

Original Article

Importance of clinical skills exam: An opportunity for allied healthcare students

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Abstract. The clinical skills remain crucial for effective patient care in today's medical environment. Research works have shown that students lack clinical skills even after graduation. One reason which could be the cause is that the faculty is unable to evaluate the students on the clinical skills exam, if the student is informed about the significance of clinical skills and about a certification exam structure which not only evaluates the student on a theory exam section but also on a clinical skills exam section, this may lead to increase focus and practice of the clinical skills more often by the students, not because the training program requires it but also because the certification they are about to appear for consist of a clinical exam section along with a theory exam section. The students will prepare themselves in such a way that the clinical skills can be performed when asked to be performed on the clinical skills section of the certification exam. Also on passing such certification exams with a clinical skills exam section on it, will not only evaluates the student's knowledge but may also exhibit the employer that the student has performed the clinical skills exam and a theory exam to get certified. The most significant approach of evaluating clinical skills is by direct observation of the student performing the clinical skills. Eventually clinical skills training can be put to test by finally challenging a certification exam by the student which evaluates the students not only on a theory exam but also on a clinical skills exam, this will not only motivate the student to work harder on the clinical skills exam but will also encourage the student to learn and practice the skills to a level that it can be performed on the clinical skills exam. The student can then perform the clinical skills in the direct observation of a qualified evaluator who can then document the results for the clinical skills exam. Research works have shown that clinical skills are deficient in students who perform least in the direct observation of the faculty member in training period; this may sometimes lead to not passing the clinical skills exam on the certification. Clinical skills assessment has a very important role in healthcare training and education. The author outlines the use of clinical skills exam and the ways in which a faculty can improve the method of training the students for clinical skills. The author is stimulating the idea of focusing of clinical skills exam for allied healthcare professionals, as it may lead to effective care for patients.

Keywords: Clinical skills, allied healthcare, student exam

Introduction

Many academic institutions structure their program but underestimate to assimilate the need for evaluation of their students by a third party resource on a clinical skills exam which can be a certification organization. Academic institutions and faculty members should conceive the idea of getting the students tested by an organization which not merely evaluate the candidates on a theory exam which is solely multiple choice but also on a clinical skills exam in which the students will have to demonstrate the skills under direct supervision which then will be graded and recorded by a qualified evaluator supervising the clinical skills [1, 2].

Preparing the students for the certification exam which evaluates the students on a clinical skills exam and a

theory exam will have the faculty members plan ahead and strategize the process of teaching with proper focus towards the clinical skills training rather than the theory section. Allied healthcare candidates are an integral part of the society in today's healthcare environment as their help is what is required by qualified license professionals, the qualified professionals like physicians, surgeons, nurses and others may only rely on allied healthcare candidates who demonstrates the level of knowledge required to perform the clinical skills in the respective healthcare facility [3-6].

Focusing on strategizing implementation of standard clinical skills into a faculty training plan for allied healthcare professionals such as vital signs, physical examination, phlebotomy, electrocardiography and

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TABLE 1
 IMPLEMENTING CERTIFICATION EXAM AS A PART OF ALLIED HEALTHCARE TRAINING PROGRAM
 AND ITS OUTCOME STATISTICAL DATA USING RANDOMIZED CONTROL TRIAL

Table Data	GROUP 1	GROUP 2
Orienta- tion Day	Faculty informed students about certification exam with only one exam component (THEORY EXAM)	Faculty informed students about certification exam with two exam component (CLINICAL SKILLS EXAM) (THEORY EXAM)
Information	Students were informed that the certification exam will consist of A THEORY EXAM "X" number of multiple choice questions which will assess their clinical and theoretical knowledge	Students informed were informed that the certification exam will consist of 1. A THEORY EXAM "X" number of multiple choice questions which will assess their clinical and theoretical knowledge 2. A CLINICAL SKILLS EXAM in which the students will have to demonstrate the clinical skills to an evaluator
Planning Implemen- tation	Faculty concentrated on theory component because this was the majority of content which was to be present on the certification exam for evaluation purposes to receive a certification	Faculty concentrated equally on clinical skills and theory skill component because both the components were present on the certification exam for evaluation purposes to receive a certification
Performance	Students were evaluated on the theory exams on REVIEW class test to assess the student's knowledge to be ready for the certification exam	Students were evaluated on the theory exams, on REVIEW class test to assess the student's knowledge to be ready for the certification exam. + Students were assigned with simulated clinical skills exams to prepare the students for the clinical skills exam on the certification.
Faculty Super- vision	Faculty supervised the clinical skill sessions and theory exam sessions along with regular class hour sessions.	Faculty supervised the clinical skill sessions and theory exam sessions along with regular class hour sessions.
Progress evaluation	Faculty found majority of students performing better on Theory exams before the final certification theory exam	Faculty found majority of students performing better on Clinical skills simulated exam before the final certification exam Theory exams before the final certification exam
Certification exam	Toward the final session of the classes the students were reminded about the certification exam and were again informed that the certification exam consist of: Theory Based Exam (Multiple Choice Questions)	Toward the final session of the classes the students were reminded about the certification exam and were again informed that the certification exam consist of: Clinical Skills Exam(to be demonstrated under direct supervision of a qualified evaluator) Theory Based Exam (Multiple Choice Questions)
Pre-certification exam feedback	STUDENT FEEDBACK BEFORE CERTIFICATION EXAM <u>THEORY EXAM COMPONENT</u> Practiced Mock Test Practice Online Quizzes Online resources for multiple choice exams Students were confident about the certification exam as they have practiced variety of practice question before challenging the theory exam.	STUDENT FEEDBACK BEFORE CERTIFICATION EXAM <u>CLINICAL EXAM COMPONENT</u> Had to practice and revise clinical skills under-supervision to make sure the clinical skills can be demonstrated appropriately on the clinical skills exam section for the certification exam. <u>THEORY EXAM COMPONENT</u> Practiced Mock Test Practice Online Quizzes Online resources for multiple choice exams Students showed confident about the certification exam as they have practiced variety of practice question before challenging the theory exam.
Post- certific- ation exam Feed back	N/A	Students had a better retention of clinical skills due to its repetition for preparation, which was to be performed on the clinical skills exam.

patient care skills can be beneficial. The benefits not only limits for the faculty training program but also for the outcome of the students career progression to be certified, it eventually may also help the student in finding a position in a healthcare facility where the student can demonstrate the knowledge of not only theoretical aspects but also on the clinical skills which

is the most important requirement for every job available for allied healthcare candidates [10].

Ways in which the faculty members can implement these changes are as follows, according to study done on academic institutions with an average of 15 students in each class. The study done was to prepare students for the certification exam for phlebotomy and EKG



Figure 1 Miller's Prism of Clinical Competence

Knows: knows some knowledge

Knows how: knows how to apply that knowledge

Shows: shows how to apply that knowledge

Does: actually applies that knowledge in practice [9]

certification.

Few questions related to introducing clinical skills exam as a part of the certification exam for allied healthcare students:

- How effective can a certification exam with clinical and theory components be?
- What role can a certification exam play in a student's learning process?
- Which exam type can lead to better retention of clinical skills?
- What effect can the clinical skills exam on a certification exam bring for the facility and for the students?

The introduction of clinical skills exam in the allied healthcare area will provide an opportunity to reflect student's ability to perform the clinical skills before being certified, in the world of emerging technology [11], how can clinical skills help a student perform better when coming face to face with a patient. Clinical skills accomplishment and expertise does matter as this has a direct relation with effective patient care [12]. Academic faculty members should focus on clinical aspects of the responsibility taking into consideration and its direct or indirect effect on the patients. Clinical skills should not only be taught but also be evaluated to get better outcome results.

Priority of Clinical Skills & Implementing Changes:

Faculty should focus and have a strategic plan about how the clinical skills will be taught to the allied healthcare students taking into consideration the theoretical aspect of the content area [13]. A well-structured program for allied healthcare students has proven to be more beneficial; a balance of clinical skills [14] and theory component should always be a part of the program structure when designing the core components of the program with appropriate lab work and required job skills. According to Bordage et al [15]

acquiring poor data skills is an important component in diagnostic inaccuracies.

Teaching proper communication to students can also help them minimize error while performing clinical skills [16]. When implementing the clinical skills [17], communicating with the patient should also be emphasized as per Harris poll exhibits that over 95% respondents said communication and diagnostic skills are an important factor. This means that the student should mostly be performing under observation for improvement & development of clinical skills and communication skills to provide effective and useful patient care during their period of training, students have shown to work better under supervision while performing clinical skill in an academic setting for the period of training, the reason for supervision is to correct the incorrect step that the student might be performing in the absence of the supervision [18].

Recent research studies

Recent researches have shown the following:

- Research has time again shown that a multiple choice examination cannot attest to a student's proficiency in clinical skills.
- Research has repeatedly demonstrated that a multiple-choice examination cannot attest to a trainee's proficiency in clinical skills, a need of simulated clinical skills exam is must.
- Recent research has highlighted the importance of strong clinical proficiency.

A clinical skills exam does not ensure that the student is perfect and can perform skills without error, the clinical skills exam is just to prepare the students with the knowledge of basic clinical skills required to enter the healthcare environment.

National Certification Career Association (NCCA) evaluates students on clinical skill exams on 4 of their allied healthcare certification exams [19, 20]. It is one

of the very few certification organizations evaluating students on clinical skills exam. The certification organization not only evaluates the students on a clinical skills exam but also on a knowledge exam which is a multiple choice exam. When asked about why has NCCA chosen this model for their candidate, the response received from NCCA officials “we just try to make sure that the candidates have received sufficient training to enter the workforce to share their part of the work with the new healthcare colleagues” the design model was suggested by the organizations vice-president who believes that effective care for patients can be achieved by evaluating the students’ knowledge in two ways CLINICAL and THEORETICAL, making sure that both practical and theoretical aspects of the knowledge received are covered when the students is evaluated for a certification exam by national certification career association [19].

Summary

Implementing changes

-Have your faculty make a plan in which clinical skills are an important part of the training period

-Faculty should perform evaluation, observation and feedback about each student’s clinical skills for learning process

- Faculty should keep a progress report of each student about their clinical skills performance

- Faculty should provide more clinical skills performance session with simulated patient care

- Faculty can encourage students to challenge a certification exam which evaluates students on clinical skills exam component and theory exam component

- Faculty should update their tutorial data with new emerging technology and changes.

Evaluation of student’s technical and clinical skills is important in ensuring the competency of educational programs as well as ensuring the trainee’s dexterity to deliver quality care [21]. Professionals have a responsibility to assess their own competency for practice and thus students should be provided with opportunities to self-assess throughout their academic program in order to develop and refine this ability. It is not enough to show the students what to do; the most important thing is to show them how to do it? Observation and practice should be an important part of the training. Demonstration is necessary to transform an experience into learning through the development of insight, which is essential for further growth and development of true expertise.

Conflict of Interest

The authors declare no conflicts of interest.

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