

Enhancing the educational interaction in family medicine registrar training in the clinical context

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Keywords: supervision; clinical training; learning styles

Abstract

SA Fam Pract 2010;52(1):51-54

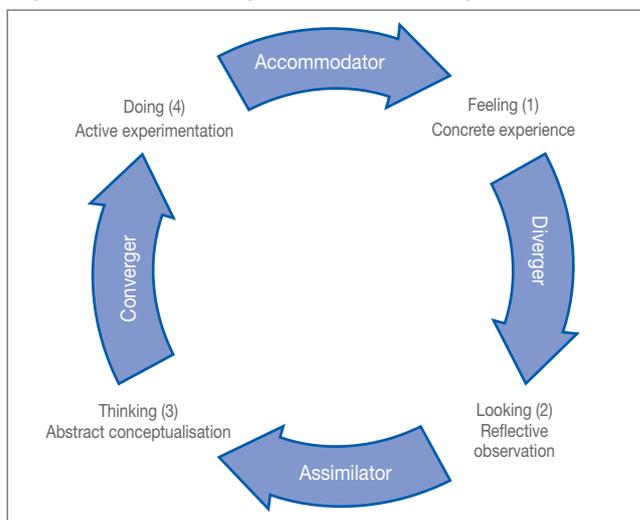
The relationship between registrar and trainer functions best when the trainer consciously facilitates the registrar's learning and considers all their interactions as educational opportunities. The trainer's role is more that of an educational guide and less that of an authoritarian expert. Both the registrar and the trainer should be aware of their own learning styles and how these may be complementary or contradictory. A variety of conversations with different purposes should be structured and planned and not left to chance and a number of methods for observing and collecting the registrar's clinical experience should be developed and used regularly. Further attention needs to be paid to the development of useful, reliable and valid portfolios.

Peer reviewed. (Submitted: 2009-04-18, Accepted: 2009-08-10). © SAAFP

Introduction

Since the formal creation of the speciality of Family Medicine by the Health Professions Council of South Africa (HPCSA) in 2007, all the departments of Family Medicine in South Africa have been busy establishing accredited training complexes. Within these complexes, family physicians have been accredited as supervisors of the new registrars in family medicine. Much energy has been spent on the administrative and regulatory processes needed to create these posts, appoint registrars and accredit both supervisors and training facilities. The district health system has been adapting to the arrival of these registrars and the implications for service delivery, training and research. Time has been spent explaining to managers, medical officers and other specialists what family medicine training is about. Energy has also been devoted at national level to defining the outcomes of the curriculum and reaching consensus on the clinical skills that registrars should acquire through their training. In the midst of all this organisational activity, there is a risk that the core educational interaction is overlooked. At the heart of each training complex within the clinical environment of the district hospital or health centre is a relationship between a registrar and a supervisor. The purpose of this relationship is educational; it has to ensure that the registrar learns how to be a competent family physician. What is it that we expect of this supervisor and what skills are required to fulfil these expectations?

Figure 1: The learning cycle and learning styles



The cycle of learning

The task facing both registrar and trainer in the clinical context is one of learning from practical clinical experience. The purpose of the training complex therefore is to ensure that registrars have the opportunity to achieve competency in the outcomes that the programme envisages. Registrars must make use of these opportunities to obtain concrete clinical experience, though this in itself may not be sufficient to ensure that learning takes place. Learning from experience follows a well-defined cycle (Figure 1).¹

Concrete experience: The registrar engages with clinical practice and experiences what it is like to consult a wide variety of people with different conditions and to perform a range of procedures.

Reflective observation: The registrar finds structured ways of looking at these experiences to be able to reflect on what has happened. Registrars need help to create space between the person having the experience and the person reflecting on what happened.

Abstract conceptualisation: The registrar's reflections lead to the development of new knowledge, insights or questions in the form of more abstract concepts.

Active experimentation: The registrar plans ways of integrating the new knowledge and insights into his/her ongoing clinical practice, or ways of further addressing the questions.

The task of the trainer is to model and facilitate this learning cycle and to ensure that the registrar develops a habit of ongoing and even life-long learning.

Preferred learning styles

Registrars and trainers, like everybody else, differ in the way they prefer to learn or tackle problems. As a trainer in an educational relationship it may help, therefore, to know one's own preferred learning style and that of one's registrar.²

This self-knowledge may help the trainer and registrar to work together better and to enhance learning. Sometimes the frustrations we experience with colleagues and students originate from the unconscious use of different styles of learning to tackle the same problem.

A previously validated process for determining one's preferred learning style can be used.² This process categorises people into one of four different styles, which can also be associated with the four quadrants of the learning cycle (Figure 1).

Diverger: A diverger prefers to look at feelings and concrete experiences and to reflect on them in a way that generates multiple perspectives. Divergers are good at imagining, identifying problems, sensing meanings and values. They will be good at brainstorming and creating a divergent set

of possibilities. They often are people orientated and drawn to feelings expressed through art, for example, as well as to roles as counsellors or social workers. They may, however, become paralysed by the various alternatives and delay taking action or making a decision.

Assimilator: An assimilator is good at inductive reasoning, which helps with moving from a range of possible reflections towards a few abstract concepts that can be supported logically. Assimilators are good at creating models and planning and like ideas to be precisely defined. They are not as concerned with the practical application as with the formation of abstract conceptualisations. They are often attracted to basic science and make good researchers. They may become lost in a world of abstract concepts, however, and end up 'building castles in the air'.

Converger: A converger is good at moving from abstract concepts to practical implementation and experimentation. Convergents are good at the practical application of ideas, at problem solving and at taking decisions. They are often emotionally controlled and technically orientated and attracted to tasks such as engineering. They may be tempted to make quick or even hasty decisions.

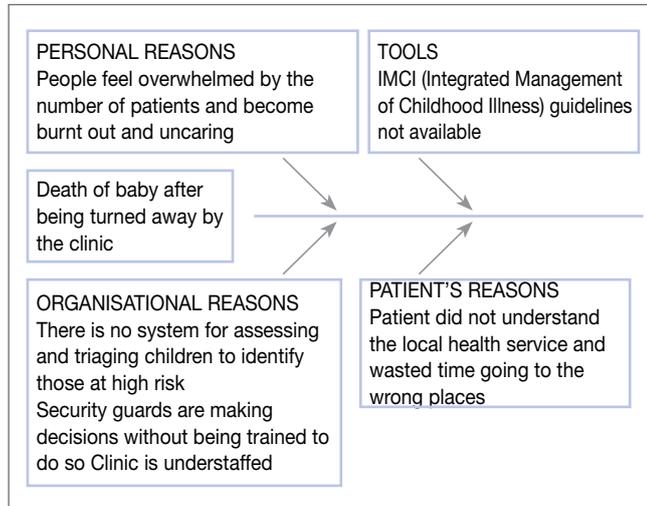
Accommodator: Accommodators like to act, undertake actions and implement plans. They seek new experiences and are good at adapting to changing circumstances with a trial-and-error approach. They like people, but can sometimes be impatient or pushy when action is delayed. They may be tempted to engage in meaningless activity or trivial improvements.

If one puts this into a typical learning scenario, for example a case discussion of a patient by a small group of registrars, the diverger will identify all the problems, feelings and unusual ways of seeing what has happened, the assimilator may insist on a strictly evidence-based approach with a desire to define one or two aspects of the situation precisely, the converger will quickly decide on an interpretation of the problem and want to focus on what would be practical to do next, while the accommodator will suggest a variety of activities that could be attempted to see what happens. The facilitator of such a discussion may unconsciously emphasise a personal learning style

Figure 2: Format of the PAM-PUN-DEN tool

Consultation	PAM	PUN	DEN	Action
61-year-old man asks for a blood test and a 'check-up'	Assessed cardiovascular risk and discussed prostate specific antigen (PSA) test	Did not explore patient's fear of prostate cancer	Is it useful to perform blood tests routinely in a 61-year-old man?	Look at the US Preventive Services website
34-year-old man comes with skin rash after using amoxicillin from another doctor for otitis media	Explained this was probably a drug reaction	Were all the patient's concerns addressed?	Should amoxicillin be used routinely for otitis media?	Look at EBM guidelines

Figure 3: Example of a significant event analysis using the fishbone technique – conversations that facilitate the learning cycle



and feel frustrated with the registrars who adopt a different approach. Conscious appreciation of these differences and their valuable contribution to moving everyone around the learning cycle may lead to a different way of working and of accepting each other's apparent idiosyncrasies.

Collecting and structuring concrete experiences

In order to enable reflection on one's own experience and initiate the learning cycle, it is often necessary to collect or structure that experience in some way. While there are many

techniques for doing this, a few that have been found useful in registrar training are summarised here.

Continuous registration: Recording 30 consecutive consultations in the SOAP format (subjective-objective-assessment-plan) and then looking for significant trends, routines or habits. For example: you may notice that there are many referrals, many antibiotics or little information about the patient's ideas, concerns and expectations. The registrar can then reflect on the meaning and interpretation of this and on what should be learnt.

PAM-PUN-DEN: A structured recall of 20 consecutive consultations in the PAM-PUN-DEN format (Figure 2).³

PAM stands for Patient's Actually Met needs, in other words what was done that met the patient's needs. PUN stands for Patients Unmet Needs, referring to issues or needs one thinks went unmet or were not handled adequately when recalling the consultation. DEN stands for Doctors Educational Needs, referring to the questions or uncertainties that were evoked by this consultation. A final column may be used to decide on and document educational activities that are prompted by this consultation.

Once the table has been completed, the registrar is expected to look for significant trends, routines or patterns of behaviour that stand out from the sequence of consultations. Are there any common threads that emerge from which the registrar can learn? One might, for example, realise that one struggles particularly with recognising

Table 1: Seven types of learning conversations

Type of conversation	Purpose of the conversation	Recommended frequency
Patient report	A brief report of the patients seen during the day to flag any issues or problems that can be explored in detail later	Daily, but lasting only a few minutes
Giving advice	To advise the registrar in a way that starts by eliciting the registrar's own analysis and suggestions before offering one's own. Create a brief learning moment.	Daily, whenever the registrar feels the need for support
Case discussion	To focus on patient encounters in which the registrar had problems, felt stuck or uncertain. Can be done in a small group. Model the learning cycle to elicit the registrar's feelings and thoughts, reflections, learning and own solutions or plans. Explore alternatives with the group. End this with plans for further action.	Weekly or fortnightly, often with a group of registrars
Intermittent evaluation	For the registrar and trainer to check progress, discuss any difficulties in their relationship or the organisation that impede learning or service delivery, make new plans.	Monthly
Constructing a learning agenda	To explore the learning needs to be addressed during the next period – knowledge, skills (checklist) and attitudes. Construct and document a plan.	Monthly
Giving feedback	To change a behaviour. Feedback should be concrete and descriptive, and show a balance between the positive and the negative. The registrar should be supported to identify alternative behaviour.	As required
Demonstration	To show or model a skill or procedure to the registrar. Work through any questions or problems.	As required

patients who have hidden mental health problems.

Significant event analysis using the fishbone technique: This is a useful technique to help people observe and reflect on situations that have an unsatisfactory outcome. It may, for example, involve making sense of why you spend too much time with patients and receive complaints from those who are waiting; why resuscitation had a poor outcome; or why a mother and child were turned away from the clinic leading to the subsequent death of the baby (Figure 3). Key factors and actors can be considered systematically and recorded in the form of a fishbone diagram. Attention can then be given in a multifaceted manner to all the changes that may prevent the recurrence of such a situation.

During the course of a month, the registrar and trainer have many encounters and opportunities for interaction. Often, however, the learning potential within these interactions is lost through a lack of planning, structure and conscious choices about what to focus on. Seven different types of learning conversations are recognised and each type may have a particular purpose and optimal frequency (Table I).⁴ The student-centredness of the trainer is one factor that runs through all these conversations as a key attribute linked to successful learning.⁵

Student-centredness, like patient-centredness, means that the trainer should pay attention to the student's agenda, ideas, concerns, learning needs and expectations. Try to avoid simply telling the registrar what to do, or offering unsolicited advice or solutions. Rather support a registrar's progression around his/her own learning cycle, sharing useful information when necessary, and facilitating a learning process more than prescribing answers.

Documenting change and learning

Formative and summative assessments are an essential part of all training in the clinical context. "How can we document progress made during the programme?" (formative) and "How can we assess final competence with sufficient reliability and validity?" (summative) are important questions to answer. Competence is a complex concept and is often impossible to assess in the artificial situation of an examination such as the Objective Structured Clinical Examination. How do you know, for example, whether a registrar is competent to decide on the need for a Caesarean section and able to perform it?

In response to these needs, all programmes in South Africa have developed a variety of logbooks and portfolios. Logbooks are being used to document the number of procedures or patients seen with a specific condition. Portfolios are being used to collect evidence of learning and competence and may include the logbook. Portfolios should be of value to the registrar and not an unreasonable burden, as not everything that can be recorded adds value to the goal of assessment or the goal of assisting reflection. Questions remain on who should assess competence and on what criteria this should be based. Further dialogue is required at a national level to reach consensus on the essential ingredients of a portfolio that can contribute to the final examination of the registrar.

Conclusion

The success of the new speciality of Family Medicine in South Africa will depend to a large extent on the quality of our graduates and their competency as judged by colleagues, employers and patients. These graduates themselves will become the new leaders and teachers of family medicine. It is important therefore that all the programmes in South Africa strive for high-quality education and training. This article highlights the need for more attention to be paid to the relationship between registrars and their supervisor in the clinical environment and to the educational value of their interactions. It is hoped that the ideas presented here will be integrated into the ongoing development of trainers within family medicine programmes throughout South Africa.

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