

Notes for Primary Care Teachers

TEACHING METHODS USED IN PRIMARY CARE

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INTRODUCTION

Different teaching methods are used for different levels of learning. Some methods involve the learner taking a more active role in patient management that would be more applicable for postgraduate teaching while others pertain to a more passive involvement that would be employed in undergraduate teaching. No method is exclusively linked to any particular level and a particular teaching method is selected according to the learners' needs and educational objectives.

Common teaching methods used in primary care are discussed below, and the advantages and disadvantages of these methods are summarised in Table 1.

LECTURES

This is a traditional teaching method that is used by an expert to deliver factual information and to explain concepts to a big audience. It also provides a framework for further discussion of specific topics in other forms of teaching. Lecturing is mainly a one-way method of communication that does not involve significant audience participation in promoting thoughts, changing attitudes or teaching behavioural skills. Delivery of information should highlight key learning points and giving printed handouts will avoid fervent note-taking.¹ The use of audiovisual clips in the presentation encourages greater learner attention and assimilation of information and skills.

TUTORIALS

A tutorial is a small group teaching session for less than 30 learners, more often six to 12. It allows a more in-depth approach to a topic and is sometimes used to supplement a lecture. When conducting a tutorial, the learning objectives have to be determined first. The teacher has to decide which teaching role to adopt: Whether to be a leader, a facilitator, a clarifier, or a role model. It can take the form of a mini-lecture where the teacher can present new material or solutions to problems, or where the learners can discuss, expand or clarify information and concepts taught in lectures. Learners can make presentations and a more interactive session helps to deliver key points. To maintain the interest of the learners, various teaching aids are used and tasks are set for students, who are divided into pairs or groups, to brainstorm particular

topics or ideas. This helps to promote individual thinking and interpersonal communication.

PROBLEM BASED LEARNING (PBL)

PBL uses simulated clinical scenarios to encourage learners to discover new knowledge and skills. During the session, learners identify what is known and what is not known. Following group discussion, the learning needs are discussed and tasks allocated to the participants. Learners go on to source information from textbooks, journals, electronic databases and from experts. At the next session, new information and knowledge are shared, discussed and applied to solve the clinical problems. PBL promotes the ability to think critically to analyse problems, and improve the learners' skills in sourcing information.

CLINICAL TEACHING

This is apprenticeship-based and has been a key area in the teaching of clinical medicine. Bedside teaching is often done when postgraduate learners are doing their hospital rotations. It emphasises clinical examination and diagnostic skills. In the outpatient setting or in general practice, it can be conducted with the learner or teacher sitting in to observe each other's clinical practices. Consultation skills, communication skills, examination techniques, interpretations of investigation results, formulations of diagnoses and management plans can be observed and taught.

Direct observation of clinical practice can be done through sitting in at the practice or recordings of consultations.

OBSERVATION OF SUPERVISOR/TRAINER BY LEARNER

This method is used mainly for undergraduate teaching or for orientation of a new trainee undergoing a General Practice vocational training programme. It provides learning of consultation and communication skills of general practitioners and their roles in the community.

OBSERVATION OF LEARNER BY SUPERVISOR/TRAINER

This method is often used in postgraduate teaching. The supervisor does not interrupt the consultations unless invited to do so by the learner or only if there is a potentially serious error in the diagnosis and management observed. He or she

Table 1. Advantages and disadvantages of different teaching methods used in primary care

Teaching methods	Advantages	Disadvantages
Lectures	<ul style="list-style-type: none"> • Efficient, cheap way of conveying a topic to a large audience 	<ul style="list-style-type: none"> • One-way speaker communication with no active learner participation • Difficult to maintain learners' interest • Does not appear to be effective in changing a physician's performance
Tutorials	<ul style="list-style-type: none"> • Promotes adult learning • Encourages learners to solve problems, connect, prioritise, and incorporate conceptual knowledge • Affects the development of attitudes and values • Promotes social and intellectual experience • Develops oral presentation skills 	<ul style="list-style-type: none"> • Labour intensive
PBL	<ul style="list-style-type: none"> • Promotes independent, active learning • Encourages problem-solving skills • Information can be better retained • Higher learner satisfaction • Can effect changes in professional practice • Develops interpersonal skills and teamwork 	<ul style="list-style-type: none"> • Resource intensive • Small numbers of learners • Facilitator needs to understand group dynamics • Dependent on facilitator's skills
Clinical teaching	<ul style="list-style-type: none"> • Promotes clinical examination, diagnostic and management skills 	<ul style="list-style-type: none"> • Labour intensive
Observation of teacher by learner	<ul style="list-style-type: none"> • Allows observation of experienced clinicians' consultations and practices 	<ul style="list-style-type: none"> • Boring, as it is less interactive
Observation of learner by teacher	<ul style="list-style-type: none"> • Highly contextualised • Easily remembered • Good for formative assessment 	<ul style="list-style-type: none"> • Lacks self-assessment • Labour intensive • Time-consuming
Audiotaping	<ul style="list-style-type: none"> • Improves verbal communication skills • Useful tool to analyse the consultation process • Cheap and reviews can be done at a convenient time 	<ul style="list-style-type: none"> • Patient refusal • Sanitisation of views expressed by the patient for fear of reprisal arising from disclosure in the consultation
Videotaping	<ul style="list-style-type: none"> • Both non-verbal and verbal communication skills are observed • Allows clinical skills to be observed • Allows self-observation by learners in addition to reviews by others • Powerful tool to analyse consultation process 	<ul style="list-style-type: none"> • The camera is threatening • Patient refusal • May interrupt the normal flow of consultation • Patient's unwillingness to commit personal information • May provoke the learner's emotions • The learner may feeling embarrassed or threatened by self-confrontation especially if he or she lacks confidence
Chart/ case reviews	<ul style="list-style-type: none"> • Interactive sessions • Promotes problem-solving, diagnostic, interpretive and management skills • Flexible; can be conducted at any time 	<ul style="list-style-type: none"> • Time-consuming
Role play	<ul style="list-style-type: none"> • Contextualised • Enhances communication and consultation skills • Useful for the teaching of difficult consultations in a controlled environment 	<ul style="list-style-type: none"> • Time-consuming • May provoke the learner's emotions
Audits	<ul style="list-style-type: none"> • Improves patient care • Improves clinical effectiveness 	<ul style="list-style-type: none"> • Repetitive and dull • Poor compliance • Time-consuming • Intrusion into clinical work
Portfolio-building	<ul style="list-style-type: none"> • Student-centred • Fosters self-assessment skills • Encourages greater learner's responsibility • Encourages the learner's reflection of own knowledge, attitudes and beliefs 	<ul style="list-style-type: none"> • Work-intensive
Internet-based teaching	<ul style="list-style-type: none"> • Accessible, convenient • Content can be updated regularly 	<ul style="list-style-type: none"> • Needs computing skills
Journal paper appraisal	<ul style="list-style-type: none"> • Promotes critical appraisal skills 	<ul style="list-style-type: none"> • Needs teachers with research skills to facilitate discussions
Use of clinical skills laboratories	<ul style="list-style-type: none"> • Allows for repeated practice and reinforcement of techniques before exposure to patients 	<ul style="list-style-type: none"> • Synthetic apparatus lacks realism

provides feedback on the consultation and communication skills of the learner and discusses clinical topics relevant to the cases seen.

AUDIOTAPING

Audio recording of clinical consultations allows a review of verbal communication and consultation of the learner in taking medical history and providing management plans to patients.

VIDEOTAPING

Videotape recording allows both teacher and learner to review one's consultation and communication skills. Self-evaluation and feedback from a supervisor or other colleagues can be done at a mutually convenient time. Although the learner may feel apprehensive and aware of the existence of the camera, within the initial five to ten minutes of videotaping, very often he or she will get used to it and will be able to carry on the consultations as in normal practice. It reflects the real clinical environment and aids actual performance assessment.

CHART REVIEW/CASE REVIEW

This is a review of case records of patients seen by the learner. It can be conducted on a one-to-one basis or in a group. Case discussion allows greater teacher/learner interaction and enhances problem-solving skills in clinical presentations, diagnoses, interpretations of investigation results, as well as in management.

ROLE PLAY

This uses simulated clinical scenarios and learners are asked to role-play the consultations or scenarios. It is simulated experiential learning in a controlled environment which is especially suitable for the teaching of how to handle difficult consultations.

AUDITS

This is a technique used to assess, evaluate and improve quality of care and services provided by an individual or by a practice. The aspects of structure, process and outcome of care are selected. It is central to clinical governance because medical records can be reviewed systematically to assess the quality of care provided for patients with common illnesses.²

PORTFOLIO-BUILDING

In this teaching method, the learner describes various educational activities attended, identifies new learning needs

and self-appraises his or her action plan. It is an analysis of experience and learning opportunities to demonstrate learning outcomes and to formulate further educational plans to meet educational needs. The contents can take the form of workload logs, audio/video tapes, audit projects, case descriptions, patient satisfaction surveys, a report of a change or innovation, research surveys, critical incident reports and commentaries on published literature.³

INTERNET-BASED TEACHING

In e-learning, teaching materials can be downloaded and regularly updated on the web. This method is convenient, easily accessible and allows active interaction between the teachers and learners.

JOURNAL PAPER APPRAISAL

Teaching the skills of critically appraising scientific papers to learners is often conducted in a group. The learner selects an interesting paper and distributes copies of it to fellow learners to be read before the teaching session. The teacher plays the role of a facilitator to promote discussion and appraisal of the scientific paper among the learners.

USE OF CLINICAL SKILLS LABORATORY

Teaching clinical skills in the protected environment of a laboratory is more often carried out in the undergraduate programme. It provides learners with the opportunity to practise procedures on mannequins to improve their confidence before they are exposed to real patients in the hospital or community.

CONCLUSION

It is important to identify the learning objectives and the learner's level before deciding on which form of teaching methods one can adopt to achieve better learning outcomes.

References

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2. Chambers R, Wakley F. Clinical audit in primary care: demonstrating quality and outcomes. Oxford: Radcliffe Publishing Ltd; 2005.
3. Wakley G, Chambers R, Field S. Continuing professional development in primary care: making it happen. Oxford: Radcliffe Publishing Ltd; 2000.

Further reading

1. Hays R. Teaching and learning in primary care. Oxford: Radcliffe publishing Ltd; 2006.