

Issues in clinical evaluation tools to measure and evaluate nursing student clinical performance

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Definition, Purpose and Introduction

1. Analysis of the Problem in Terms of Its Potential for Education

Evaluation as defined by Rines(1974) is a method an educator can use to determine the "extent to which a student is achieving the goals of the learning experiences."(p.7) The purpose of evaluation, according to Rines(1974), "encompasses improvement of teaching, assessing the progress of the student, helping the student, assessing the program, defining objectives, developing tools of evaluation, motivating the student, and providing security for all concerned with the educational program"(p.18).

There are a variety methods(tools)used to evaluate clinical performance of students. Some of these are evaluation of performance, evaluation by judgment, evaluation by observation, evaluation by imagination, evaluation by criteria, evaluation by checklist, peer evaluation, client /student evaluation, self-evaluation, and many more. The issue at hand is the reliability and validity of these

methods. Authorities remarked that there are flaws in all of them, that the methods by themselves do not measure quality of performance. Regardless of the methods used, the outcome of the clinical evaluation is dependent on the student remaining in the nursing program and progressing to the next level.

Nursing educators have found the issue of clinical evaluation a major source of frustration. Faculty members are continually reviewing, updating, and revising their clinical evaluation tools Faculty use checklists, rating scales contracts, and narrative forms to collect evaluative data. Faculty develop elaborate mathematical formulas to apply to the evaluation tools to "help" arrive at a "fair" grade for students. Faculty often feel that more is better—the more complex the evaluation tool, the greater the validity. In reality, the opposite is true. In other words, keep it simple and straight forward. Tucker and Mautz(1984) state that certification of clinical competence is based on assumptions dealing with the validity, uniformity, and standards used in a series of individual, primarily subjective judgments. Faculty need to develop objective evaluation procedures that they can agree on and which all faculty in the program will adhere to

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(Litwack, Linc, and Bower, 1985)

This paper is written for instructors and students of nursing who are interested in the reliability and validity of evaluation tools. It will analyze the problem(issue) in terms of its potential for nursing education, It will give views of authorities concerned about the problem(issue). It will analyze the merits of opinions of authorities. It will give a description of the author's position and the reasons for her position.

Clinical evaluations are one of the means by which a nursing program will continue to exist. It is a way of determining the quality of the products (graduate nurses) that the school produces. NLN (1977) stated that "it must be remembered that all these different types of evaluation and measurements are used for making decisions in the course, for developing and improving an instructional system while in the course of its operation"(p.9). It is through evaluation that changes are made to improve the quality of the program. According to Battenfield(1986), the first and most indispensable part of the definition of clinical evaluation is the first sentence : determining whether students are achieving the goals of the learning experience. The second essential aspect is that evaluation is an intellectual process for which the instructor, an expert in nursing, has the knowledge, skill, and experience necessary to appraise and rate the students' behaviors against established expectations.

When the reliability and the validity of one aspect of the program are in question, this places barriers and potential problems on the progress of the program. Its philosophy, objectives, guidelines, etc. will be in jeopardy Accreditation, attraction, and recruitment, and retention of students, percentage of students passing the state boards are also potential problems.

2. What Authorities Are Saying

A perusal of the literature on this issue reveals that authorities are aware that problems exist in

the validity and reliability of methods used to evaluate nursing students' clinical performance.

King(1979) contends that "behavioral objectives attempt to facilitate honest effective communication between nursing instructor and students. This provides a direction for learning and specifies evaluation criteria, by these criteria we can never measure or evaluate all of the students' behavior, but they may be motivated by these objectives"(p. 5). Students try to attain these objectives because they are required to do so, Conflicts arise when the method of evaluation is not suited to the objective and vice versa. The teaching method may not be appropriate or the clinical objectives may not stem from the school's philosophy. King(1979) continues to say that

critics of behavioral objectives argue that actions which can be stated in behavioral terms tend not to be very important, that behaviorally stated objectives limit achievement by putting ceilings on student aspirations and that it is impossible to specify and evaluate all the outcomes that may be accomplished by the instruction. (p.5).

On the other hand, "advocates of behavioral objectives counter these arguments with : important or not you can never measure intangibles, thus it is far better to concentrate on the attainable. Second, attainment of objectives does not diminish student aspirations, but motivate students to succeed"(p.5) Students may succeed in achieving the objectives but learning may not have to make judgements on these types of tests. He goes on to say that "determinants of this type of validity are quite subjective." A student may pass a test by guessing the answers. There is always the problem of students cheating on tests.

Virginia Conley, NLN, 1977, that major problems exist in any system of evaluation. These "problems revolve around two fundamental issues : (1) the development of appropriate instruments(tools) which will be used to obtain the necessary data about the student performance, (2) the value judgments that will be used in decision-making" (p.9). The value judgments a teacher places on a

specific type of behavior may not be the value judgment or opinion of another teacher. Value judgments may prove invalid in clinical evaluation if its accuracy is not tested.

Torres (1982) contends that "in order to evaluate any educational process, it is essential that some mechanism be developed to validate learning in relation to behavioral objectives. Such mechanisms usually take the form of measurement tools which tend to be quantitative rather than qualitative. Admittedly qualitative data primarily reflect a professional judgment approach which strongly influences the development of quantitatively developed tools"(p.91). Some teachers have a tendency to evaluate students by the quantity of work or the amount of objectives they accomplish rather than by the quality of their work. Both should be taken into consideration. Tools should be set up to measure quantitative as well as qualitative performance.

Due to the above contention, Torres(1982) came up with the idea that "there are three types of evaluations that occur within any program, which involves the student's ability to achieve the stated objectives. These are : (1) evaluation for continued learning, (2) evaluation for grading, and (3) evaluation for curriculum revision"(p.151). The three items may be good but here again value judgments are evolved with these types of evaluation, and the reliability and validity of value judgments are always a major concern.

Belinda Puetz in her argument about the issues also contends that "there are two types of evaluation, the quantitative and qualitative ; and that validity is a variable in any quantitative evaluation."It is also problematic in qualitative evaluation. Reliability, on the other hand, is problematic with qualitative evaluation, in that similar methods of evaluation must be tested or replicated, Reliability is rarely a problem in quantitative evaluation. Litwack(1985), argues that a workable evaluation system "is to convert the qualities of performance into objective terms. This can be done by

establishing standards or criteria by which employees(nursing students) can be evaluated"(p.149). Other authorities such as Clause and Bailey prefer guidelines by which to evaluate clinical performance(p.24). Again value judgments are placed on any qualitative or quantitative evaluation, due to the nature of human beings.

3. Relative Merits of Opinions of Authorities

Almost all of the authorities agree that objectives are necessary for any form of evaluation to take place. They also agree that there are inherent problems in the present methods of evaluation of student nurses' clinical performance. This is due to the relative nature of human beings in making decisions and judgments.

It is different to agree upon specific evaluation tools to assess clinical competence, even when a variety of tools are available. No one instrument or tool will suffice. Several tools must be utilized to improve the reliability and validity of evaluation.

Authorities like Montag, Rines, King and Conley agree that to improve our present standards of clinical evaluation, teachers of nursing need to prepare themselves through continuing education in the subject matter.

4. Description of the Author's Position

In a changing society nurse educators must have some method whereby they can evaluate the students' clinical progress and thus improve our nursing programs. According to Montag(1974).

While the evaluation of students is always important, it is imperative that in nursing education we seek to extend and improve our skills in evaluation. Through evaluation we can assure the future consumer of nursing that the graduates of our programs are capable practitioners of nursing.(p. Forward).

In this present day and time, the presenting obstacles will always prevent us from making valid

clinical evaluations of our students. But perhaps we can improve upon it. Montag continues to say, "while we will never be able to perfect evaluation practices, we can and must develop better ways and means of evaluating student performance". (1974, p. Forward). There should be some courses developed and ongoing in a continuing education program to keep teachers abreast of evaluation methods and to develop skills in creating appropriate evaluation tools. Montag concludes that "while the need for evaluation is well known and all teachers engage in many different kinds of practices leave much to be desired." (p. Forward). Educators should be more objective in their evaluation of student behavior, even though the behaviors are difficult and complex in nature. They should prepare themselves in the process of evaluation even if it means educating themselves in the subject matter. "Then to implement the process of evaluation, they must use many different devices and many different samples of student behavior. All of the samples together give a more reliable basis for determining a trend of behavior. No one tool and no one sample will suffice" (Rines, 1974, p. 4).

In order to avoid some of the presenting problems or obstacles, teachers must develop high level instruments (tools) for evaluation. Conley followed through by saying that "in order to use these instruments effectively, teachers must prepare themselves with a set of high level skills such as mastery of the subject matter, expertise in communication, creative ability in designing a context for the task which is to be measured" (Conley, NLN, 1977, P. 10). There is no doubt that we need better prepared teachers in our system.

There is such an emphasis on hiring doctorally prepared teachers that there are many individuals unprepared in the teaching of nursing, and unskilled teachers in clinical skills and techniques (or who have either forgotten or have not kept up with the skills and techniques). There are also teachers who are unprepared to do clinical evaluations because they never had the proper education. These

individuals flood our discipline today and are hired to teach clinical nursing and to evaluate students' clinical performance. Perhaps the author can speculate here and say if all non-teachers of nursing were removed from teaching nursing, we may be able to solve some of the existing problems. This will take a very long time, perhaps not in my lifetime, but a change must be implemented.

Oftentimes, clinical nursing educators refer to their job as "supervising the students in the clinical area," perhaps they should concentrate more on clinical teaching rather than supervision. To test the reliability and validity of clinical evaluation tools written tests should be developed about the skills or techniques or procedures to be performed. These tests should be given at the end of the procedures and at the end of the clinical course.

King (1979) verifies this when he states that "a test must be developed and administered, then it requires administering the same test to the same group with the same intervening time interval from several days to several years" (p. 64). This not only tests the student's knowledge, but it tests learning.

5. Reasons for Author's Position the Issue

There are too many negative factors that influence clinical evaluation. Example : Rating (evaluation) errors are common. Litwack (1985), states, "one of the more common rating errors is personal bias, when the evaluator's individual likes and dislikes enter into the employee (student) performance appraisal (evaluation)" (p. 194). Too often it is said that one has to stay on the "good side" of the teacher (evaluator) so as not to be judged negatively but by their positive actions. In most cases, positive evaluations become motivational forces for the individual student. According to Litwack (1985), "a second rating error is temperament effect—being too strict or too lenient as an evaluator". Some evaluators focus only on the negative, with little positive reinforcement, while others offer only praise, finding it difficult to give negative

feedback. Whereas, some evaluators rate (evaluate) everyone too high or too low, others tend toward the center, rating everyone as average (p.194). Some evaluators (teachers) feel that one negative connotation among the positives is demonstration of a good evaluator. No one is perfect and all positives demonstrate perfect performance. Haphazard evaluation has no basis, no guidelines, criteria, objectives or directives on which to base behavior. The "halo effect occurs when the evaluator allows one characteristic behavior to influence the appraisal of all other behaviors, A similar rating error is problem distortion allowing one negative performance to outweigh several good or positive performance" (p.194). On many occasions teachers evaluate students on previous evaluations which is not a true evaluation because it does not reflect changes in behavior and thus no interpretation as to whether learning has taken place. Clinical evaluations give off negative vibes when "the school's philosophy prevails on a set type of checklists or a certain type of evaluation should be given: also when" common errors including poor communication, criticizing, interrupting the employee, smoothing over problems, failing to check out the facts beforehand, 'passing the buck,' and turning the appraisal session into a social visit (Steven, 1983).

Clinical evaluations are based mostly on judgments of the teacher. Clinical evaluation tools should reflect student progress. It is wise to notify the student of deficiencies and document this notification. Additionally, the faculty should make judgments despite the fact that these judgments are based on limited observations and in subjective areas. The faculty should strengthen clinical evaluation tools by establishing criteria or scales that delineate the requisite knowledge, skills, and professional characteristics that students must meet. The issue of reliability and validity also ensues when students are asked to evaluate their own behaviors. In this case, students are given evaluation instruments (tools) to take home to allow them time to evaluate themselves. Most students

rate themselves very highly, some average. Their object is to succeed. Some students tend to evaluate themselves quantitatively. They do not take into consideration how well they accomplished these goals and whether learning took place. Self-evaluation, according to Litwack (1985),

"typically requires the student to identify personal strengths and deficiencies at specified points of the program, according to predetermined criteria. In one such model students are first shown the instructor's evaluation at interim, or at final evaluation conferences. They are asked to evaluate themselves and to indicate any disagreements with the instructor's assessment. This is not an effective method, primarily because the student's self-evaluation is affected to an unknown degree by the previously communicated evaluation of the instructor. (p. 151)."

Students can also influence the instructor to change the evaluation.

At the beginning of the clinical experience, students should be given copies of the checklist, objectives and evaluation tool that will be used by the teacher to evaluate their progress periodically.

Litwack (1985) states that "students can be asked to complete the clinical instrument as a self-assessment tool and bring the completed instrument to the evaluation conference. A discussion can then be held about discrepancies between student and faculty evaluations and plans can be made for the future." (p.151).

Nursing faculty should begin to identify various strategies that are more likely to succeed in assisting a student to improve performance. To maintain adequate and accurate clinical evaluation of nursing students, further research should be in progress to test the extent to which they affect the reliability of clinical evaluations of student performance. The importance of the evaluation process should be stressed as an important part of the learning process. The author emphasizes that the teacher is described as a critical factor in the teaching-learning process. Faculty has to provide materials so that the student is able to understand more clearly the

basis for the instructor's assessment of her or his progress and likely to view it as fair effective judgment. The trend in nursing education is to focus on methods to develop self-motivated life-long learners, create alternate learning strategies to achieve learning goals, and improve ways to measure the quality of student performance.

Stecchi et al(1983) pointed out that several criteria had to be considered in developing a comprehensive evaluation tools :

1. The tool should accurately reflect the conceptual framework of the curriculum in both its horizontal and vertical strands.
2. The tool should measure the clinical competencies of the students as well as their ability to apply theoretical knowledge in clinical practice.
3. The tool should reflect increasingly complex behavioral and practice objectives and culminate in mastery of specific end objectives.
4. The tool should meet the needs of clinical faculty evaluating students in a variety of clinical setting.
5. The students should be able to use the tool to evaluate their own development of professional practice.

I see many discrepancies in the clinical evaluation methods developed by many of the authorities, many of which are already mentioned throughout this paper. I agree that no one's instrument(tool), method, objective criteria(or any present form of evaluation) has been developed that will suffice or delineate the existing problem. The reliability and validity of each in itself is in question. Perhaps a meeting of the minds and compiling all the knowledge and work of each authority will help to develop an appropriate clinical evaluation tool. On the other hand, as long as human beings exist with biases, temperaments, likes, and dislikes, the problem of reliability and validity of clinical evaluation will always be an issue.

Author have addressed the issue as it exists

today and the factors that highlight the issue. I have made remarks and given suggestions on how this problem can best be solved.

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-국문초록-

간호학생의 임상실습평가와 측정에 관한 도구의 신뢰도와 타당도

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이 연구는 현존해 있는 다양한 임상평가도구의 신뢰도와 타당도에 관한 분석 서술 연구이다. Rines(1974)에 의하면 평가는 학습경험을 통하여 목적을 달성하는지의 여부를 측정하는 것이라고 하였고 평가의 목적은 교육증진을 도모하며, 목표를 설정하고, 학생의 학습진행과정을 사정하여 학생들을 위한 프로그램을 사정, 개발시키는데 있다고 피력하였다.

간호교육에는 실무교육이 많은 비중을 차지하고 있다. 또한 많은 간호교육자들은 실습평가에 있어 많은 어려움을 경험하고 있다. 이러한 난해한 실습평가도구를 개발하기 위하여 선행된 우선순위로써 현존해 있는 다양한 평가도구의 신뢰도와 타당도를 평가하는 것이 의의 있는 일이라 사료된다. 이 논문은 실습평가도구의 신뢰도와 타당도에 관심을 가진 임상지도교수나 간호교육자들을 대상으로 한 서술적 연구이다.

우선 간호교육평가에 있어서의 문제점을 분석하고 평가도구에 대한 전문가(Authority)의 의견을 피력한 다음 저자의 의견을 서술하였다. 결론적으로 현재까지 개발된 완전한 임상실습평가의 방법은 없다. 그러므로 현존해 있는 평가방법을 서술평가하고 문제점을 지적함으로써 질적인 평가도구개발에 도움을 줄 수 있다. 앞으로 간호교육자들이 각 문제점들을 보완하여 교육 목적을 달성시킬 수 있는 효율적인 평가도구를 개발하는 것이 급선무이다.

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