ALTERNATIVE METHODS FOR CLINICAL NURSING ASSESSMENT AND EVALUATION

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ABSTRACT

The recommendations made in the article on nurse educators' perceptions of OSCE as a clinical evaluation method (Chabeli, 2001:84-91) are addressed in this article. The research question: What alternative methods of assessment and evaluation can be used to measure the comprehensive and holistic clinical nursing competency of learners in Gauteng Province is answered by an exploratory and descriptive research strategy. The perception of nurse educators (N=20) purposively selected from three nursing colleges affiliated to a University in Gauteng regarding the use of OSCE are explored and described. A descriptive content analysis was used. Trustworthiness was ensured by using Lincoln and Guba's model (1985). The result suggested the following methods, supported and complemented by literature: portfolios, self-assessment, reflective tutorials, authentic scenarios/problem-solving tasks, simulations (role-play, educational games), peer-group assessment, reflective journal writing, critical incident analysis technique and ward round evaluation. Many assessment and evaluation methods could be used depending on the evaluator's open-mindedness and creativity.

UITTREKSEL

In hierdie artikel word daar gefokus op die aanbevelings wat gedoen is met betrekking tot die persepsies van verpleegopvoedkundiges ten opsigte van die OGKE as 'n kliniese evalueringsmetode (Chabeli, 2001:84-91). Die navorsingsvraag is: Watter alternatiewe metodes van assessering en evaluering kan aangewend word ten einde die kliniese verpleegvaardighede van leerders in die Gauteng Provinsie op 'n omvattende en holistiese wyse te meet? 'n Verkennende en beskrywende navorsingstrategie is gebruik ten einde die vraag te beantwoord. Die persepsies van verpleegopvoedkundiges (N=20) met betrekking tot die aanwending van die OGKE is verken en beskryf. Hierdie verpleegopvoedkundiges is op 'n doelgerigte wyse geselekteer vanuit drie Verpleegkolleges wat by 'n universiteit in Gauteng geaffilieer is. 'n Beskrywende metode van inhoudsanalise is aangewend. Betroubaarheid is verseker deur die aanwending van Guba en Lincoln (1985) se model. Die resultate stel die volgende metodes voor wat ook deur die literatuur ondersteun word: portefeuljes, self-assessering, reflektiewe onderrigsessies, lewensegte scenario's/probleemoplossingstake, simulasies (rolspel, speletjies), portuurgroep-assessering, die skryf van reflektiewe joernale, kritiese insidentanalise tegnieke en Saalrondte-evaluering. 'n Verskeidenheid van assesserings en evalueringsmetodes kan aangewend word afhangende van die ontvanklikheid en kreatiwiteit van die evalueerder.

INTRODUCTION

This article is presented in response to the recommendation made in an article on the perceptions of nurse educators on the use of OSCE as a clinical evaluation method (Chabeli, 2001:84-91). The results indicated that nurse educators perceived the use of OSCE as a method of clinical

evaluation in both negative and positive ways with regard to the following themes: administrative aspects; evaluators; learners; procedures/instruments and evaluation of OSCE. A brief description of the results will be provided. The positive perceptions concerning administration is the need for an effective committee and a co-ordinator with OSCE competency to be able to plan, execute and control the examination collaboratively. This would ensure the smooth running of the examination where a large number of learners could be evaluated simultaneously and timeously. The negative perceptions indicated that poor and ineffective administration results in total confusion for the learners, lack of human and material resources as well as time constraints, which place a great deal of pressure on both the learner and the evaluator.

With regard to the evaluators, the positive perceptions are that OSCE encourages teamship and sharpens the evaluator's observation skills. The negative perceptions indicated the subjective, inconsistent and incompetent tendencies of the evaluators. The lack of inter-rater reliability, the lack of interaction with the learners during the examination and less involvement of the ward sisters in OSCE were also identified.

The positive perceptions with regard to the learners are that OSCE encourages active involvement of the learners, which enables the evaluation of cognitive, affective and psychomotor skills. The negative perceptions indicated that some learners do not take OSCE seriously. They become nervous especially when fellow learners are used as patients. The system does not allow learners time to reflect on their experience, and the situation is compounded by written scenarios that provide insufficient information to enable the learner to analyse, interpret and reflect on the activity to be performed.

Concerning procedures and instruments, the positive perceptions are that OSCE mostly use simulated procedures and is therefore less threatening. Patient's lives and privacy are not at risk. The negative perceptions are that the simulated procedures are not realistic and holistic. They lack human feeling. Certain procedures are difficult to simulate, and if they try, the simulation becomes unrealistic and meaningless, causing confusion for the learners. It is noted that the evaluation instruments and criteria for evaluation are not well developed and lack clarity.

The positive perceptions of the evaluation of OSCE are that the feedback obtained from the learners is invaluable. More procedures can be evaluated in a single examination. The negative perceptions are that there is no immediate feedback for the learners. Station and item analysis to determine the strengths and weaknesses for future improvement is not undertaken. Some learners regard the OSCE evaluation as an opportunity to express their anger and some comments could sometimes be insulting to the evaluators.

It is in this light that OSCE as a method of clinical evaluation is causing much concern, especially in the changing educational system of the country where, according to Ross and Morris (**in** Major and Pines, 1999:144), beliefs and practices on how to assess educational outcomes paradigm also changes. When one looks at the new educational dispensation of education and training, teachers are required to move away from the conventional modes of education. It is also required that learners be assessed in a manner different from that used in the past. Higher education is being called upon to demonstrate educational quality and effectiveness. One response to these forces has been the movement to measure educational outcomes that involves incorporating continuous, comprehensive and outcomes-based assessment and evaluation methods, thereby reducing the weight that was placed on the final examinations (Aslin 1985 and Ewill 1983 **in** Miller, 1992:1401).

In the same vein, Kuechle (2000) and SANC (1999:Doc B:15) advocate the use of integrated assessment and evaluation methods with clearly described assessment and evaluation criteria and performance indicators. SANC maintains that learners should be able to demonstrate the achievements of the stated learning outcomes at different levels throughout the four years of the programme. Some examples of the integrated assessment and evaluation approaches stated by SANC are portfolios, simulations, case studies and case presentations, clinical and academic ward rounds and inspections, projects and seminars, journal assessment and self-evaluation, peer-group and preceptor evaluation, competency evaluation of clinical skills, comprehensive evaluation of nursing care and problem-based learning (PBL) strategies of assessment and evaluation.

This mode of assessment and evaluation is unconventional, time is allowed for exploration and self-discovery and teachers adopt an inductive rather than a deductive style of assessment. The whole system is, according to Major and Pines (1999:122, 123), more flexible, more open, not as restrictive, more interactive, more collaborative, more supportive and more learner-centred. This argument is supported by Butcher (2000) who asserts that, the success of learning of learners is no more a direct function of how effectively learners are able to absorb, digest and reproduce that work taught by the teacher, but rather a function of how successful the more novel ways of assessment have been in eliciting a qualitatively better kind of learning.

Wallace, Shorten, Crookes, McGurk & Brewer (1999:139) are of the opinion that a multi-dimensional assessment and evaluation process will facilitate the cognitive, affective and psychomotor competence of the learner. Studies have indicated that traditional examinations often cause learners to adopt a surface approach to learning. They are not able to capture the actual changes in the

learners' knowledge and skills. In contrast, assessment methods that emphasise the learning process itself and encourage learners to engage in meta-cognitive and reflective activities are in harmony with the constructivist view of learning. Assessment of this kind is often called authentic assessment or performance assessment. It is based on authentic learning activities instead of artificial, rigid assessment situations (Biggs, 1996; Entwistle, Entwistle & Tait, 1993; Entwistle & Entwistle, 1991; Tynjala, 1998 and McCarty-Roberts, 2000).

The research question that arises is: *What are the perceptions of nurse educators with regard to alternative methods of assessment and evaluation that could be used to measure the comprehensive and holistic clinical nursing competency of learners in Gauteng Province?* It is therefore the purpose of this article to explore and describe the alternative methods of assessment and evaluation that could be used to measure the clinical competence of the learners supported and complemented by literature. This purpose will be achieved through the following objective: to explore and describe the perceptions of nurse educators with regard to alternative methods of assessment and evaluation that can be used to measure the comprehensive and holistic clinical nursing competency of learners in Gauteng Province.

DEFINITION OF CONCEPTS

Nurse educator
A person registered with SANC as a nurse educator/tutor, who acts as a facilitator of the learning process through the education and training of nurses and midwives to provide diversified comprehensive health care within the National Health System in a variety of settings, inside and outside hospitals. Facilitation is achieved through the active involvement and participation of nurses/midwives to enable them to change, analyse and solve problems. To develop analytical, critical and

reflective, creative thinking skills, to communicate effectively, to adopt an ethos of caring, and to have a positive attitude towards learning that will inspire them to become lifelong learners (SANC, 1999:2).

The learner

A person undergoing a basic comprehensive diploma/bachelor's degree in nursing (general, psychiatric and community health) and midwifery registered with SANC. The learner is prepared to provide professional nursing independently and autonomously. A practitioner and generalist nurse clinician and midwife are expected to practise professionally with independence in clinical decision-making and problem-solving, case management, community empowerment, supervision of other personnel and efficient use of resources (SANC, 1999:Document A:2, Document B:1).

Alternative methods of assessment and evaluation

This is often referred to as authentic or performance assessment approaches that offer alternatives to the traditional methods. Alternative assessment approaches focus on learner processes or performance in that learners solve problems that have an equivalent in their real world involving the use of resources, consultation and the integration of skills. The learners become an active partner in the assessment enterprise whereby they reflect on how they can learn meaningfully (Nicol & Freeth, 1998; Van der Horst & McDonald, 1997:188).

Competence

Within the context of SAQA (South African Qualifications Authority Act No. 58 of 1995), the three competencies are defined as:

- Foundational competence refers to the learner's demonstrated understanding of the knowledge and thinking that underpins the actions taken.
- Practical competence is the demonstrated

ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action.

- Reflective competence refers to the learner's demonstrated ability to integrate and connect performances and decision-making with understanding, and with an ability to adapt to unforeseen circumstances and explain the reasons behind such adaptations.

RESEARCH DESIGN

A qualitative, contextual, exploratory and descriptive research strategy was utilised (Mouton & Marais, 1994:43-44, 51). Focus group interviews (Krueger, 1994:6) were conducted in three nursing colleges affiliated to a nursing science department at a University in Gauteng to collect data from nurse educators who met the sample criteria of this research. The population consisted of all the nurse educators involved in the four-year comprehensive diploma course (general nursing, community health, psychiatry and midwifery) in the three nursing colleges affiliated to a nursing science department at a University in Gauteng. The participants had to meet the sampling criteria based on five or more years of involvement with OSCE. Sampling was purposive in that all the participants volunteered with enthusiasm to take part in the research. There were six participants from two of the nursing colleges and eight participants from the third nursing college (N = 20). Written permission was obtained from the participants to conduct the focus group interview using a tape recorder. Permission was also obtained from the relevant Department of Health and the various Assistant Directors of Nursing Colleges.

According to Krueger (1994:6) a focus group interview is defined as a carefully planned

discussion conducted with seven to ten people. It is designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment. Focus group interviews were conducted in three nursing colleges on different days suitable to the colleges. An expert interviewer who holds a doctoral degree and is experienced in qualitative research was purposively selected to conduct the three focus group interviews, while the researcher collected field notes during the interview by noting the group interaction and dynamics. The research question asked was:

What are your perceptions with regard to alternative methods of assessment and evaluation that could be used to measure the comprehensive and holistic clinical nursing competency of learners in Gauteng Province?

The duration of the interviews was about one hour. The question was thoroughly dealt with until the perceptions were saturated. While the participants had tea, the interviewer and the researcher completed a preliminary categorisation of the concepts, themes and patterns. Consensus between the researcher and an external coder, who was also purposively selected, was reached with regard to the categories derived from the data collected. Follow-up interviews were conducted with two participants from each college to validate the findings.

Tesch's protocol (**in** Cresswell, 1994:155) was used for the descriptive content analysis of the collected data followed by a literature control. Lincoln and Guba's model (1985) was used to ensure trustworthiness throughout the study. Trustworthiness was ensured according to the four principles related to credibility, transferability, dependability and confirmability. Credibility was ensured through prolonged engagement since the researcher and the participants were experienced clinical nurse educators. The researcher took field notes and follow-up interviews were conducted to validate the categories deduced from the collected

data. A literature control was conducted by using the findings of similar studies. To ensure transferability, the sampling method was purposive with no prior selection and a complete description of the design, methodology and literature control to maintain transparency. A consensus discussion between the researcher and an independent coder, as well as the description of the design and methodology, ensured dependability. Confirmability was also ensured through the taking of field notes.

RESULTS

The following ten methods were perceived as alternative and authentic in providing a comprehensive and holistic assessment and evaluation of the learner's clinical competence: portfolios, self-assessment, reflective tutorials, authentic scenarios/problem-solving tasks, simulations (role-play: educational games), peer group assessments, reflective journal writing, critical incident analysis technique and ward round evaluation, as indicated in table 1. The participants strongly indicated that these methods are not the only methods that could be used, as indicated: "*These methods are just examples of methods that can be used for comprehensive assessment and evaluation. The more methods used, the better picture of the learner's competence you will get*". Major and Pine (1999:155) also place much emphasis on simulations, interviews, technologies, videotapes, problem-solving tasks such as authentic problem-solving or enquiry-based authentic scenarios, exhibitions, and research-based group projects to explain ethical and moral problems through value clarification or to evaluate standards or care in a unit.

The results are supported by literature to demonstrate important aspects to be considered when using these methods. These are described below.

Table 1: Alternative Methods of Clinical Nursing Assessment and Evaluation

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                    Portfolios
                 Self-assessment
                Reflective Tutorials
    Authentic Scenarios/Problem-solving Tasks
    Simulations (role-play; educational games)
               Peer-group Assessment
              Reflective Journal Writing
           Critical Incident Analysis Technique
                Ward Round Evaluation
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Portfolios

The participants strongly acknowledged the fact that the use of portfolios as assessment and evaluation method is authentic and facilitates clinical reasoning and learning in the clinical setting as evidenced by *"Portfolios stimulate the learners to think critically of the reasons why they have to include an item or activity in the file. It keeps the learners busy as they have to think and rethink"*. However, the participants acknowledged the fact that the use of portfolios in clinical nursing education is relatively new and nurse educators need to be empowered with the relevant knowledge and skills as cited *"since portfolios are new to us, we need to know how they can be used effectively"*.

The use of portfolios is widely described in literature. According to Wolf and Siu-Runyan (1996:31) a portfolio is a selective collection of student work and records of progress gathered across diverse contexts of time, framed by reflection and enriched through collaboration for the advancement of student learning (Wolf & Siu-Runyan, 1996:31). The work may be selected by the students themselves, by the teacher or through a mutual judgement of both observations, comments exhibitions, student evaluations, a checklist, rating scales of self-assessment, etc. Portfolios therefore present an in-depth perspective of what a student can do, as opposed to the 'quick snapshot' provided by the traditional method of evaluation such as

OSCE (Mellish, Brink & Paton, 1998:252).

Woolfolk (**in** Van der Horst & McDonald, 1997:196) provides the following guidelines for using portfolios:

· Learners should be involved in selecting the topic that will make up the portfolio.
· A portfolio should include information that shows learners' self-reflection and self-criticism.
· A portfolio should reflect the learner's activities in learning.
· Portfolios can serve different functions at different times of the year.
· Portfolios should show growth.
· Learners should be taught and shown how to create and use portfolios.
· Portfolios should be examined frequently, especially early in the year.
· Constructive feedback should be given.
· A scoring scheme should be developed and used to evaluate the entire sample of work (Rubric is advocated).

Boschee and Baron (**in** Van der Horst & McDonald, 1997:197, 208) suggest the following criteria for evaluating the portfolio:

· Meaningful purpose(s) set by the learner for the use of the portfolio
· Degree to which the portfolio contents are quality products and congruent with the learners' stated purpose(s) for the portfolio (the learner's best work)
· Evidence in the portfolio of the learner's having demonstrated achievement of learning outcomes
· Effectiveness of the learner's portfolio presentation to the teacher that should include the degree to which the learner provides a rationale for the items included (based on the stated purpose(s) of the portfolio and the effective and clear communication of the learner

Portfolios allow for assessment over time. Learners are not assessed on a once-off performance, and the assessment includes peer and self-assessment.

Self-assessment

Self-assessment is regarded by participants as one of the important methods of clinical assessment and evaluation since it demonstrates the internal responsibility of the learner as stated "*self-assessment makes the learner to take responsibility and ownership in evaluating her thinking and understanding as to how she arrived at conclusions, although some learners feel intimidated*". Van der Horst and McDonald (1997:202) state that continuous self-assessment is an ongoing evaluation of one's own work and learning, as distinct from evaluation based on a final examination, whereas Van Kraayenoord and Paris (1997:525) define self-assessment as the process in which the learners determine the extent of their knowledge and skills in a field of study by assessing their responses to activities. This includes reflection on certain appropriate activities for the sake of improved performance in future situations. It means involving students in the process of determining what is good work in any given situation. It requires them to consider the characteristics of self-assessment that promote self-regulation which has been identified by Van der Horst and McDonald (1997:202) as meaningful, meta-cognitive, motivational, self-reflective and multi-dimensional.

Towler and Broadfoot (**in** Paris & Ayres, 1994) suggested four phases of self-assessment that are fundamental to the approach, as follows:

·   The knowledge phase where the learners will recall previous experiences, review their work and provide concrete records.
·   The analysis and understanding phase: the learners will seek to understand why things happened and make attributions for their performance.
·   The evaluation phase: learners will make

judgements on the quality of their work and construct plausible explanations for their evaluations.
·   The synthesis phase: learners will organise their new knowledge with the past experiences, fit their evaluations into a large context, and set future objectives.

In self-assessment, the learner "jumps into the head of the teacher to see what he wants" (Boud, 1995). It is one way of avoiding the making of a straightjacketed learner. Van Kraayenoord (**in** Paris & Ayres, 1994) pointed out that self-assessment promotes the learners' sense of ownership and responsibility. It is a necessary skill for lifelong learning and effective learning. It is a pragmatic response to difficult problems since it allows the learner to step back and evaluate the work done. It involves the process of reflection and evaluation leading the student to enhanced self-confidence towards independent learning, quality learning and greater learner autonomy and control. Fundamental to self-assessment is the creation of an environment and opportunities for supporting critical and reflective thinking skills (van Kraayenoord & Paris, 1997:533).

However, Boud (1995:178) is of the opinion that since many learners will be unfamiliar with self-assessment and have no direct experience of its formal use within a course, it will often be necessary for a specific proposal to be outlined and the idea discussed with learners prior to its implementation. Boud also maintains that the learners must be given the opportunity to discuss it fully and be allowed to influence the way in which it is used. Such involvement could lead to more effective implementation and to a great degree of ownership. The author warns that teachers must avoid being drawn into educationally unsound practices.

Reflective Tutorials

The participants felt that reflective tutorials are not

widely used in the assessment and evaluation of clinical competence. However, they were of the opinion that reflective tutorials also facilitate clinical reasoning skills as the learners engage in free interactive dialogue as cited: "*Reflective tutorials are good. They stimulate the thinking skills as the learner deals with the topic in the presence of fellow learners and the tutor*". Reflective tutorials are regarded by Glen, Clark & Nicol (1995:66) as one of the alternative assessment methods, since the reflective diary written by the learners following their tutorials illustrate that for them it was a different experience and reveals a developing understanding of the process of reflection as evidenced by the citation: "*During the reflection sessions with peers and the supervisor a lot of really deep thought, probing at a deep level occurs. I feel I understand the process better now, she (supervisor) keeps probing until she gets a comment or a reaction from me. I don't know if I could do that on my own, it's the level of debate that appears to be the key.*" Nurse educators are encouraged to expose learners to reflective tutorials where they are given authentic problems to solve followed by the writing of reflective journals to reflect on and justify their thoughts and feelings.

Authentic scenarios/problem-solving tasks

This method is perceived by the participants as a way of life in clinical assessment and evaluation. It is widely used in case studies and its authenticity relies on good planning as cited: "*Scenarios of problem-solving have been used in clinical setting. Learners are given case studies, which they must present, to their peers in the presence of the tutor. Scenarios need to be carefully selected or formulated according to the learner's level of training or else they serve as meaningless exercise*". Concerning realistic patient scenarios Freeth and Nicol (1998:457) maintain that these scenarios enable affective and communication skills to be interwoven throughout, a necessary move for providing high quality patient care. They also serve

to model a holistic approach to patient management, putting a variety of skills together in the context of addressing patient needs. This contextualisation aids meaningful learning and allows participants to draw upon their practical experience (Knowles, 1990 and Kolb, 1984 **in** Freeth & Nicol, 1998:457).

Simulations

Like authentic scenarios/problem-solving tasks, the participants perceived simulations as the most widely used method of clinical assessment and evaluation as demonstrated in OSCE. In expressing their opinion, they indicated: "*Simulations are easy, well managed, less threatening and patient's safety and privacy are ensured. Simulations need to be well planned with the focus of achieving the learning outcomes.*"

Simulations represent the third level of psychomotor domain according to Bloom's Taxonomy (**in** Quinn, 1988:244) where the learner performs a task on a simulated object rather than using the real clinical setting which may have adverse effects on the patient. Simulations play an integral part since learning opportunities are more predictable as the scenario is designed to develop according to the desired learning outcome. Learning takes place without the distraction of the real clinical setting, in a safe environment where mistakes could be seen simply as valuable learning opportunities. The use of realistic mannequins allowed dexterity and confidence to be developed through repeated practice at a pace that suited the learner. Step-by-step performance takes place without unnerving the patient or the learner during the assessment or evaluation process (Freeth & Nicol, 1998:457; Quinn, 1988:179).

Mellish **et al.** (1998:129) maintain that simulation can take many forms, such as the physical simulation when planning can make physical forms resemble the real thing very closely (stitching on pieces of fresh meat which allows the learner to

'feel' what it is like to insert stitches into a human being). Simulation can be done by using film or video programmes to illustrate the problem, to evoke clinical reasoning and to demonstrate the appropriate action to be taken in solving the problem.

Role-play is also based on simulating techniques. Members of the group are allocated roles to play and the other members form the audience and evaluate the group. Mellish **et al.** (1998:131) warn that the success of role-play lies in the original scripting of the scene to be enacted, which must be in line with the learning outcomes based on a real life situation. The group members can be uniformly scored followed by their self-assessment. Patterson (1996:51) asserts that working on projects together and participating in group discussions are steps in the learning process, but warns that despite its obvious merits, group work raises a difficulty when it comes to awarding marks to individual group members. Foldfinch and Raeside (**in** Patterson, 1996:52) maintain that studies have reported the potential for marks to reflect the learners' personality rather than their contributions. Learners feel responsible in making peer assessments but not necessarily comfortable in doing so. On the other the hand learners stated that peer assessment clearly enhances relationships between learner groups. Educational games and dramas may also be used by following similar principles.

Peer-group assessment

The participants felt that peer-group assessment is an assessment and evaluation strategy that is also very widely used to measure clinical competence. It also needs proper planning to meet the learning outcomes, as stated: "*Peer-group assessment is also referred to as proficiency classes where one learner teaches fellow learners, and is subject to criticism by the group. She is also expected to defend and justify her performance. The tutor facilitates the debate and discussion, and both the group mem-*

bers and the tutor will evaluate the learner." The participants felt that this method encourages learner interaction and thinking process, as cited: "*Defending and justification of the performance encourage learners to think all the time.*"

Learning is enhanced by maximising the opportunities for learners to discuss their work with others (Boud, 1995:200). Learners engage in a greater level and depth of reflection when they discuss or get feedback from peers. Such discussion can involve learners in disclosing their tentative views and uncertainties without having to justify themselves to a figure of authority. Through peer assessment, learners develop self-awareness and self-disclosure, and acknowledge feedback from others. Self-disclosure facilitates the discovering of what people really think and feel about themselves while humane feedback from others helps to balance this picture. Montgomery (**in** Patterson, 1996:52) asserts that peers are capable of accurately perceiving and interpreting one another's behaviour. The author maintains that there is a need to improve the effectiveness of the assessment of group members' behaviour to enlighten their experience.

Boud (1995:204) suggests the following guidelines in the use of peer assessment: to those offering feedback they should be realistic, specific and sensitive to the goals of the person, and timely, descriptive, non-judgmental, non-comparative, diligent, direct, positive and aware of their own emotional state before giving feedback. To those receiving feedback the author suggests that the receivers be explicit about the kind of feedback they are seeking. They should be attentive and concentrate fully on what is being said, and aware of their own reactions both intellectually and emotionally. They should be silent and refrain from responding until they have listened carefully to what has been said and considered the implications.

Reflective journal writing

The participants acknowledged the fact that reflective journal writing is not a new method of assessment and evaluation of learners' competence in nursing. Learners have always been encouraged to carry diaries to record their experience, as stated: "*Learners have been encouraged to carry small pocket note books to record their experience. For them to be reflective, the tutor must carefully plan their use to meet the desired learning outcomes.*"

Learners in nursing/midwifery are adult learners who have developed their self-concept based on an accumulation of life experiences (Riley-Doucet & Wilson, 1997:964). Reflective journal writing is considered to be one method of assessment that provides a private and confidential environment within which learners can scrutinise their own clinical learning experience. It enhances the use of self-analysis and critical thinking, reinforces the importance of utilising theory to guide practice; and establishes a co-operative educator-learner relationship built on a model of mentorship (Callister, 1993, Cameron & Mitchell, 1993, Reed & Procter, 1993 and McAlphine, 1992 **in** Riley-Doucet & Wilson, 1997:965). This type of reflective learning is advocated, and the three-step method for implementation is suggested:

· Critical appraisal whenever a critical analysis of important clinical events takes place. Learners are given the freedom to include descriptions, emotional reactions and cathartic reflections of their experiences by using their own writing style.

· Peer group discussions where learners share and express their concern and integrate their theoretical perspectives when discussing issues emanating from the clinical situation. The teacher functions as a facilitator.

· Self-awareness to self-evaluation. This is the final step of this reflective process

completed independently by the learner after the daily clinical post-conference meeting. In this last step of analysis, the learner demonstrates the ability of higher-order reflection. The teacher makes an overview of the journal to illustrate the successful attainment of the learning outcome.

Critical Incident Analysis Technique

The participants stated that: "*Critical incident analysis technique can be used as a method of continuous clinical assessment method but the problem is to determine when an incident is critical to the learner's clinical learning needs.*" The critical incident analysis technique is the learning of a method that assumes raters will make inferences about a learner's general competence on the basis of the learner's performances in a number of specific situations. Critical incidents can be used to develop a performance record based on core behaviours. Ewan and White (1984:210) assert that this approach fits in well with criterion referenced assessment where the core behaviours for mastering have been identified. It can be used to obtain a holistic perspective, a broad picture of activities in a clinical practical setting. They provide details of the categories and criteria used to classify incidents. Flagan (**in** Ewan & White, 1984:211) indicates the specified criteria for the use of critical incidents to assess clinical performance as follows:

· the actual behaviour must be reported rather than general traits;

· the behaviour must actually be observed by the reporter;

· all relevant factors in the situation must be given;

· the observer/reporter must make a definite judgment of the 'criticalness' of the behaviour; and

· the observer/reporter must make it clear why the behaviour is considered to be critical.

Sims (**in** Ewan & White, 1984:210) reported that nursing sisters disliked the technique because of the connotation 'critical' and the logistic problems that limit the usefulness of the technique, such as uneven enthusiasm, interest and commitment among assessors, and the difficulties in establishing consensus on categories under which incidents fall.

Ward Round Evaluation

The participants regarded various types of ward round evaluation as a valuable method of continuous assessment and evaluation of clinical knowledge, skills and values, since: "*ward rounds provide invaluable teaching and evaluation situations where real-life comprehensive competency of the learner can be evaluated*". Participants also indicated that: "*The educational development of the learner should receive consideration. It is best used to evaluate senior students.*"

Mellish **et al.** (1998:247) maintain that the depth of knowledge, the powers of observation and the ability to plan and comment on nursing care and the response to treatment would depend on the level of training of the learner being assessed. Ward round provides a holistic approach in that the learner's knowledge in correlating theory and practice, the interpersonal and communication skills, the ability to observe and the use of clinical reasoning skills can be assessed. The ability to use the nursing process critically and reflectively in making clinical decisions and solve problems can be assessed. Learners conduct ongoing checks and assessment, provide a knowledgeable account of diagnosis, treatment and response to treatment. Nursing care plans can be inspected and discussed, and knowledge of medico-legal hazards can be tested (Mellish **et al.** 1998:158). Senior learners are also expected to be evaluated on the general state of the ward.

CONCLUSION

The nine alternative methods to clinical assessment and evaluation methods that were described are among the many methods that can be used. These methods encourage critical, analytical and creative thinking where the learner is expected to demonstrate the cognitive, affective and psychomotor skills. Learners draw certain conclusions that must be justified by means of clinical reasoning. These methods are, according to Major and Pines (1999:122, 123), characterised by flexibility, openness, unrestrictiveness, interaction, dialogue, support and are more learner centred.

The comprehensiveness and holistic picture of the learners' clinical competence can be measured. However, it is clearly indicated that the quality of clinical assessment and evaluation depends on the teachers' degree of creativity and imagination to enhance collaborative clinical learning in accordance with the learners' level of development. Constructive feedback should be provided throughout the student placement and during a final evaluation. Students should actually look forward to the feedback enthusiastically rather than viewing assessment and evaluation negatively and as punishment.

RECOMMENDATION

It is therefore recommended that teachers explore various alternative methods of assessing and evaluating the learners' comprehensive and holistic clinical competence. Strive to strike a balance between the old and new methods. These methods should be used and tested for their effectiveness and efficiency in measuring the predetermined clinical learning outcomes of the learners against the mutually agreed upon explicit criteria. Patterson (1996:53) is also of the opinion that varied alternative assessment and evaluation methods should be explored, used and tested in order to shift the power and influence from the teacher to the learner. Develop an attitude of wanting to help the learners to reflect critically on their practice to

improve their self-awareness, and increase the quality of their self-assessment, which forms the core of clinical assessment and evaluation.

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