

## Assessment the Competence of Nursing Teachers' performance in Technical Nursing Schools at Sharkia Governorate

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### Abstract

**Background:** Nursing schools are the basic and fundamental stone to be qualified, registered and professional nurse. Excellent and good teachers' performance leads to a successful learning process. **Aim of the study:** was to assess the competence of nursing teachers' performance in technical nursing schools at Sharkia Governorate. **Subjects & Methods: Research design:** A descriptive cross sectional design was utilized. **Setting:** All technical nursing schools at Sharkia Governorate. **Subjects:** The study sample included all technical nursing teachers in 17 schools nursing schools' at Sharkia Governorate (119 teachers) and 510 students. **Tools of data collection:** Tool (1) was used to assess the self- assessment of nursing teachers, tool (2) was used to assess Students' satisfaction of their nursing teachers and tool (3) was used by researcher to evaluate the performance of nursing teacher's in classroom. **Results:** The study findings revealed that the most of nursing teachers assessed themselves with high performance (85.7%). Moreover, majority of nursing students were satisfied of their teachers in general (83.8%), finally, the competence of technical nursing teachers' performance was higher in personal skills (73.9%) compared to teaching skills (24.4%). There was a statistical significant relation between students' satisfaction of nursing teachers and their gender ( $p < 0.001$ ). **Conclusion:** The most of nursing teachers assessed themselves with high performance. The majority of students were satisfayed with their teachers in general. While in observed performance personal skills were better than teaching skills, and total teaching skills were low, especially regarding using teaching media and setting objectives.. **Recommendation:** Develop training programs for nursing teachers' about using teaching media, setting objectives, and standards for self-assessment.

**Key words** Competence, Technical Nursing Schools, Technical nursing Teachers and Performance.

### Introduction

Competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individuals and communities being served <sup>(1)</sup>. Additionally, it refers to a person's ability to act successfully in a specific task. Education is not a static process <sup>(2)</sup>. It evolves with newly discovered best-practices, technology, and innovation in the classroom. Elevating the role of nursing science for healthcare advances is more critical than ever <sup>(3)</sup>.

Effective education begins with an understanding of what students like, how they behave and learn, and what problems they counter. Every student has the responsibility to come to school prepared and willing to learn,

and is ultimately responsible for self, family, community and country. Performance appraisal is a process of assessing, summarizing and developing the work performance of the teachers. To ensure teachers' competence, staff appraisal is an equally essential procedure <sup>(4)</sup>.

The quality of education depends on the ability, hard work and dedication of the teacher. If a teacher fails to keep himself in touch with the rapid scientific and educational developments then he would become inefficient and ineffective as the teacher is considered the most fateful factor in implementing all instructional reforms at the grassroots level. It is a fact that the academic qualifications, knowledge of the subject matter, competence and skills of teaching and the commitment of the teacher have effective impact on the teaching learning process <sup>(5)</sup>.

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities and population<sup>(6)</sup>

Teaching in nursing is a complex activity that integrates the art and science of nursing and clinical practice into teaching- learning process, it involves asset of skills, competencies that are essential to facilitate students learning outcomes. The preparation for teaching involves classroom and clinical experiences to acquire the competencies<sup>(7)</sup>.

### **Significance of the study**

Assessing the competence of nursing teachers' performance is a vital step to improve the effectiveness of teaching and learning in nursing and raising the educational standards. Nursing teachers' performance can be improved when the following conditions are present, opportunities for teacher self-reflection and goal setting, regular classroom observation and the provision of constructive feedback from school leaders or managers and peers. Performance assessment is a process of assessing teachers' work tasks in the classroom or practical sessions. To ensure fair performance assessment, it must include at least three aspects, self-assessment, students' assessment and reviewer assessment. So, the aim of this study is to assess the competence of nursing teachers' performance in technical nursing schools.

### **Aim of the study**

The aim of the study was to assess the competence of nursing teachers' performance in technical nursing schools at Sharkia Governorate.

### **Research questions**

1. What is the self-assessment of nursing teachers in technical

nursing schools at Sharkia Governorate?

2. Are nursing students satisfied with their nursing teachers' performance in technical nursing schools at Sharkia Governorate?

3. What is the competence of nursing teachers' performance in technical nursing schools at Sharkia Governorate?

4. What are the factors affecting the competence of nursing teachers' performance?

### **Subjects and methods**

#### **Research Design**

A descriptive cross sectional design was used in conducting the study.

#### **Study Setting**

The study was conducted at all nursing technical schools (3 years program) at Sharkia Governorate (17 technical nursing schools).

#### **Study Subjects**

A convenient sample of nurse teachers (119) and nurse students (510) both male and female of the selected schools at Sharkia Governorate, using random sample technique from official school files. Before performing the main study, a pilot study was carried out on 10% (51 students) of the study sample. The process of data collection was started in September 2016 to the end of December 2016.

#### **Tools of data collection**

Three tools were used to collect the necessary data for achieving the study objectives.

**Tool I:** Self-administered questionnaire developed by the researcher after reviewing the related literature. It composed of the following sections:

**Part A:** Socio-demographic data of teachers composed of 8 questions, which included: age, residence, marital status, qualification, income,

years' experience in the nursing school, training courses, and subject teacher educates.

- **Part B:** Self-assessment of nursing teachers. It included three dimensions:

- **Dimension I.** Setting objectives composed of 6 questions which include characteristics of objectives, proper time for the lesson, presenting the scientific material in logical sequence

- **Dimension II.** Communication with students, composed of 11 questions, which include explain the lesson without waiting the time, characteristics of teacher's voice, asking questions, making feedback, and summary..

- **Dimension III:** Teaching methods and media composed of 15 questions as using different media during teaching, using role play in the practical part of lesson.

#### Scoring system:

Self-assessment: The items were scored 2, 1 and zero for the responses "Often/Sometimes/Never" respectively. For each section, the scores of the items were summed-up and the total divided by the number of the items, giving a mean score for the part. These scores were converted into percent scores. The teacher's self-assessment was considered high if the percent score was 60% or more, and low if less than 60% based on statistical analysis.

**Tool II:** Students' satisfaction, self-administered questionnaires to determine students' satisfaction about their teacher's performance. It consisted of three dimensions as follows:

- **Dimension I.** Teacher's communication with students composed of 7 questions as: teacher concerns with student, respects the student, encourages and supports the student.

- **Dimension II.** Teacher's performance in classroom composed of 8 questions as: seriousness in the class, presentation of

scientific material, responding to questions and comments of students, using teaching methods, student's benefits from the exercises and practical applications, appropriate questions for all levels, linking the previous lesson with the current one, and success in passing the difficult situations in the class.

**Dimension III.** Student's satisfaction in general, it consisted of one question, student satisfied with his teacher or not **(Q16)**.

#### Scoring system:

The items were scored 3, 2, 1 and zero for the responses "Most of time/Average/Low/Never" respectively. For each section, the scores of the items were summed-up and the total was divided by the total number of the items, giving a mean score for the part. These scores were converted into percent scores. The teacher's self-assessment was considered high if the percent score was 75% or more, and low if less than 75%.

**Tool III: Observational checklist:** to evaluate the nursing teachers' competence of performance in classroom guided by Rateb <sup>(8)</sup>, which included the two dimensions.

**Dimension I:** Personal skills composed of 10 items as, appearance, punctuality, treat student with respect and patience, body movements, and attract students attention.

**Dimension II:** Teaching skills includes seven categories divided into sub item as follows: Setting objectives, preparation and inciting), teaching methods, style of reinforcement, teaching media, director the class, and evaluation of students.

#### Scoring system:

The items observed were scored "3" for outstanding, "2" for acceptable, and "1" for unacceptable. For each area, the scores of the items were summed-up and the total divided by the number of the items, giving a mean score for the part. These scores were converted into percent scores. The teacher's performance was considered

high if the percent score was 75% or more, and low if less than 75%.

### **Content validity and Reliability**

The validity of data collection tools prepared by the researcher was also assessed during this phase by five experts from the faculty of nursing (Administrative nursing, Community health nursing and Medical surgical department) and faculty of medicine (public health). These experts assessed the tool for clarity, relevance, application, comprehensiveness, and understanding. This constituted the face and content validation of the tool, all recommended modification in the tool was done. Reliability of the proposed tools was done by Cronbach'Alpha test; it was 0.99 for tool I, 0.77 for tool II, and 0.87 for tool III.

### **Field work**

Upon securing all official permissions, the researcher took written consent from the director of training center at Directorate of Health Affairs in Sharqia and oral consent from the manager of technical nursing schools. The process of data collection was started in September 2016 to the end of December 2016. The researcher visited the study setting, and met with the teachers and their students individually. She explained to them the aim and procedure of the study, and invited them to participate. Those who gave their verbal consent to participate. The teachers and students were interviewed using the respective interview questionnaire forms. The time consumed for answering the self-administered questionnaire by the nursing teacher ranged from 20 to 30 minutes in the break. The time consumed for answering the self-administered sheet regarding students' opinion about their teachers' performance from 10-20 minutes between classes and in the break. And the total time for the researcher to fulfill the observational check list was 30 to 45 minute during the class. The researcher observed the nurse teacher once for each subject taught. The researcher performed the

fieldwork three days weekly (Sunday, Monday and Wednesday).

### **Pilot study:**

Before performing the main study, a pilot study was carried out on 10% (51 students) of the study sample. The purpose of pilot study was to test the questions for any ambiguity, practicability, applicability, and feasibility of the tool and then the necessary modification were done. It also helped the researcher to determine the time needed for filling out the forms. Those who shared in the pilot were excluded from the main study sample.

### **Administrative and ethical considerations:**

The study proposal was approved by the ethics committee of faculty of nursing. The Faculty of Nursing issued an official letter explaining the aim of the study and its procedures to obtain permission from the Director of Training Center at Directorate of Health Affairs in Sharkia Governorate. This consent was sent to the manager of the technical nursing schools to help the researcher to conduct the study. Also informed consent for participation was taken verbally from each potential participant after full explanation of the aim of the study. They were informed that their participation in this study is voluntarily. The nursing teachers and students were given the opportunity to refuse participation, and they were notified that they could withdraw at any stage of the data collection without giving any reason. They were assured that any information taken from them would be confidential and used for the research purpose only.

### **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 assessment scales through their 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. In larger than 2x2 cross-tables, no test could be applied whenever the expected value in 10% or more of the cells was less than 5. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of assessment and performance multiple linear regression analysis was used and analysis of variance for the full regression models done. Statistical significance was considered at p-value <0.05.

#### Results:

**Table 1:** Shows that the age of teachers is ranged from 24 to 60 years old with median of 35 years; additionally their years of experience ranged between 4 to 37 years. As well as 60.5% of teachers resided in urban area, 91.6% of them are married, 98.3% of them have bachelor with 72.3% have post graduate qualification (diploma or master). Furthermore 71.4% attending training courses regarding teaching methods and 93.3% of them had sufficient income.

**Table 2:** Indicates that self-assessments among nursing teachers in the study sample regarding preparing objectives, communication with students, and use of teaching methods/media were (74.8%, 85.7% & 95%) respectively.

**Table 3:** Reveals that students' satisfaction of their nursing teachers. Regarding communication with students, performance in class, and student satisfaction were (63.5%, 79.8%, and 83.8%) respectively.

**Table 4:** Displays the competence of nursing teachers' performance in the study sample. Regarding teaching skills, the highest percent (94.1%) in preparation and inciting, followed by directing class (81.5%), and style of reinforcement (79.0%). Moreover, total

teaching skills among nursing teachers was low (76.5 %).

#### Discussion:

Competence is quality of being adequately or well qualified to perform a task. A person gains competence through education, training, and experience. It is observable or measurable skills, knowledge and attitude. <sup>(9)</sup> Regarding socio demographic data, in the present study, age of nursing teachers was ranged from 24 to 60 years old with median of 35 years. This might be due to nursing teachers might work in hospital as a nurse before joining technical nursing schools. The study results supported by Abo- Elmaty <sup>(10)</sup>, found that the median age of nurse teachers was 35 years. On the contrary, the study was done in Suez Canal University by Shetawy <sup>(11)</sup>, who found that clinical instructors aged from 23 to 38 years with experience regarded from 1 to 17.

Concerning of research question regarding the teacher self-assessment regarding teaching performance, the findings of the present study found that more than three fifths of nursing teachers prepared objectives and majority of them had good communication with students and used teaching methods. This finding is to some extent that of Patricia and Maria <sup>(12)</sup> who assessed evaluation of teacher competencies of nursing for managing educational programs for adults and found that teachers considered themselves distant from competencies which hoped to achieve This might be due to that the technical nursing school teachers were overload with the students and more than half of them teach more than one subject

Concerning research question students satisfaction about their teachers' performance in technical nursing schools at Sharkia Governorate, The current study result found that, more than three fifth of students were satisfied with their teachers related to their total communication level among technical

nursing schools, more than three quarters of them were satisfied with their teachers' performance in class. Furthermore, the total students' satisfaction was more than half and overall most of them were satisfied of their nursing teachers. This finding goes in the same line with that of Ismail. <sup>(13)</sup> in Egypt, assessed the quality of educational process for fourth academic year in secondary technical nursing school in Qalyoubiah branch for health insurance and found that most of students were satisfied with their teachers related to their performance and communication in class This might be due to training courses about communication skills attended by more than three fifths of teachers, as well; the most of nursing teachers in the present study had bachelor degree and sufficient income..

However these results are in disagreement with those of Ali <sup>(14)</sup>, who described the caring and effective teaching behaviors of clinical instructors in clinical area as perceived by the students and found that the nursing students wanted the clinical instructors to be knowledgeable and competent in their own field that knowledge and experience competence is the most important and essential component for effective teaching. This finding might attributed to the differences in the study setting.

As regards research question regarding the competency of nursing teachers' performance, the findings of the present study indicated that nearly three quarters of nursing teachers had high personal skills.. This finding in agreement with Junod et al. <sup>(15)</sup>, who done a study about the impact of a faculty development program on communication skills for nursing teachers; and found that there was improvement in the communication skills after implementation of program This result might be due to continuous observational from director of the schools.

As regards teaching skills the current study results showed that nearly about one quarter of nursing teachers had high teaching skills. This finding is consistent with that of Elkhalidy <sup>(16)</sup>, in Palestine, who found that teachers rarely use teaching media. This study in contrast with study done in faculty of nursing at Benha University by Ismail <sup>(17)</sup>, in Egypt who revealed that the nursing educators were outstanding especially in performing demonstration and evaluation of activities, because this study revealed that more than half of teachers had master's degree. This might be due to lack of training about teaching strategies methods and shortage of supplies such as, computer, data show, etc standard of students evaluation. Additionally, lack of training regarding teaching skills.

Concerning of setting objectives among nursing teachers in the current study, about two fifths of nursing teachers set objectives effectively, This finding is consistent with that of Rateb. <sup>(18)</sup>, in Egypt who found that half of nursing teachers were at unacceptable level regarding sitting objectives in Suez school. This might be due to shortage of time needed and huge curriculum.

The present study found that statistically significant relation between students' satisfaction of nursing teachers and their gender. This interpretation was supported by Tessema et al. <sup>(19)</sup>, in who reported that there is statistically significant relation between students' satisfaction and their gender. This might be due to gender plays a significant role with student's satisfaction of nursing teachers, also satisfaction derives from the facilities, and appropriate services provided by the teachers to meet students' expectations.

The current study demonstrated that statistically significant positive correlation was found between observed performance scores and teacher's income and teacher's characteristics. This finding is

consistent with that of Subroto <sup>(20)</sup>, in Indonesia who found that the high performance of teachers is supported by the income. This context with a study done in Niegeria by yahya and Fasasi <sup>(21)</sup>, found that there was significant relation between teachers' income and teachers' performance. This is might be due to appropriate income improve psychological status of the person.

### **Conclusion**

The study findings lead to the conclusion that the most of nursing teachers assessed themselves with high performance. Furthermore, the majority of students were satisfied with their teachers in general. While in observed performance, personal skills were better than teaching skills. Total teaching skills were low, especially regarding using teaching media and setting objectives. Finally, there were statistically significant positive correlations between competence of performance and both income and number of subjects taught. There was statistically significant negative correlation between competence of performance and teachers' age.

### **Recommendations**

In view of the study findings, the following recommendations are proposed.

- Develop training programs for nursing teachers' about setting objectives, standards for self-assessment, teaching methods, and communication skills.
- The directors of technical nursing schools should continuously supervise the communication between nursing teachers and students, observe nursing teachers' performance in class and evaluate degree of students' satisfaction. Also, mentors should intensify evaluation for teachers' performance.
- The training administration should provide and increase number of nursing teachers in the schools to decrease the huge work loaded over nursing teachers, and set criteria for selection of nursing teachers.
- Teaching methods and needed equipments must be recent and available for teachers' in all technical nursing schools for available.
- Further studies to be carried out in different geographical areas to assess teachers' performance, and modify methods of teaching and test each method to find out the best one that satisfy both teachers and students..

**Table (1):** Socio-demographic characteristics of nursing teachers in the study sample (n=119)

| Socio-demographic characteristics                                    | Frequency | Percent |
|--|-----------|---------|
| Age:   |           |         |
| <40  | 82        | 68.9    |
| 40+  | 37        | 31.1    |
| Range  | 24.0-60.0 |         |
| Mean±SD  | 38.2±9.2  |         |
| Median   | 35.0      |         |
| Residence:   |           |         |
| Rural  | 47        | 39.5    |
| Urban  | 72        | 60.5    |
| Marital status:  |           |         |
| Unmarried (single/widow)   | 10        | 8.4     |
| Married  | 109       | 91.6    |
| Qualification:   |           |         |
| Diploma  | 11        | 9.2     |
| Bachelor   | 108       | 90.8    |
| Postgraduate qualification: (diploma or master)                      |           |         |
| No   | 86        | 72.3    |
| Yes  | 33        | 27.7    |
| Income:  |           |         |
| Insufficient   | 8         | 6.7     |
| Sufficient   | 111       | 93.3    |
| Experience years:  |           |         |
| <10  | 56        | 47.1    |
| 10+  | 63        | 52.9    |
| Range  | 4.0-37.0  |         |
| Mean±SD  | 12.8±9.2  |         |
| Median   | 10.0      |         |
| Attended training courses: (teaching methods, communication skills). |           |         |
| No   | 34        | 28.6    |
| Yes  | 85        | 71.4    |

**Table 2:** Self-assessment of nursing teachers in the study sample (n=119))

| High score (75% or more) self-assessment in: | Frequency | Percent |
|--|-----------|---------|
| Preparing objectives                         | 89        | 74.8    |
| Communication with students                  | 102       | 85.7    |
| Use of teaching methods/media                | 113       | 95.0    |

**Table 3:** Students' satisfaction of their nursing teachers (n=1610)

| High (75%+) students' satisfaction in | Frequency | Percent |
|---------------------------------------|-----------|---------|
| Communication with students           | 1022      | 63.5    |
| Performance in class                  | 1284      | 79.8    |
| Student satisfaction in general       | 1349      | 83.8    |

**Table 4:** Competence of nursing teachers' performance in the study sample (n=119)

| Competence of performance  | Frequency | Percent |
|--|-----------|---------|
| Personal skills:   |           |         |
| High $\geq 75\%$   | 88        | 73.9    |
| Low $\leq 75\%$  | 31        | 26.1    |
| Teaching skills (High $\geq 75\%$ ):   |           |         |
| Setting objectives   | 44        | 37.0    |
| Preparation and inciting   | 112       | 94.1    |
| Teaching methods   | 87        | 73.1    |
| Style of reinforcement   | 94        | 79.0    |
| Use of suitable teaching media   | 1         | 0.8     |
| Directing class  | 97        | 81.5    |
| Evaluation ( objective, following evaluation style, homework, different types of question, and subjectivity) | 66        | 55.5    |
| Total teaching:  |           |         |
| High   | 28        | 23.5    |
| Low  | 91        | 76.5    |

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