

Developing and Validating Standards for Clinical Teaching Skills

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Abstract

Background: Teaching in clinical settings presents nurse educators with challenges that are different from those encountered in the classroom. **Aim:** This study was aimed at developing and validating standards for clinical teaching skills. **Design:** A methodological design was utilized. **Setting:** It was conducted at the Faculty of Nursing, Ain-Shams University on a group of 72 faculty assistants who participating in clinical teaching, and jury group consisted of 30 nursing faculty members. **Tools of Data collection:** Data collection tools included an opinionnaire for jury group, an questionnaire sheet for faculty assistants group, and an observation checklist. **Results:** There were high agreement of faculty assistant upon all proposed standards. 87.5% of them agreed upon the total standards. 80.6% of assistants faculty, had adequate performance of the proposed standards. There was a high agreement upon almost all items of the proposed standards by jury group. The total agreement ranged between 85.7% to 100.0%. **Conclusion:** applicability as shown by the high performance of the faculty assistants using proposed standard. **Recommendations:** Apply The proposed standards at the Faculty of Nursing, Ain-shams University and in similar settings. Offer the necessary equipment and resources to apply the suggested standards.

Key words: Clinical teaching, Skills, Development, Standards.

Introduction

Nursing is a professional discipline. A professional is an individual who possesses expert knowledge and skill in a specific domain acquired through formal education in institutions of higher learning and through experience and who uses that knowledge and skill on behalf of society by serving specified clients. Professional disciplines are differentiated from academic discipline by their practice component. Clinical practice requires critical thinking and problem solving abilities, specialized psychomotor and technological skills and a professional value system. Healthcare professionals must

use critical-thinking skills to solve increasingly complex problems. Educators need to help nurses develop their critical-thinking skills to maintain and enhance their competence (*Jamshidi, 2012*).

Clinical teaching is more important than classroom teaching, because nursing is a professional practice discipline. Teaching in clinical settings presents nurse educators with challenges that are different from those encountered in the classroom. In nursing education, the classroom and clinical environments are linked because students must apply in clinical practice what they have learned in the classroom, and through other experiences. However, clinical settings

require different approaches to teaching. The clinical environment is complex and rapidly changing, with a variety of new settings and roles in which nurses must be prepared to practice (*Kathleen and Oermann, 2010*).

What the nurses and nursing students do in clinical practice is more important than what they can demonstrate in a classroom. Clinical learning activities provide real-life experiences and opportunities for transfer of knowledge to practical situations (*Oermann and Gaberson, 2009*).

Clinical teaching lies at the heart of nursing education; its importance cannot be overemphasized. In the clinical setting, nurse students are primed for the reality of their professional roles. In other words, clinical teaching and learning help to prepare students for the kind of work they will have to do as practicing nurses. Real life clinical experience allows nurse students to improve their skills so become competent practitioners. Effective clinical teaching is critical for quality nursing practices; and clinical nurse educators (CNEs) are mostly responsible for teaching student nurses in the clinical setting (*Eta et al., 2011*).

Clinical learning is defined as "a process that is able to be known to learners and allows students to use what has been learned in a clinical experience in subsequent experiences." Clinical teaching is defined as "actions, activities, and verbalizations of the clinical instructor which facilitate student learning in the clinical setting" (*Kube, 2010*). Clinical learning activities provide real-life experiences and opportunities for transfer of knowledge to practical situations. It focuses on the relationship between theory and practice, and can assist students not only to apply theory, but also to search the ways that nursing theory can emerge from the rich texture of clinical practice (*Guilbert, 2002; Oermann and Gaberson, 2009*).

Clinical education plays a crucial role in undergraduate nursing program. Not only does it provide opportunities for students to apply the theory learned in the classroom to the real world of clinical nursing, but also it is a socialization process through which students are inducted into the practices, expectations and real-life work environment of the nursing profession (*Lewin, 2004*). The aim of clinical education is to develop in the student the professional skills and knowledge needed in life-long learning and critical thinking, to create self-confidence as a nurse, and to ensure that the nurse is able to make her own decisions and be independent (*Tiwari et al., 2005*).

The clinical nursing instructor is responsible for managing, educating and supporting the student nurses during clinical practice that is most effective for facilitating learning process. Clinical instructor behavior and skills that enhance effective clinical instruction include clinical teaching skills, having experience, having good communication skills, providing constructive feedback, facilitating a student-centered environment and give student chance for training during clinical practice. Correspondingly, students propose that supportive clinical settings have clinical instructors who provide constructive feedback, use good communication skills and help students develop self-confidence (*Levy et al., 2009*).

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instructors who provide constructive feedback, use good communication skills and help students develop self-confidence (*Levy et al., 2009*).

Additionally, nurse students perceive their instructors as having effective clinical instructors' characteristics as creating environment with mutual respect, giving immediate feedback, motivating the students, and being accessible all times for answering carefully and precisely questions raised by students. Also involve giving good instructions to their students according to level of readiness, creating a constructive learning environment, applying theoretical knowledge to clinical practice, and demonstrating excellent role model (*Awad, 2015*).

Excellent clinical teachers are described as nurse role models, effective supervisors, dynamic teachers, and supportive individuals, possibly complemented by their role as assessors, planners, and resource developers (*Ramani and Leinster, 2008*).

Effective role models are clinically competent, possess excellent teaching skills, and have personal qualities, such as compassion, sense of humor and integrity. Effective supervisors give feedback and provide guidance, involve their students in patient care, and provide opportunities for carrying out procedures. Studies on work-based learning show that work allocation and structuring are important for learners to make progress and that a significant proportion of their work needs to be sufficiently new to challenge them without being so daunting as to reduce their confidence (*Bolhuis, 2006*).

Significance of the Study:

The researcher as a clinical instructor observed that there is no standardized strategy for evaluating the clinical performance of the students, and no

adequate formative assessment function with mechanisms for providing structured and timely feedback to students' questions. There is also inefficient use of available facilities. Hence, the development of clinical teaching skills standards is highly needed to promote better preparation of new nurses who are able to compete at the national and international levels, think critically, solve problems, apply evidence-based practice, and ensure patient safety and satisfaction. For these reasons, this study will be carried out to develop a process standard of clinical teaching skills for faculty assistants.

Aim of the Study:

This study aimed at developing and validating standards for clinical teaching skills through:

- 1- Determining clinical teaching skills from nursing Faculty assistants' point of view;
- 2- Designing clinical teaching skills standard based on literature;
- 3- Examining the proposed standards validity based on experts opinions.

Subjects and Methods:

Research design:

A methodological design was used to achieve the objectives of this study.

Setting:

The study was conducted at the Faculty of Nursing, Ain-Shams University in the different scientific departments where nursing students are trained. These included medical-surgical nursing, pediatric nursing, maternity nursing, psychiatric and mental health nursing, community health nursing, and nursing administration.

Subjects:

The subjects who participated in the study consisted of two different groups, namely faculty assistants group and jury group.

- **Faculty assistants group:** All faculty assistants working at the Faculty of Nursing, Ain-Shams University, and participating in clinical teaching during the academic years 2015-2016 were eligible to be included in the study. Their total number was 72 (23 were demonstrators and 49 were assistant lecturers).

- **Jury group:** This group was consisted of 30 faculty members from ten faculties of nursing namely, Ain-Shams, Cairo, Assiut, Port-said, Menoufyia, Banha, Elmansoura, Helwan, Elzagazeg, and Elmenia Universities. They represented different nursing specialties.

- **Data collection tools:** Three tools were used for collecting data namely an opinionnaire for jury. Questionnaire sheet, and observation checklist. **Opinionnaire sheet for**

jury: it was aimed at eliciting the opinions of the jury group regarding the proposed standards for face and content validation. It was developed by the researcher based on the related literature (**American Nursing Association [ANA], 2004; Marquis and Huston, 2006; Mohamed, 2014**). It consisted of three parts as follows.

- **Part I:** This part included data related to the personal characteristics of the jury group member such as job position, department, and work place. years of experience.

- **Part II:** This part is concerned with the assessment of the face validity of the proposed standards through experts' opinions. It included 11 items and sub-items covering the general form of the proposed standards. The responses were either "agree" or "disagree," in addition to comments.

- **Part III:** This was intended to assess the content validity of the proposed standards. The responses were either "agree" or "disagree," in addition to comments. It covered 15 domains with a total of 103 criteria.

Domains	Number of items	Examples
Personal attributes/Appearance of faculty assistant	4 items.	Has appropriate dress
Preparation for session	4 items.	Prepare environment for session
Voice characteristics	5 items	Voice is clear (good articulation)
Body language	9 items	Face students while speaking
Personality	6 items	Start working in time
Demonstration skills	6 items	Set goals for clinical day
Facilitation skills	5 items	Provide clear visibility for each student
Assessment and coordination skills	6 items	Assess students understanding of the clinical procedure.
Supporting skills	6 items	Answer students' questions clearly
Training skills	8 items	Demonstrate procedure for students.
Interpersonal relations and communication skills	10 items	Deal with other colleagues with respect
Creation of stimulating learning environment	7 items	Ensure that facilities adequately accommodate students.
Role model	7 items	Show model of clinical competency.
Evaluation and feedback skills	13 items	Observe student performance during clinical practice
Critical Thinking Skills	7 Items	Ask vital questions that stimulate student critical thinking.

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• **Questionnaire for faculty assistants:** it was developed by the researcher based on the related literature (*Mahfouz, 2007; Mohamed, 2014*) for soliciting faculty assistants' opinions about the importance of various criteria of standards of clinical teaching skills. It consisted of the following parts.

○ **Part I:** This part aimed for collection of data related to the demographic characteristics of the faculty assistant such as age, job position, specialty, and experience years.

○ **Part II:** This part aimed for assessment of the faculty assistant's scales for self-rating of teaching and training abilities.

• **Observation checklist:** it was developed by the researcher based on the related literature (*Mahfouz, 2007; Mohamed, 2014*) for examining faculty assistants' performance of the various criteria of standards of clinical teaching skills and determining the applicability of the developed standards. It consisted of the same parts as the opinionnaire sheet with its domains and criteria. Each item or criterion was checked as either "done" or "not done."

• The performance was considered adequate if the percent score was 60% or more and inadequate if less than 60%.

II. Operational Design:

The operational design includes the preparatory phase of the study, the pilot, and fieldwork.

Preparatory phase:

The researcher started the process of development and validation of the data collection tools. This was done based on the proposed standards and through revision of the pertinent literature using

international journals and standards, textbooks, articles, magazines, and different scientific websites. A preliminary form of the proposed standards for teaching skills was developed; The next step was the development of the opinionnaire for validation by the jury group. Finally, the observation checklist was developed based on the validated standards to assess their applicability. The tools were validated by a panel of jury that included professors from the Medical-Surgical Nursing department at the Faculty of Nursing, Cairo University, and assistant professors from the Nursing Administration departments at Ain-Shams, Cairo, Benha, Port-Said, Menoufyia, Assiut, Elmansoura, Helwan, Elzagazeg, and Elmenia Universities. The necessary modifications were done according to their comments and suggestions.

Pilot study

A pilot study was conducted on a sample of 8 faculty assistants, selected randomly from different scientific departments. The aim of the pilot study was to test clarity of the data collection tools and their feasibility. It also helped in estimating the time needed to fill in the forms. It took 30- 40 minutes to fill the forms depending on the work conditions and interruptions. The modifications needed were done based on the pilot study results, and finalized data collection forms were prepared. The subjects who participated in the pilot study included in the main study sample. The reliability of the proposed standard were tested using examining its internal consistency. The reliability was very high with a Cronbach alpha coefficient 0.976.

Fieldwork

Data collection started from the beginning of October 2015 to the end of June 2016. The fieldwork was carried out through the following phases.

○ **Phase1:** Questioner sheets were distributed to the participants in their work settings. They filled the forms at the time of distribution. Their filling-in took 25-30 minutes. The researcher checked each sheet to ensure its completion. This step took about three months started January to march 2016.

○ **Phase2:** The researcher distributed the proposed standards along with the designed opinionnaire sheet to be filled by jury group members in their work settings for testing its face and content validity. It took 30-45 minutes. This phase took about two-months started for November to December 2015. The proposed standards was then finalized based on the opinions of the jury group members.

○ **Phase 3:** In this phase, the researcher assessed the applicability of the validated finalized standards. Through the assessment of the performance of the faculty assistants in clinical settings. The researcher and the clinical instructors who works in the college laboratory observed the faculty assistant during implementation of the proposed standards. The observation was done three times. This phase took about three-month duration from April to June 2016.

III. Administrative Design:

Before embarking on the study, official, formal letter were issued from the dean Faculty of Nursing, Ain-Shams University to the head of each scientific department, explaining the aim of the work, and the expected benefits and ask their support.

Ethical considerations:

Prior to actual start of this research, ethical approval was obtained from the Scientific Research Ethical Committee of the Faculty of Nursing at Ain-Shams University. All official permissions were

obtained. The aim of the study and its procedures were explained to each expert participate. They were reassured about the anonymity and confidentiality of any collected data. The study procedures could not induce any actual or potential harm to participants.

IV. Statistical Design:

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians and interquartile ranges for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the developed scale through its internal consistency. Qualitative categorical variables were compared using chi-square test. Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5, Fisher exact test was used instead. Statistical significance was considered at p-value <0.05.

Result

Table (1): shows that faculty assistant had age ranged between 23 and 50 years, approximately three quarters of them (73.6%) had a master degree in addition to their bachelor degree. Their experience years ranged between one to eighteen years, with median 8.5 years.

Table (2): There was a great majority of faculty assistant were agreement upon the importance of all its criteria, with first interquartile score 2.0, indicating agreement upon importance by at least three fourth of the sample. Thus, none of them considered faculty assistant staff formal and neat dress as “non-important” appearance criteria. In total, indicates very high percent scores of faculty assistant staff agreement upon the proposed standards.

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Table (3): The mean percent scores of agreement ranged between 86.11 for personal attributes and appearance standards, to 94.08 for the other criterion of evaluation and feedback skills. Meanwhile, the median scores for all criteria were 100.00 indicating that at least one-half of the sample agreed upon them. The only exception was for the first of personal attributes and appearance, which had a median score of 87.50. Overall, the median total percent score was 99.19.

Figure (1): As Illustrated 87.5% of the faculty staff members expressed their agreement upon importance of the total proposed standards. In total, indicates high percentages of faculty assistant staff adequately performing the fifteen standards. The highest percentages of adequate performance were in the standards related to critical thinking skills (88.9%), and supporting skills (87.5%). On the other hand, the lowest percentages were in the standards related to facilitation skills (75.0%), creation of stimulating

learning environment (76.4%), and demonstration skills (77.8%).

Figure (2): displays, 80.6% of the faculty staff members had total adequate performance of the developed standards.

Table (4): points to jury group members' agreement upon almost all items of the face validity of the proposed standards. The only exception were related to the standard being written correctly, scientifically, and appropriately, as well as its inclusion of assessment of clinical teaching skills structure regarding location, facilities/ tools, and manpower. Only two of the 30 jury members disagreed upon these items. Concerning the content validity of the proposed standard,

Table (5): indicates all jury group members' were agreed upon all items of personal attributes/appearance of faculty assistant, preparation for session, voice characteristics, body language, and personality.

Table (1): Demographic characteristics of faculty assistant staff in the study sample (n =72).

item	Frequency	Percent
Age:		
<30	38	52.8
30+	34	47.2
Range	23.0-50.0	
Mean±SD	35.2±6.0	
Median	34.0	
Qualification:		
Bachelor	19	26.4
Master	53	73.6
Experience years:		
<10	39	54.2
10+	33	45.8
Range	<1.0-18.0	
Mean±SD	8.0±5.1	
Median	8.5	

Table (2): Total scores of faculty assistant staff opinions about importance of proposed standards.

Clinical teaching skill Standards	Importance score (max=100)				
	Mean	SD	Median	Quartiles	
				1 st	3 rd
1. Personal attributes/Appearance of faculty assistant	86.11	13.32	87.50	79.17	95.83
2. Preparation for session	91.28	16.81	100.00	94.44	100.00
3. Voice characteristics	95.69	10.98	100.00	100.00	100.00
4. Body language	93.52	11.50	100.00	88.89	100.00
5. Personality	92.86	14.63	100.00	92.86	100.00
6. Demonstration skills	91.90	18.23	100.00	100.00	100.00
7. Facilitation skills	93.75	15.24	100.00	100.00	100.00
8. Assessment and coordination skills	93.29	16.65	100.00	100.00	100.00
9. Supporting skills	93.63	15.42	100.00	100.00	100.00
10. Training skills	94.20	10.47	100.00	93.38	100.00
11. Interpersonal relations and communication skills	92.85	14.26	100.00	98.75	100.00
12. Creation of stimulating learning environment	92.16	16.31	100.00	98.21	100.00
13. Role model	90.97	19.33	100.00	100.00	100.00
14. Evaluation and feedback skills	94.08	13.99	100.00	97.06	100.00
15. Critical Thinking Skills	90.67	19.54	100.00	100.00	100.00
Total	93.14	11.19	99.19	90.93	100.00

Table (3): Faculty assistant staff total performance of the proposed standards(n=72) .

Clinical teaching skill Standards	Adequate	
	No.	%
1. Personal attributes/Appearance of faculty assistant	61	84.7
2. Preparation for session	58	80.6
3. Voice characteristics	61	84.7
4. Body language	62	86.1
5. Personality	62	86.1
6. Demonstration skills	56	77.8
7. Facilitation skills	54	75.0
8. Assessment and coordination skills	60	83.3
9. Supporting skills	63	87.5
10. Training skills	59	81.9
11. Interpersonal relations and communication skills	60	83.3
12. Creation of stimulating learning environment	55	76.4
13. Role model	60	83.3
14. Evaluation and feedback skills	62	86.1
15. Critical Thinking Skills	64	88.9

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Table (4): Jury group agreement of general form of the proposed standards (n=30).

Items	Agreement	
	No.	%
The design of this format indicates a standard for assessment	30	100.0
The design of this format indicates the criteria for selection of the place for practical training of nursing students	30	100.0
The proposed standard is written:		
Clearly	30	100.0
Correctly	27	90
Scientifically	27	90
Appropriately	27	90
The formulation of words is understandable	30	100.0
The elements of the standard are measurable	30	100.0
The title is appropriate for the standard	30	100.0
The proposed standard covers all relevant aspects	30	100.0
There is a logical sequence between the different sections of the standard	30	100.0
There is a balance between the various sections	30	100.0
The standard is free of any superfluous elements.	30	100.0
The standard is free of any duplication or repetition.	30	100.0
The standard includes assessment of the following components of the clinical teaching skills :		
Structure		
Location	27	90
Facilities/ tools	27	90
Manpower	27	90
Process	30	100.0
Outcomes	30	100.0
The standard reflects the required the clinical teaching skills	30	100.0
The standard can be used for the selection of an effective of practical skills for nursingstudents.	30	100.0

Table (5): Agreement of jury group on proposed standards. (n=30).

Items	Agreement	
	No.	%
1. Personal attributes/Appearance of faculty assistant		
1.1. Has appropriate dress:	30	100.0
1.2. Physically capable	30	100.0
1.3. Mentally alert	30	100.0
1.4. Cheerful	30	100.0
2. Preparation for session		
2.1. Prepare environment for session:	30	100.0
2.2. Prepare patient	30	100.0
2.3. Prepare necessary records/documents	30	100.0
2.4. Prepare necessary clinical equipment	30	100.0
2.5. Ensure that student is assigned the appropriate client to meet clinical learning objectives	30	100.0
3. Voice characteristics		
3.1. Voice is clear (good articulation)	30	100.0
3.2. Use adequate speech volume (high enough so everyone in the room can hear it)	30	100.0
3.3. Speak at an appropriate pace (not too slow or too fast)	30	100.0
3.4. Vary voice pitch and does not speak in a monotone	30	100.0
3.5. Avoid distracting speech fillers	30	100.0
4. Body language		
4.1. Face students while speaking	30	100.0
4.2. Establish and maintain eye contact	30	100.0
4.3. Exhibits facial gestures or expressions	30	100.0
4.4. Moves occasionally while speaking	30	100.0
4.5. Shows no distracting movements or gestures	30	100.0
5. Personality		
5.1. Show flexibility	30	100.0
5.2. Have some sense of humor	30	100.0
5.3. Open-minded	30	100.0
5.4. Non-judgmental and tolerates mistakes	30	100.0
5.5. Show patience with students	30	100.0

Figure (1): Total opinions of faculty assistant staff about the importance of standards.

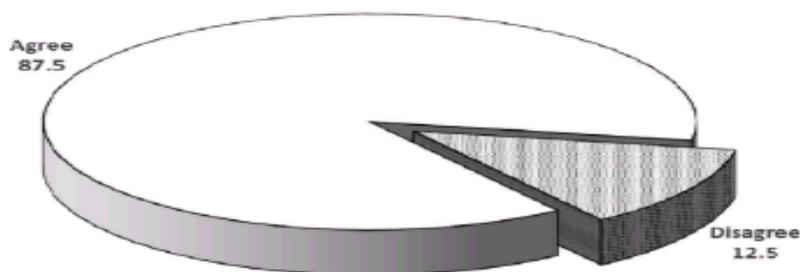
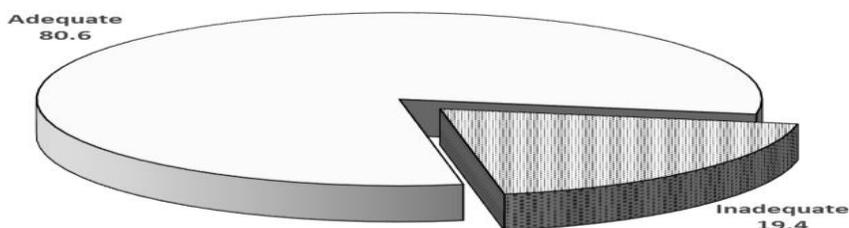


Figure (2): Total performance faculty assistant of the proposed standard.



Discussion

The advancing accountability of nurses and nurse educators requires students to develop knowledge, skills, and judgment on a continuum of focus from individual patients to the broader context of care (O'Neill, 2016). However, several national and regional assessments have revealed significant concerns about educational governance, institutional and educator capacity, quality and standards (Evans et al., 2013). The present study was aimed at developing and validating standards for clinical teaching skills for faculty assistant staff. The standards were developed responding to their opinions; they had unanimous validation by experts' opinions, and showed good applicability. The present study findings revealed that the majority of the participating faculty assistant staff had attended training courses in presentation skills, teaching, and clinical training. This is quite important for their educational career, and is set as a requirement for further promotion. However, only less than one-fifth of them were attended training programs in adult learning. This is a significant shortcoming in their training and preparation for their teaching profession. In fact, adult learning is quite different and needs different approaches when compared with teaching in schools. In agreement with this, a study conducted by (Curran, 2014) in the United States found that nursing educators seldom

apply the principles of adult learning while teaching their students.

The practical experience in training among the faculty assistant staff in the current study was evaluated not only by their experience years, but also by the training activities they practiced such as oral presentations and clinical training sessions. The findings revealed that more than half of them had at least four oral presentation during the last year, with at least 16 attendants. Conversely, half of them had not conducted any training sessions during the last year. This findings indicate that faculty assistant staff are more experienced in theoretical rather than in practical training. In congruence with this, a study carried out in Singapore on medical and nursing educators revealed that oral presentations were among the competencies rated as the most important (Goh et al., 2015).

Regarding the attendance of training courses in teaching and clinical training, there are other means of self-development in order to improve own skills. In the present study, only a few of the faculty assistant staff reported such attempts to develop their teaching skills, to refine their own teaching/training methods, and to seek trainees' opinions about their own teaching/training style. This indicates that they not aware about the different skills and attributes they should used to perform their role effectively to develop their own skills,

due to lack of time or needed resources such as digital libraries and training media. The importance of continuing self-development activities for educators has been reported in a ten-year follow-up study conducted in the United States by (Auseon *et al.*, 2016).

When the faculty assistant staff in the current study were asked to self-rate their clinically teaching abilities, the majority rating themselves had high skills in giving an oral presentation, administering a small group discussion, and conducting a group clinical teaching session. On the other hand, few of the reported high skills in conducting a problem solving session and administering a seminar. Problem solving session need trainer with certain abilities and skills to conduct effective session which are inadequate among assistant faculty staff. As for administering a seminar, the faculty assistant staff may consider that this skill is only mastered by more senior faculty staff members. In agreement with this, a study in Australia found that problem solving and critical thinking skills were the most deficient of the essential nursing skills among nurses (Missen *et al.*, 2016). Yet, a meta-analysis carried out in Korea demonstrated the positive impact of problem-based learning on nursing students' outcomes, and recommended utilizing this learning approach by nursing educators (Shin and Kim, 2013).

The development of the standards was started with assessment of faculty assistant staff's awareness and opinions about their importance. The results revealed very high percent scores of agreement upon all proposed standards. The findings indicate a real need for such standards in order to improve the clinical training of nursing students, (Mousa, 2012). The importance of such standards has been outlined in a study in the United States dealing with the preparation of

nurse educators for their roles in teaching and training (Harper *et al.*, 2017).

According to the present study results, scores of agreement of faculty assistant staff was highest for the standard related to voice characteristics. The results showed a majority agreement upon the importance of all its criteria. The highest score was for the criterion of voice clarity or good articulation. This is of extreme importance since the English language is used in training at various faculties of nursing in Egypt. Since this is not the mother tongue of trainers or students, good articulation is of great importance for good understanding (Mohamed, 2014). In line with this, Sessa *et al.* (2015) conducted a study in Italy mentioned that oral presentation is considered as one of the most sought after skills by companies and professional organizations and program accreditation agencies. It requires good verbal communication, including appropriate voice characteristics.

Another equally important criterion, was standard related to evaluation and feedback skills. It had the second highest mean score. In this standard, the items that gained the highest importance scores were those related to provide constructive feedback about performance to students, and accurate documentation of students' evaluation, whereas less importance was noticed for giving feedback in private and distinguishing performance from personal, (Awad, 2015). In congruence with the importance of feedback evaluation, Hunter (2016) in a study in Rhode Island reported that incorporating reflective feedback strategies in clinical learning promotes meaningful learning, which will strengthen the capabilities of students and better prepare them for the complexities they will face in clinical practice.

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At the other extreme, the personal attributes and appearance standard had the lowest mean score of agreement among the faculty assistant staff of the present study. Nonetheless, all faculty assistant staff agreed upon the importance of having neat and formal dress. In agreement with this, a study in the Kingdom of Saudi Arabia revealed that the educators' attributes related to performance such as being expert in the subject were valued more by students compared to their personality attributes such as dressing appropriately (*Al-Mohaimed, 2014*), (*Mohamed, 2014*).

Similarly, the standard of critical thinking skills had the second lowest mean agreement among the faculty assistant staff of the present study. Although the majority of them agreed upon the importance of all its criteria, approximately one-fourth of them did not agree upon the importance of asking vital questions to stimulate student critical thinking and upon the use of small group discussion during clinical practice. This could be attributed to their lack of experience and training in critical thinking. Additionally, the notion of critical thinking could have many different definitions and approaches in teaching and evaluation as stressed by *Von Colln-Appling and Giuliano (2017)*.

Mohamed, (2014) in a study clarified that nursing education must include both competency building elements for essential nursing competencies, and capability building elements which can be fostered through self-directed learning.

The final step in the development of the clinical teaching skills standards was its validation by the jury group members. The results demonstrated total agreement upon almost all items of the face validity of the proposed standard. Similarly, in content validation, there

were total agreements by juries upon all items of the standards, with only a few exceptions such as some of the items of the last five standards dealing with interpersonal relations and communication skills, creation of stimulating learning environment, role model, evaluation and feedback skills, and critical thinking skills. Nonetheless, in none of these items the juries' agreement was less than 70.0%. Thus, the proposed standards are valid. A similar approach in face and content validation of a training program was utilized in study *Mohamed, (2014)*.

Conclusion:

The outcome of this methodological study is a set of standards for clinical teaching skills developed for use by faculty assistant staff in faculties of nursing. It is based on pertinent literature and agreed upon by the faculty assistants who would use it. It also has a good applicability as shown by the high performance of the faculty assistants using it. The standards are valid as judged by a panel of experts in nursing and medicine. It is amenable to application in the study settings and in similar ones.

Recommendation

In the light of the study findings, the following recommendations are proposed:

- The developed clinical teaching skills standards have to be applied at the Faculty of Nursing, Ain-shams University and in different faculties of nursing.
- These standards should be disseminated by the faculty administration to all clinical instructors and assistive staff.

- Monitoring of the application of the developed standards should be done with a reward system for those with outstanding performance.
- Faculty assistant staff should have the opportunity to discuss their clinical work, validate their decision-making, and examine clinical issues with faculty members to foster their clinical experience and help in the development of self-confidence.
- Continuing staff development activities should be provided to faculty assistant staff members, particularly in areas of problem-solving, critical thinking, and adult learning.
- The administration of the Faculty of Nursing should allocate the resources needed for application of the clinical teaching skills standards.
- Further research is proposed to examine the effect of the application of the developed standards on the teaching outcomes and nurses students' satisfaction.

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