Core Competencies of Nurse Educator At Technical institutes of Nursing

Doaa Lotfy Ahmed Mohamed, Mona Mostafa Shazly, Nema Fathy saad

Nursing Administration Department – Faculty of Nursing Ain Shams University

Abstract

Background: Core Competencies are a valuable resource for nurse educators. The appropriate preparation of nurse educators is critical to the development of knowledge, skills, and attitudes of nurses. **Aim:** Study was aimed to assess core competencies of nurse educators at technical Institutes of nursing. **Subjects and methods: -** A descriptive cross sectional design was used in carrying 0ut the study on (40) nurse educators from Nursing Technical Institute affiliated to Ain Shams Specialized and University Hospitals, and (56) educators from Imbaba Technical Health Institute for Nursing, affiliated to Ministry of Health. A self-administered questionnaire was used to collect data. The fieldwork lasted from October to December 2016. **Results: -** the results revealed that their age ranged between 25 and 56 years, and 52.1% had a postgraduate degree. The highest core competencies were facilitating learning, while the lowest was participating in curriculum design and evaluation. Overall, 76.0% had high competencies. In total, 92.5% of nurse educators' in Ain-Shams institutions had high core competencies, compared with 64.3% in Imbaba institution (p<0.001). Those who attended training courses had higher facilitator competency (p=0.047). in multivariate analysis, working in Imbaba institutes was the only significant independent negative predictor of the score of core competencies. **Conclusion and Recommendations: -** the nurse educators in the study setting have good core competencies, which are influenced by their age, qualification, attendance of training courses, and the workplace

Key words: Core Competencies, Nurse Educator, Nursing Institute.

Introduction

Nursing is a practice profession that requires nurse educators to be skilled clinical practitioners in order to teach the next generation of nurses *(El-Said 2012).* Nursing educators are instrumental in preparing competent nurses to meet the health care needs of our society. However, nurse educator's shortages nationwide have threatened the future of nursing education. Without adequately trained nurse educator to teach future generations of health care professionals, the nation's health care infrastructure is in jeopardy *(Billings et al. 2009; Higbi, 2010).*

Nurse Educators must be able to prepare professional nurses who can think critically, communicate effectively, and work collaboratively with multidisciplinary teams to facilitate change. The core knowledge, professional values, and competencies that nurse educators possess in their roles as teachers, scholars, researchers, and collaborators, needed to be defined. While some competencies in the nurse educator role may be learned in the clinician role, others such as assessing learning needs, planning curriculum, and research are more unique to the educator role *(Higbie, 2010).*

The core competencies are a valuable resource for nurse educators and

have the potential to transform nursing education by inspiring excellence in nurse educator practice. Core competencies are paramount that these standards of practice are integrated in nurse educator curricula, role descriptions, and evaluation processes. By using the core competencies of nurse educators in intentional and innovative ways, nurse educators are empowered to shape their own practice and advance the education and lifelong learning of all nurse educators *(WHO, 2016).*

Significance of The Study

Because the ongoing nurse educators' shortage is made even more challenging, it is important that those who do teach are well prepared as educators and leaders to advance nursing education, conduct research and contribute to the science of nursing education. So the present research study would determine nurse educators' activities to assess their core competencies level and may help them to know their strength and weakness point and activities needed to increase work effectiveness and self-development.

Aim of The Study

This study was aimed to assess core competencies of nurse educators at technical Institutes of nursing.

Research question

- What are the core competencies of nurse educators at Technical Institute of Nursing?

Subjects and Methods

Research design and setting

A descriptive cross-sectional design was used in carrying out the study; the study was conducted at two technical

institutes of nursing. These were namely The Nursing Technical Institute affiliated to

Ain Shams specialized and University hospitals and Health, and Imbaba Technical Health Institute for nursing affiliated to ministry of health where nurse educators work.

Subjects:

The total number of educators in Ain Shams specialized and University hospitals Institutes were 40, while Imbaba Technical Health Institute had a total 65nurse educator. The only inclusion criterion was having teaching experience years not less than one. All those in Ain-shams institute were eligible, while 56 of those in Imbaba Institute were eligible.

Data Collection Tool

A self-administered questionnaire. It consists of two parts:

✓ Socio-demographic data of nurse educators such as "age, gender, marital status, academic qualification, and years of experience, attendance of training courses, and work institute and department.
✓ Core Competencies questionnaire. It consisted of 66 statement grouped into eight main heading items these are: (Facilitate Learning (17), Facilitate Learner Development and Socialization (8), Use Assessment and Evaluation Strategies (9), Participate in Curriculum Design and Evaluation of Program Outcomes (8), function as a change agent and leader (7), Pursue Continuous Quality Improvement in the Nurse Educator Role (7), Engage in Scholarship (5) and function effectively within the organizational environment (5) statements).

Validity of the tool: The tool was distributed to a jury group consisted of five experts in the field of nursing administration from faculty of nursing from three universities namely Ain Shams, Cairo and Mneofiya Universities .One from Ain Shams University, Assistant Professor and two from Cairo University are Assistant Professor and two from Mneofiya University, one of them are Professor and

the other are Assistant Professor from nursing administration department. Jury group reviewed the tools to judge its clarity, comprehensiveness and accuracy. Their opinions were elicited regarding the tools format, layout, parts, and scoring system.

Tool reliability: was done by Cronbach alpha which (0.95%) for Core Competencies of Nurse Educators questionnairessheet.

Pilot Study

A pilot study was conducted on ten nurse educator representing almost 10% of the main study sample. The aim of the pilot study was to determine the understandability and applicability of the tool, to determine the time needed for filling it, out and to test the feasibility and suitability of the study setting. Data obtained from a pilot study were analyzed and accordingly necessary modifications were done to reach to the final version of the tool. The time needed for filling in the questionnaire ranged between 10 to 15 minutes. These ten nurse educators were not included in the main study sample.

Fieldwork

Upon having official permissions from the Faculty of Nursing at Ain Shams University, the researchers met with the nurse educators and explained to them the aim of the study and methods of filling-in the form. This was done either individually or through group meeting. The filling process was done in the presence of the researcher to avoid any interruptions and to clarify any ambiguities.The work was done three days per week.

Ethical considerations

The study proposal was approved by Ethics Committee of the Faculty of Nursing, Ain-Shams University. Officialpermissions to conduct the study were secured from pertinent authorities. All participants gave their oral consent to participate in the study. They were informed about their rights to refuse or withdraw at any time without giving explanation. The confidentiality of any obtained information was ensured.

Statistical Analysis

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 tools through their internal consistency. Qualitative categorical variables were compared using chi-square test. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent core competencies score, 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): Socio-demographic characteristics of nurse educators in the study sample (N=96).

| Socio-demographic characteristics	Frequency	Percent
Age: <40 40+	63 33	65.6 34.4

Range
   Mean±SD
   Median
	25.0-56.0
	 36.1±7.4
	 35.0	

Qualification:
  Bachelor
  Master/ Doctorate
	46
	 50
		47.9
		 52.1

Experience years: <10 10+	46 50	47.9 52.1
Range Mean±SD Median	3.0-34.0 11.8±7.3 10.0	
Marital Status: Unmarried (single/ divorced) Married	20 76	20.8 79.2

Table (1): illustrates that The study included 96 female nurse educators whose age ranged between 25 and 56 years, with median 35.0 years as present in Table 2. Slightly more than half of them (52.1%) were having a postgraduate degree in nursing. Their experience ranged between 3 and 34 years, with median 10.0 years, with a majority of them married (79.2%).

Table (2): Attendance of training courses among nurse educators in the study sample (N=96)

Attendance of training courses	Frequency	Percent
Had training courses in nursing	86	89.6
Had training courses in education	47	49.0
No. of courses attended: 1 2 3	70 10 6	81.4 11.6 7.0
Total course days: Range Mean±SD Median	0.0-365.0 22.9±50.0 7.0	

Table (2): showed that the majority of the nurse educators reported having attended training courses in nursing (89.6%). However, only 49.0% of them had attended training courses in education. The majority attended only one courses (81.4%), and the median total days of training was 7.0 days.

Figure (1): Distribution of nurse educators in the study sample by institute (N=96).
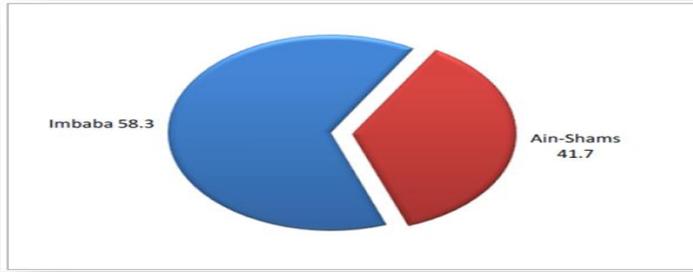

Figure(1):illustrated that, approximately three-fifth of the nurse educators in the study sample were working at Imbaba institute (58.3%).

Figure (2): Total core competencies scores among nurse educators in the study sample (N=96).
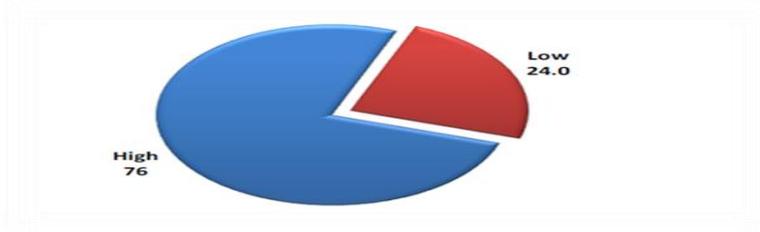
Figure 2: illustrate that slightly more than fourth of them (76.0) had high agreement upon core competencies.

Figure (3): Comparison of total core competencies of nurse educators in the two study institutions.
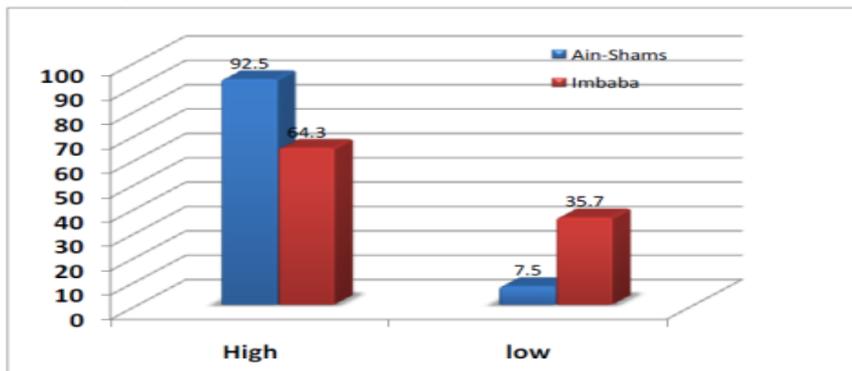
(*) statistically significant at p<0.05

Figure (3): demonstrate that 92.5% of the nurse educators' in Ain-shams institution had high core competencies, compared with 64.3% of those in Imbaba institution. The difference was statically significant (p<0.001).

Table (3): Correlation between nurse educators' core competencies scores and their characteristics.

Competencies	Spearman's rank correlation coefficient				
	Age	Experience	Qualification	Course(days)	Course(numbers)
1- Facilitate Learning	0.07	0.04	0.03	0.05	0.07
2- Facilitate Learner Development and Socialization	0.10	0.11	0.12	0.07	-0.06
3- Using Assessment and Evaluation Strategies	0.09	0.10	0.21*	0.15	0.13
4- Participate in Curriculum Design and Evaluation of Program Outcomes	0.12	0.13	0.00	-0.10	-0.03
5- Function as a change agent and leader	0.07	0.14	-0.11	-0.11	0.04
6- Pursue Continuous Quality Improvement in the Nurse Educator Role	0.06	0.05	0.12	0.02	0.17
7- Engaging in Scholarship	.27**	0.23*	0.01	-0.04	0.06
8- Function Effectively within the Organizational Environment	0.08	0.04	0.08	0.08	0.11
Total competencies	**0.12**	**0.13**	**0.06**	**-0.01**	**0.06**

(*) statistically significant at $P<0.05$ (**) statistically significant at $P<0.01$

Table(3): demonstrate statistically significant positive correlation between nurse educators' core competencies of Engaging in Scholarship and their age ($r=0.27$) and Experience ($r=0.23$). Meanwhile, their competency of Using Assessment and Evaluation Strategies had statistically significant weak positive correlation with their Qualification ($r=0.21$).

Discussion

Although the term competence is commonly used in nursing, there is no true agreement upon its definition. The term refers to personal overall capability to perform something effectively **(Unkuri, 2015).** It is also defined as the functional adequacy and capacity to integrate knowledge, skills, attitudes and values in specific contextual situation of practice **(Dao-Ayen, 2015).** In nursing education, a set of guidelines, known as Core Competencies for Nurse Educators is used in nursing schools to define the scope of practice for nurse educators **(Wilson, 2010).** A competent clinical teacher knows how to act in clinical practice and can guide student in developing clinical competencies **(Botma and Remsburg, 2013).**

The present study aim was to assess core competencies of nurse educators at technical Institutes of nursing. The results indicated generally high agreement of nurse educators in both study institutes upon the most of the core competencies under study. The agreement

is only influenced by the work place of the nurse educator.

In the current study sample, there was a wide gamut of nurse educators' age, ranging, between the age of newly graduates and those approaching retirement. This was also reflected on their experience years, which had a range of about 30 years. This mix of different ages and experience years would allow examining the influence of these two factors on nurse educators' core competencies.

Moreover, the present study sample included nurse educators from two different institutes, one affiliated to Ain-Shams University and other affiliated to the ministry of health. There is an important difference between two settings, the first being close to academia. This could have a positive influence on the nurse educators who work in an academic educational environment. In fact, the study findings revealed that the workplace was the only predictor of nurse educators' core competencies.

In the present study finding, the majority of the nurse educators reported having previously attended training courses in nursing. However, only less than a half of them received training in education. This is quite surprising given that the main job of nurse educators is teaching and educating nursing students. If they were not properly prepared for this task, their performance would be sub-optimal. This result is incongruent with that of *Abbas (2010)* study in perception of teachers and student Regarding Education program in technical institutes of nursing, where all nursing teachers had attended seminars and conferences, and almost all of them had fellowships for training.

When the core competencies of the current study nurse educators were compared by institutes, the result revealed higher competencies among those working in Ain-Shams University institutes compared with those in Imbaba institute. The differences reached statistical significance in the competencies related to using assessment and evaluation strategies, participating in curriculum design and evaluation, change agent and leader, and engaging in scholarship. This difference was confirmed in multivariate analysis, which identified the work in Imbaba institutes as the only significant negative predictor of the score of the core competencies. The higher competencies among Ain-Shams institutes' educators might be explained by the affiliation of the institutes to the university, a primarily academic educational institution, whereas the Imbaba institute is affiliated to the Ministry of Health. Thus, they are more able to facilitate learner-centered education using innovative educational approaches.

As regards the influence of other nurse educators' characteristics on their core competencies, the present study result showed a significant positive correlation between nurse educators' core competencies of engaging in scholarship and their age. This is quite plausible since maturation with advancing age increases the likelihood of the nurse educator to design activities based on won experience, publish educational and nursing science materials, and demonstrate integrity, perseverance, and creativities as qualities of a scholar. However, an in disagreement with this finding, in *Mohamed (2009)* study in competency of clinical instructor as perceived by students and clinical instructors themselves, there is no significant correlation could be revealed between age and total competency of nurse educators.

The current study has also revealed significant positive correlation between nurse educators' level of qualification and their core competencies of engaging in scholarship and using

assessment and evaluation strategies. This is also expected since a nurse educator with a master or doctoral degree should have better knowledge and more skills related to nursing education principles and practice. Moreover, a higher qualification is linked to a higher job position, with more power and authorities to participate in decisions and induce changes in institute's programs and in assessment strategies. A similar association between nurse educators' qualification and their competency in training and teaching was reported in a study in Egypt *(Ahmed, 2009),* and in Australia *(Phillips et al, 2017).*

Concerning the impact of attending training courses, the present study demonstrates a paradoxical finding. Thus, while the nurse educators who had attended training courses had significantly higher facilitator competency, they had lower competency in curriculum design and evaluation. This paradox might be explained by the content and process of such training. Moreover, the impact of training courses depends also on the quality of participation of attendant, and how much benefits he/she got from the training. Nonetheless, and in partial agreement with these present study findings, *Phillips et al, (2017)* found that the Australian nurse educators who had attended courses and /or workshops in education had better skills and competencies in nursing students' training. Moreover, *Abd-El Aliem (2007)* in Egypt found that implementing a clinical teaching program for preparing clinical educators was effective in improving their performance.

Recommendations

In the light of the findings of the current study the following recommendations are suggested:

- Periodic regular educational on-the-job training program are needed for nurse educators in order to foster their competencies and maintain them up-to-date.

- Nurse educators must be encouraged to attend conferences and workshops to refresh their knowledge and competencies, and this should a requirement for their promotion.

- Practical training program are recommended for the nurse educators to be proficient in the use of different teaching methods and strategies, and evidence-based teaching practices.

References

Abbas, E.M (2010): perception of teachers and student Regarding Education program in technical institutes of nursing, Unpublished Master Degree Theses, Faculty of Nursing, Ain-Shams University .

Abd-ElAliem, E. (2007): Designing and implementing a clinical teaching program for preparing hospital preceptors in Cairo university hospital, unpublished doctorate theses, faculty of nursing, cairo university.

Ahmed,R(2009): developing and validating a job description of nurse teachers working at the technical institutes of nursing, unpublished doctorate theses, faculty of nursing, Ain-Shams university.

Billings,M,. (2009): what does it take to be a nurse educator? Journal of nursing education; 42(3): 99-100.

Botma, Y.AndRemsburg, G. (2013): A concept analysis: transfer of learning in health science education, the Canadian nurses association, African Journal for physical Health education; 38(4):32-43

El-Said.m. (2012): Nursing students' rights as perceived by nurse teachers and student. Unpublished master thesis.Faculty of nursing. Ain shams university. Egypt

Higbie, J. (2010): Perceived levels of nurse educator's attainment of NLN core competencies. Western Michigan University. ProQuest Dissertations and Theses, Retrieved from http://search.proquest.com/docview/755494061?accountid=27965

Mohamed,K,. (2009): competency of clinical instructor as perceived by students and clinical instructors themselves at faculty of nursing Mansoura University, unpublished master theses, faculty of nursing, Zagazeg University.

Phillips N.M., Duke M.M., and Weerasuriya R. (2017): Questioning skills of clinical facilitators supporting undergraduate nursing students. J ClinNurs.; 2017 Feb 16. Doi: 10.1111/jocn.13761.

Unkuri, S.K. (2015): Nurse competence of Graduating Nursing Students, Department of Nursing Science, Faculty of Medicine, University of Turku, Finlanda, AnalesUniversitatisTurkuensis, Painosalama Oy, Turku 2015.

Wilson,R. (2010): Examining the effect on national league for nursing core competencies workshop as an intervention to improve nurse faculty practice, liberty university, published Doctorate theses.

World Health Organization [WHO], (2016): Nurse Educator Core Competencies, Retrieved on Oct 6, 2017 at: http://www.who. int/hrh/ ursing_midwifery/nurse_educator 050416.pdf?ua=1