The benefits of teaching at the patient’s bedside have been well documented and described. Ramani et al. identify these as being the demonstration of communication skills, the findings of the physical examination, the teaching of humanistic aspects of clinical medicine, and the opportunity to role-model professional behaviour. These qualities cannot be as effectively demonstrated in the classroom. In addition, bedside teaching also gives the teacher the opportunity to observe the learners.

Despite the fact that bedside teaching is acknowledged for the unique benefits which it brings to the student’s learning, the time allocated to bedside teaching has been shown to be on the decline. El-Bagir and Ahmed report a decline from ‘75% of teaching time 30 years ago to just 16% by 1978’ and note that it is much lower now. Ramani et al. report that estimates of actual time spent at the bedside vary from 15% to 25%. Several barriers to bedside teaching have been identified: new technology, increased workloads, and the fact that teaching is not as highly valued in our academic settings as is research. El-Bagir and Ahmed go on to say that bedside teaching ‘has been neglected and rendered haphazard, mediocre and lacking in intellectual excitement, so much so that the clinical examination skills of young doctors have been seriously compromised’. This is of some concern when one considers the findings reported by Nair et al. Only 48% of learners reported that they had been given enough bedside teaching during their undergraduate training, while 100% thought that bedside learning was the most effective way of learning clinical skills.

In the first 2 years of study of the graduate entry medical programme (GEMP) at the University of the Witwatersrand, the key approach to teaching and learning is problem-based learning. This teaching and learning approach uses trigger scenarios to stimulate learning. In addition, students are introduced to the clinical environment and spend one day a week in hospitals or community clinics. In the 3rd and 4th years of study, these trigger scenarios are replaced by actual cases in the wards, and bedside teaching then forms the core approach to teaching and learning. Students in the third and fourth years of study of the GEMP are divided into groups and rotate through ‘blocks’ of study in the various clinical disciplines. There are approximately 30 students in each of these blocks at any one time. The students are divided between 3 teaching hospitals, so that there are approximately 10 students allocated to a hospital for a particular clinical discipline at a time. Bedside teaching forms the core teaching and learning strategy during these rotations. The bedside teachers are usually members of the faculty staff, who are in joint appointments with the provincial health departments and have a teaching responsibility to the university. Rewards
Surgery strives to offer high quality clinical teaching. In order to achieve this, the teaching instrument is to motivate good teaching.

During the first 2 years of study, attention is given to evaluation of a number of aspects of the teaching-learning process, such as the case used in the trigger, the facilitator, the week’s activities and the system block. However, little or no attention has been given to the evaluation of bedside teaching.

Problem statement
While bedside teaching forms a core component of a problem-based learning curriculum for medical students at the University of the Witwatersrand, there was no formal evaluation of this teaching-learning modality and therefore no information as to whether this learning strategy was achieving its objective in terms of developing understanding about content and interpersonal skills. Therefore, the purpose of this pilot study was to determine the quality of bedside teaching in one group of students in the medical curriculum with a view to validating an instrument for evaluating bedside teaching.

Methods
A quantitative, descriptive study was undertaken in the final year of study of the GEMP. The sample comprised medical students who were completing their surgical block during September and November 2008. There were approximately 30 students in each block.

The objectives of the study were to determine:

- whether the tutor gave attention to establishing interpersonal relations with both the students and the patient
- the quality of the teaching and the learning experience for the student
- the reliability of the instrument.

The bedside teaching evaluation questionnaire (Fig.1) was adapted from similar peer review questionnaires evaluating small-group formal lectures. It comprised 23 questions. Five questions related to the learning climate, 4 to the student’s learning, 10 to the actual tutorial at the bedside, and 4 to the student’s perceptions of the tutorial.

The students were asked to rate each of the 23 questions on a scale of 1 - 5, with 1 meaning ‘not done’ and 5 ‘excellent’.

One of 2 study co-ordinators made the students aware of the study prior to the tutorial and gave the forms to the students. The bedside teacher was aware that the study was being undertaken, and one of the study co-ordinators attended each session evaluated by students. Students were asked to complete the questionnaires immediately after the tutorial without the teacher being present, and to place the completed questionnaires into an envelope which was sealed by the study co-ordinator once all the forms had been returned. The sealed envelopes were returned to the study co-ordinator’s office where they were kept in a locked cupboard.

Permission was granted by the Head of Surgery to undertake this pilot study in the surgical block. Participation in the study was voluntary – participants were assured that their responses would be treated confidentially and that the completed evaluation forms would not be shown to the teachers. The bedside teachers were told about the study and individual permission for the study co-ordinator to attend the teaching session was obtained from each teacher before commencement of the teaching session. Permission to...
The evaluation.indd   52

The evaluation.indd   52

7th tip 5 states that the bedside teacher should ‘challenge

in their discussion of the learning climate, Kroenke

observation as a necessary part of learner-centred bedside

is to be taught, introducing oneself and the students to the

section of ‘learning climate’, i.e. telling the students what

teaching. In their discussion of the learning climate, Kroenke

value of the bedside tutorial) have all received attention

Four of the tips relate to aspects evaluated in the

The 4 main constructs of the evaluation form (i.e. learn-

Discussion

from the construct of the subset.

When the single constructs within each subset were

analysed individually, the only item that was inconsistent

within its subset was the question ‘Are students challenged?’

This question had a CA of 0.8259 while the others in the

same subset ranged between 0.7258 and 0.7761. However, as

it still yielded a positive numerical value, it was recommended

that the statement be left unchanged, as it does not detract

from the construct of the subset.

Discussion

The 4 main constructs of the evaluation form (i.e. learn-

ing climate, student learning, delivery of the tutorial, and

the value of the bedside tutorial) have all received attention

in the literature. Ramani1 poses 12 tips to improve bedside

teaching. Four of the tips relate to aspects evaluated in the

section of ‘learning climate’, i.e. telling the students what

is to be taught, introducing oneself and the students to the

patient, role-modelling the physician-patient interaction, and

observation as a necessary part of learner-centred bedside

teaching. In their discussion of the learning climate, Kroenke

and Omori2 state that fear of appearing ignorant in front of a

patient is one of the concerns of physicians when they have

to examine patients during teaching rounds. They postu-

late that this fear may be greater in younger clinical teachers

who themselves may have had inadequate exposure to

bedside teaching during their clinical teaching. They added

that the role modelling of professionalism is a quality which

experienced physicians have developed through numerous

patient encounters, but that students dislike bedside rounds

for reasons such as boredom and embarrassment; therefore,

establishing rapport with the students at the beginning of the

teaching session will contribute to a positive learning climate.

The second construct (student learning) in the current

study relates to issues such as students’ motivation to learn,

opportunity to ask questions, challenging of students, and

an emphasis being placed on understanding. Again, these

concepts have consistencies with Ramani’s 12 tips;1 his

7th tip1 states that the bedside teacher should ‘challenge

the learners’ minds without humiliating’ and suggests that

teachers should avoid asking impossible questions and

should keep all the learners engaged. The latter can be

done by ensuring that all students get an opportunity to

answer questions, which also prevents them becoming bored.

Essential to the promotion of student learning is the need for

teachers to be aware of and to assess the students’ needs; this

requires clinical teachers to be informed and knowledgeable

about the curriculum, community needs and the health care

system in which teaching and learning is taking place.

In developing the tutorial, the current study focused on

concepts such as the ability to communicate information

clearly, being knowledgeable and enthusiastic about the

topic, integration of all aspects of health care, and teaching

strategies used to maintain attention. The concept of

developing the tutorial may be consistent with Parsell and

Bligh’s concept of ‘knowing learners’. While it is important

for teachers to have an understanding of teaching strategies,

motivation is important in stimulating self-directed learning

and ‘other forms of knowledge, including, for example,

communication skills, the ability to manage emotions, and a

knowledge of curricula, health care organizations, ethics

and health care costs are also necessary’. Sutkin et al.4 undertook

a review of the literature concerning ‘What makes a good

clinical teacher in medicine?’ Three of the themes that they

identified from the literature were ‘positive relationships

with students and a supportive learning environment’,

‘communication skills’ and ‘enthusiasm’.

The last construct (the value of the bedside tutorial)

related to students’ perceptions of whether the tutorial was

of value to them, and their overall impression of the quality

of the tutorial. The value of the bedside tutorial has been well

documented in the literature. Kroenke and Omori2 describe

the patient’s bedside as the ‘ideal setting’ for teaching physical

examination, history taking and interpersonal skills. The

bedside teaching tutorial allows the teacher to demonstrate

asking difficult questions (e.g. about alcohol consumption),

managing emotions such as fear and anger, and providing

patient education and support. Janicik and Fletcher9 report

that there is evidence that patients enjoy bedside teaching as

they gain better understanding of their illnesses.

Conclusion

The value of bedside teaching in the education of medical

students cannot be under-estimated, and therefore the evalu-

ation of teaching sessions at the bedside needs to be assigned

the same degree of value as formal lectures. Our study dem-

onstrated that evaluation of bedside teaching sessions can

be done in a formal manner and contribute to the quality of

medical education.

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