outpatient Clinics</i>	<ul style="list-style-type: none">• General outpatient clinics with unspecified referrals and follow – up visits• Specialist secondary or tertiary referral clinics• Multidisciplinary (eg Gynaecological oncology)• Multiprofessional (eg. Diabetes, Asthma or Epilepsy where other healthcare professionals involved)
<i>Ambulatory Care</i>	<ul style="list-style-type: none">• Daycase surgery units• “One – stop” clinics (eg Breast clinics)• Investigation Units (eg Endoscopy suites)• Pre-admission clinics• NHS Walk – in Clinics

Teaching in ambulatory care settings offers unique opportunities to address a wide range of healthcare issues. Although teaching in outpatients is, by necessity, opportunistic, with careful planning and identification of appropriate learning goals, even specialised tertiary referral clinics can be valuable learning environments for students at all stages in the curriculum. For doctors in training the basic educational rules can be applied to teach clinical management in specialist medicine.

LEARNING ACTIVITY AND REFLECTION

The following may be considered as common elements in traditional medical teaching in all settings:

- Aetiology and pathology
- History
- Physical examination
- Laboratory and imaging tests
- Therapy

List other elements of medical care that might be covered by teaching in ambulatory care settings.

My thoughts:

Stearns and Glasser (1993) identified 5 other domains: *continuity* (both backward in terms of past history and chronic illness and forward in terms of prevention); *context* (the patients setting in their family and community and their health beliefs and attitudes); *health education*; *economics or resource allocation* and *responsibility* (both the patient's autonomy and the doctor's role). Whilst some of these might be covered in part in the in-patient setting, they are far more meaningful to the student in the context of outpatient care. Other aspects of medical education well presented in outpatients include presentation skills, diagnostic reasoning and data interpretation.

Advantages and disadvantages of teaching in Outpatients

The way in which teaching in outpatient settings is undertaken will vary according to the type of clinical work. However, a number of generic issues can and should be dealt with in outpatients.

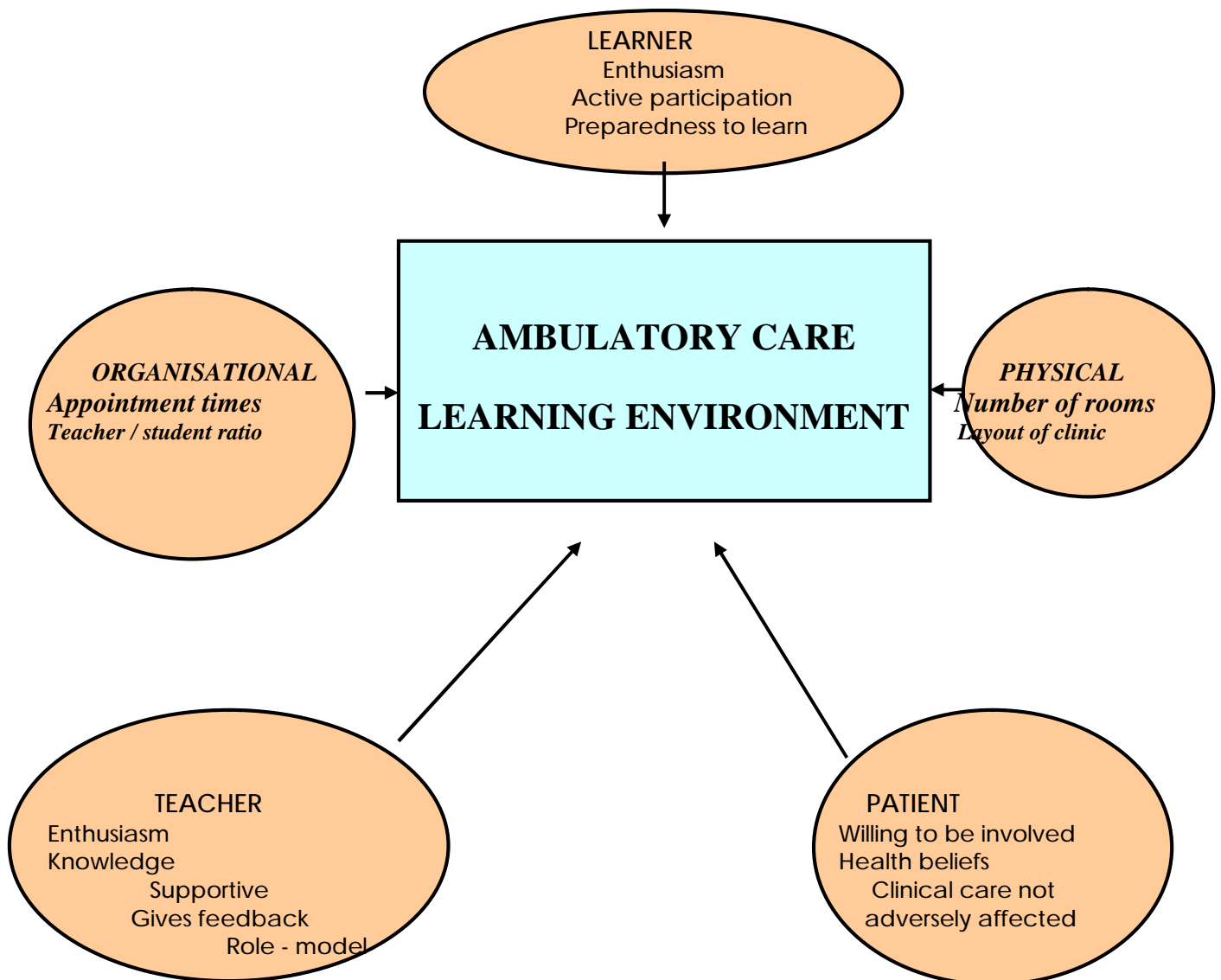
Outpatient teaching is generally well – received and both teachers and students appreciate the clinic as a learning environment although they may have different perspectives on the learning opportunities. In a large study of staff and students in a London medical school, teachers stated that the most important things to be learned were communication skills, attitudes to patients and the “real world” aspects of patient care in the context of “fresh”, undifferentiated patients. The students were more concerned with history taking and eliciting physical signs (Wood & Elzubeir, 1995).

In the same study, staff identified the major problems associated with outpatient teaching as lack of time, staff and space. Students identified passivity and being in a purely observational role as the major drawbacks to learning.

Teaching and learning in ambulatory care settings

One of the main difficulties for teachers in outpatient settings is establishing a good learning environment. A number of factors need to be considered.

The Ambulatory Care Learning Environment



Within the context of the individual learning environment, outpatient settings offer a variety of teaching and learning opportunities which may vary according to the students' level, the type of patients in the clinic and the time available.

At the start of the clinic

Run through the following checklist:

- What curriculum stage are the students?
- What are the overall objectives for the phase of the curriculum and how does it relate to the curriculum overall?
- Welcome the students, explain to them what type of clinic it is and what sort of patients they can expect to see. Tell them what you expect of them.
- Make sure the students are sitting in an appropriate place so they can see both yourself and the patients.
- Ask the students what they expect to learn from the clinic and establish any individual learning goals they might have.

- If the students are attending on a weekly basis, review the learning objectives they set last time and establish that they have undertaken some study in the intervening time to achieve their objectives
- Establish whether you wish the students to remain for the whole clinic or just part of it.

LEARNING ACTIVITY AND REFLECTION

Think about the way you teach in outpatient settings. Write down the methods you use and think about other ways in which you could engage the students in active learning.

My thoughts

Whatever the task the basic principles of good clinical teaching apply. Here are some specific suggestions:

- Students go individually or in pairs to a separate consulting room to take a history from a new patient and then present their findings to you.
- You observe a student taking a history or performing part or all of the physical examination.
- Students perform a clinical skill under supervision.
- Ask the student/s to observe a particular part of the consultation and feed back to you at the end ("Observe my information - gathering skills"; "I have to explain to this patient what will happen to them when they have an upper GI endoscopy. Watch how I do this and offer me some feedback at the end").
- Stop after you have taken a history. Ask the student/s to present the patient back to you and identify any further information they would like to know and why.
- Ask the student/s to review the patient's medication, explaining any drug therapy and its mode of action to you.
- Ask the student/s to spend some time with the nursing staff or other health care professionals in the clinic and report back to you with specific points about their contribution to the patient's care.
- If available, consider using video or audio recordings for future feedback
- Get the students to write the notes, dictate the letter to the GP, fill in request forms for investigations and find out what happens to them next.
- In the endoscopy suite or a One-stop clinic ask the student/s to follow a patient through the course of their visit, report back on the findings and give their views of the patient's experience.

Clinical Teaching Model

A useful model for clinical teaching based on the educational theories of constructivism and conceptual change has been described (Hewson, 1992). This is particularly helpful for teaching in outpatient settings where the teacher facilitates learning by identification of students' existing conceptions and helps them to become aware of their learning needs in the context of individual patients.

Clinical Teaching Model
(adapted from Hewson, 1992)

Orientation	Establish appropriate learning environment and context
Elicitation	Find out student's knowledge, attitudes and skills
Diagnosis	Decide whether the student has gaps, confusion or errors
Intervention	Facilitate integration, exchange ideas
Application	Apply new ideas to the problem
Review	Review student's current understanding and progress made

LEARNING ACTIVITY AND REFLECTION

Dr Smith, your PRHO, has come to your general medical Outpatients Clinic. You ask her to see Mr J, a 55 year old man who has been referred by his GP for investigation of epigastric pain and then to present her findings to you.

Using the six categories identified in Hewson's Clinical Teaching Model, how would you maximise Dr Smith's learning experience?

Some suggestions:

Orientation: provide appropriate teaching environment (be friendly, supportive and enthusiastic), invite her to present the patient, do not interrupt and be open-minded about the presentation.

Elicitation: ask open questions ("what is your opinion?"), probe her knowledge of the patient's history ("what happened then?") and ask her to justify her statements ("what is your reason for saying that?").

Diagnosis: make judgements about her knowledge, skills and attitudes, identifying gaps and errors. Feed this back to her including both positive and negative aspects and negotiate her educational needs.

Intervene: engage in appropriate teaching using a variety of methods (mini-lecture, demonstration of physical signs, use teaching resources, discuss and debate etc). Identify the important factors in the case and explain your reasoning.

Application: invite Dr Smith to apply new ideas to the case (eg. change the diagnosis or management plan)

Review: summarise the learning and invite her to discuss her learning objectives.

(developed from Hewson, 1992)

At the end of the clinic

- Take time to reflect with the students. Ask them to review the patients they have seen and to relate their learning experiences to the goals you set together at the start of the session.

- Students should identify the learning objectives that have arisen from the clinic. Make sure that you check on their subsequent learning - this may involve allocating time at the beginning of a subsequent clinic.
- Consider using the outpatient experience as the basis for a seminar during the week, preferably one that is student - led and which may involve any aspect of patient care, the underlying clinical disorder, pathology or therapeutics.

Organisational issues and the physical environment

The difficulties associated with teaching in Outpatient settings are usually related to organisational issues and the physical environment.

Organisational issues

Clinical service: pressure to deliver the clinical service in outpatients may be seen as a major barrier to teaching. Consider the following:

Review the appointments profile

- It may be possible to spread new patient slots throughout the session so that students or junior doctors can see new patients whilst you see follow-ups, allowing time for discussion at the end of each new patient appointment.
- Consider allocating some specific teaching time in each clinic where new patients or selected patients can be seen by students. At the end of that time students can be dismissed or given the specific observational roles discussed in this module whilst they sit in on your consultations.
- Consider arranging specific teaching clinics so that on some weeks the patients you see are all either new patients or patients brought up specifically for teaching as well as clinical care.

Review the number of staff available

- How many doctors are in the clinic? Consider allocating teaching time on certain lists and not on others.
- Discuss the possibility of students being allocated to nursing or other staff in the clinic and give the students specific learning goals related to that clinical experience.

Review the number of students who attend

- In most clinics a maximum of 2 students per clinical teacher is advisable, both for educational purposes and also for the sake of the patients. If you have to take larger numbers of students, consider sending them off to see patients in ones or two's and then report back to you. An alternative is the "breakout" model where students observe you at work and then repeat your activities with patients of their own, allowing another one or two students to be with you. These methods both have the disadvantage that you cannot always observe what the student is doing - students value the opportunity to see patients on their own but it is vital that their activities are observed as often as possible and feedback given.
- Consider rotating students through the clinic - the advantages of attending a smaller number of well organised clinics where teaching is valued and of a high standard outweigh the need for all students to attend your clinic every week.

The physical environment

The way in which you conduct outpatient teaching will be affected by the design and usage of your Outpatient Clinic.

- Review the number of consulting rooms available to you. Is it possible to allocate space for students to see patients themselves? Are there other rooms available which would be appropriate for use? (seminar rooms, unused treatment rooms etc).
- Are the consulting rooms equipped with appropriate resources such as X-ray boxes, whiteboards etc?

Think about the way in which you teach in Outpatient settings. How might you improve the learning experience for your students?

Summary

Outpatient clinics and other ambulatory care settings provide a rich environment for teaching and learning. Learning opportunities for students can be maximised by planning ahead, encouraging active learning by various methods and by optimising the use of staff and physical space. Key features that will enhance the learning opportunities in ambulatory care setting include:

- Orientation of the students to the clinic and the type of patients
- Setting learning objectives by negotiation at the start of a clinic
- Active involvement of the students in patient management
- Reflection time at the end of the clinic, review the learning objectives and develop a study plan
- Follow – up the study plan in the next clinic or a linked seminar
- Maximise the available staff and space and optimise the teacher / student ratio.

References and suggested further reading

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