

Disposition of Staff Nurses' Critical Thinking and its Relation to Quality of their Performance at Mansoura University Hospital

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Abstract: Along with the evolution in the scope of nursing practice, there has been greater autonomy for nurses and a growing demand for expanded critical thinking abilities. Therefore, Critical thinking in nursing is an essential component of professional accountability and quality of nursing performance. So, this study aimed to examine the relationship between the disposition of staff nurses toward critical thinking and quality of their performance at Mansoura University Hospital. Cross sectional descriptive design was used for staff nurses working at all general medical and surgical units of Mansoura University Hospital. It included 95 staff nurses (35 staff nurses working at medical units and 60 staff nurses at surgical units). Data collected through two tools: the first tool consists of two parts; the first part was intended to collect demographic characteristics; and the second part was The California Critical Thinking Disposition Inventory. The second tool was Observation checklist to measure staff nurses ' performance. Within the total sample (n=95) the relationship between the disposition of staff nurses toward critical thinking and quality of their performance was statistically significant.

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1. Introduction

Organizations are continually seeking well-trained individuals that possess not only the technical skills to fulfill their roles, but more importantly, the thinking skills to be effective in a constantly changing environment (**Harrington and Terry 2009**). The nursing profession is quickly becoming more complex, requiring higher levels of critical thinking and there is considerable agreement that critical thinking is a vital component of successful nursing practice. In addition, Critical thinking is a requirement for nurses to be safe, competent and skilful practitioners and suggest it is essential to true autonomy. Furthermore, nurses are expected to be able to think critically in order to process complex data and to make intelligent decisions concerning the planning, management and evaluation of health care for their clients (**Giro, 2000**).

Beach (2009) defined critical thinking as the mode of thinking about any subject, content, or problem in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking presupposes assent to rigorous standards of excellence and entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism.

A consensus called the "1990 Delfi Research" was developed addressing both critical thinking and

the ideal critical thinker. It defined critical thinking as: "purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference as well as contextual considerations upon which that judgment is based (**Facione, 1990**).

According to Delphi consensus statement: The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit (**Facione, Facione, and Giancarlo 2000**).

Critical thinking consisted of two major dimensions: critical thinking disposition skills and critical thinking cognitive skills. Dispositions refer to nurses' motivation to use these cognitive skills when engaging in higher order thinking such as problem solving and decision-making. While cognitive skills refer to nurses' ability to engage in activities such as analysis, inference, evaluation, explanation and self correction to particular problems, decisions or judgments (**Kakai, 2000 & Walsh and Hardy, 1999**).

In addition to that, **Facione, (2006)** believed that linking disposition skills with cognitive skills

lead to critical thinking and the environmental health professional with well-developed critical thinking dispositions can be a powerful force for effectiveness and improvement. Also (**Papastephanou & Angeli, 2007**) believed that the education of good critical thinkers includes the fostering of critical thinking dispositions as well as the development of critical thinking cognitive skills.

Gordon, (2000) identified a variety of critical-thinking dispositions, including: inquisitiveness, confidence in one's reasoning ability, being open-minded to diverse views, flexible in considering views and opinions of others, willing to revise one's opinions and being cognizant of one's own biases. Furthermore, Nurses who have developed these dispositional characteristics are more likely to apply critical thinking in their personal and professional lives (**Smith-Blair and Neighbors, 2000**).

As a matter of fact, every profession requires critical thinking and nursing is no exception to this fact. Critical thinking is essential to prepare professional nurses with competencies necessary to practice within the complex and changing world of health care (**Kelly, 2009**). Critical thinking in nursing is basically a disciplined and systematic intellectual process that is developed as an effective skills to treat patients in far more better way than normal care methods. Without critical thinking, patients can be mismanaged, leading to adverse outcomes. Hence, critical thinking in nursing is basic to increase nurse's performance, efficiency and intuitive power (**Del Bueno, 2005**). Also **Chuang Feng, (2010)** stated that promoting critical thinking in clinical nurses is an important way to improve problem solving and decision-making competence to further improve nurse's performance and quality of patient care.

Quality is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. It is the degree to which our patient safety outcomes and satisfaction are consistent with the results achieved by the top performance (**Feld, 2007**). Performance and quality are not mutually exclusive. Measuring clinical performance transforms clinical data so it can be used in a meaningful way for measuring performance and improving healthcare quality. Furthermore, nursing performance measures are an integral part of quality initiatives (**Chuang Feng, 2010**).

Performance can be defined as the application of inherent and learned capabilities that enable an individual, group or organization to carry a process. Capabilities refer to essential knowledge, skills and attitudes. It is also defined as an actual situated

behavior, that is, what is actually done in the real-life (**Mohamed, 2006**).

Nursing performance refers to what is actually carried out by nurses in their clinical practice (**While, 1994**). Nurses serve as the principal caregivers in hospitals and other institutional care setting. Considering nursing as an organized service and nurses as individual caregivers is critical to optimal healthcare system performance. However, nurses are not only required to possess adequate knowledge or skills for their job, but also to be able to transform competencies into effective performance in new situations (**Johnson, 2004**). Quality and performance improvement is a dynamic, interdisciplinary process that strives to achieve the outcomes established by the hospital leadership. Understanding the business of healthcare requires the ability to integrate point-of-care clinical data with administrative and financial data and to transform that raw data into actionable information. Having access to the right data at the right time helps managers and clinicians support the organization and its patients while improving health care quality. performance management help identify quality improvement opportunities, reduce practice variability, lower costs, track progress and optimize resources to focus on your organization's most critical goals (**Chuang Feng, 2010**).

No attempts were done to examine the relationship between staff nurses' critical thinking and quality of their performance in Mansoura University Hospital. Also, **May et al., (1999)** mentioned that the relationship of clinical performance to critical thinking in nursing still unclear, and further research to study the association is warranted. So, the aim of this study is to examine the relationship between the disposition of staff nurses toward critical thinking and quality of their performance at Mansoura University Hospital.

Aim of the study

Aim of the study is to examine the relationship between the disposition of staff nurses toward critical thinking and quality of their performance in all medical surgical units at Mansoura University Hospital.

Research Question

Is disposition of staff nurses toward critical thinking improve quality of their performance?

2. Materials and Methods

Research design:

Cross sectional descriptive design was utilized in this study.

Setting

The present study was carried out in all general medical units and all general surgical units at Mansoura University Hospital:

- (a) General medical units are three units with 77 beds.
- (b) General surgical units are five units with 127 beds.

Subject

Subjects of this study included all staff nurses working at the study setting (95 nurses):

- (a) Staff nurses working at medical units (35 nurses).
- (b) Staff nurses working at surgical units (60 nurses).

Tools of data collection

Data was collected by using

1- The California Critical Thinking Disposition Inventory. It consists of two parts:

- The first part included demographic characteristics of the staff nurses as age, work place, educational qualification, years of experience in nursing and marital status.

- The second part included The California Critical Thinking Disposition Inventory (CCTDI). It was developed by Facione, Facione & Giancarlo (2000) and guided by Samir (2003). It used to assess the disposition of staff nurses towards critical thinking. It was translated into Arabic and the necessary modification was done. It consists of 75 items divided into seven dispositional characteristics, namely: Truth seeking (12 items), Open mindedness (12 items), Analyticity (11 items), Systematicity (11 items), Self confidence (9 items), Inquisitiveness (10 items) and Maturity (10 items).

Scoring System

Subjects responses for CCTDI were measured on a 6- point rating scale ranged from (Strongly agree) to (Strongly disagree). Nurses may be positively, ambivalently, or negatively disposed on each of seven of the overall disposition toward critical thinking.

* The total scores 0-420 (Facione, Facione & Sanchez 1994):

- <210 indicates a negative disposition
- 210-280 is ambivalent disposition,
- > 280 is positive disposition toward critical thinking,

*Total Subscales scores 0-60:

- < 30 is weak
- 31-39 is ambivalent
- >40 is positive.

2- Observation checklist:

It was developed by Abdrabou (2002). It was used to assess quality of staff nurses' performance. It contained 49 items categorized under seven main dimensions which are: Psychosocial individual (12 items), Communication (7 items), Professionalism (3 items), General patient care (6 items), Dressing (7 items), Patient status (6 items), Vital signs (3 items),

and Medication (5 items).

Scoring System

Observation checklist scored on the bases of done or not done or not applicable for each activity; done scored (1 point), not done scored (zero), and not applicable were omitted from the calculation. Minimum satisfactory of nurses' performance is 75%. (Abdrabou, 2002).

Field work

Aim of the study was explained to all staff nurses assigned to all medical and surgical units at Mansoura University Hospital. First tool related to The California Critical Thinking Disposition Inventory was distributed to the study sample in their workplaces, with explanation of how to answer it. The researcher observed each nurse three times to complete the second tool (Observation checklist) to assess quality of staff nurses' performance. Data were collected at the morning shift starting August 2010 till end of December 2010.

Administrative and ethical consideration

The aim of the study was explained to the administrative personnel. Official permissions were obtained from hospital's director and nurses' director to conduct the study at the selected units. They were reassured that the collected information was being treated confidentiality.

Pilot study

Pilot study on the data collection tools was carried out on 10% (n=9) of studied nurses to assess the clarity and applicability of The California Critical Thinking Disposition Inventory and Observation checklist and they were excluded from the study sample. The necessary modification includes clarification; rewording and omission of questions were done.

Statistical design:

The collected data were analyzed and results were tabulated by using the statistical package for social science (SPSS). Data were presented using descriptive statistics in the form of frequency, percentage (%), chi-square test (X^2), and correlation coefficients tests. Statistically significant was considered at p-value <0.05.

Results

Table I. Describes the demographic characteristics of staff nurses at Mansoura University Hospital. According to the table, the majority of staff nurses working in surgical units (63.2). Regarding the age of staff nurses, the highest percent (37.9%)

aged above 40 years old and 57.9% had more than ten years in nursing experience. Concerning educational qualification, the majority of staff nurses (79%) had nursing school diploma and the most of them (89.5%) were married.

Table I: Demographic characteristics of staff nurses in the study sample at Mansoura University Hospital (n=95).

Items	No.	%
Department		
- Medical	35	36.8
- Surgical	60	63.2
Age		
<30-	29	30.5
30-	30	31.6
40+	36	37.9
Educational qualification		
Nursing school diploma	79	83.2
Technical nursing institute	16	16.8
Years of experience		
<10	40	42.1
10+	55	57.9
Marital status		
Married	85	89.5
Single	10	10.5

Table II. Describe Total critical thinking disposition among staff nurses in the study sample. According to the scoring system, the majority of staff nurses were positively scored regarding the total critical thinking dispositions (61.1%). Indeed, truth seeking scored the highest of the critical thinking dispositions (81.1 % - 51.9±6.2). While, maturity was the lowest (41.1%).

Table II: Total critical thinking disposition among staff nurses in the study sample at Mansoura University Hospital (n=95).

Dispositional characteristics	+ve critical thinking		
	No	%	X̄ ±SD
Truth seeking	77	81.1	51.9±6.2
Analyticity	57	60.0	44.9±5.4
Systematicity	43	45.3	43.5±4.9
Self-confidence	55	57.9	37.7±7.1
Inquisitiveness	56	58.9	41.5±8.9
Open mindedness	50	52.6	47.7±4.4
Maturity	39	41.1	38.6±4.8
Total			
Ambivalent/negative	37	38.9	305.8±29.5
Positive	58	61.1	

Table III. Describe dimensions of performance the total Performance as observed among staff nurses at Mansoura University Hospital. According to the scoring system, the majority of staff nurses had inadequate performance (63.2%). Regarding dimensions of performance, medication was the highest among staff nurses (90.5%). Meanwhile,

psychosocial individual was the lowest dimension (14.7%).

Table III: Total Performance and its dimensions as observed among staff nurses at Mansoura University Hospital (n=95).

Dimensions of performance	No.	%
Psychosocial individual	14	14.7
Patient status	15	15.8
Communication	25	26.3
Professionalism	76	80.0
General patient care	37	39.8
Dressing	23	38.3
Vital signs	76	80.0
Medication	86	90.5
Total practice		
Adequate (75+)	35	36.8
Inadequate (<75%)	60	63.2

Table IV. Relationship between critical thinking dispositions and staff nurses' total Performance. According to the table, there was a statistical significant relationship between total critical thinking dispositions and total performance (p= 0.04). Also, there were statistical significant relationship between both self-confidence and open mindedness dispositions with total performance (p= 0.01, 0.02). Table V. describe Correlation between staff nurses' scores of critical thinking disposition, Performance and demographic characteristics. According to the table, there was a positive statistical significant correlation between staff nurses' performance and critical thinking disposition (p=0.004). While, there were negative significant correlation between staff nurses' age with both critical thinking disposition and performance (p=.003, 0.008). Also, experience had a negative significant correlation with both critical thinking disposition and performance (p=.012, 0.023).

Table IV: Relationship between critical thinking dispositions and staff nurses' total Performance (n=95).

Dispositional characteristics	Practice				X ² Test	P-value
	Adequate (75%+)		Inadequate (<75%)			
	No	%	No	%		
Truth seeking	31	88.6	46	76.7	2.04	0.15
Analyticity	23	65.7	34	56.7	0.75	0.39
Systematicity	19	54.3	24	40.0	1.82	0.18
Self-confidence	26	74.3	29	48.3	6.11	0.01*
Inquisitiveness	25	71.4	31	51.7	3.57	0.06
Open mindedness	24	68.6	26	43.3	5.65	0.02*
Maturity	14	40.0	25	41.7	0.03	0.87
Total	26	74.3	32	53.3	4.08	0.04*

(*) Statistically significant at p<0.05

Table V: Correlation between staff nurses' scores of critical thinking disposition and Performance with demographic characteristics.

	Critical score		Performance score	
	Pearson correlation coefficient (r)	P-value	Pearson correlation coefficient (r)	P-value
Performance score	0.295	0.004*		
Age	-0.298	0.003*	-0.271	0.008*
Qualification	0.012	0.909	0.201	0.050
Experience years	-0.256	0.012*	-0.233	0.023*

(*) Statistically significant at $p < 0.05$

4. Discussion

The need for critical thinking in nursing has been accentuated in response to the rapidly changing health care environment. Nurses must think critically to provide effective care whilst coping up with the expansion in role associated with the complexities of current health care systems. In addition to that, health care organizations have made dramatic advances and transformations during the last few decades, resulting in rapid growth of nursing technology and theory. Some of the changes facing nursing today are consumer demand for quality care, pressure for cost containment, decreased length of stay in hospitals, and the increased number of patient (Kelly, 2009). Accordingly, if nurses are to deal effectively with complex change, increased demands and greater accountability, they must become skilled in higher level thinking and reasoning abilities (Harrington & Terry, 2009).

The present study conducted to examine the relationship between the disposition of staff nurses toward critical thinking and quality of their performance at Mansoura University Hospital.

As regard to the total disposition of staff nurses toward critical thinking, the majority of staff nurses at Mansoura University Hospital were positively disposed toward critical thinking. It is may be due to that nurses sift through an abundance of data and information to assimilate and adapt knowledge for problem clarification and solution. Moreover, nurses are constantly involved in making decisions with their practice. These decisions are frequently concerned with situations where there is no single or absolutely correct response. In this same respect, (Blackwell, 2010) proclaims the use of critical thinking is vital in examining simple and complex situations in nurses' day-to-day responsibilities, and reported a positive disposition towards critical thinking. This findings also supported by, (James, 2004) who stated that environmental health majors at Illinois State University were positively disposed

toward six of critical thinking dispositions.

In the same respect, (Bowles, 2000) asserted that critical thinking belongs in nursing because nursing is concerned with purposeful goal-directed thinking with the primary aim of making judgments grounded on factual evidence rather than conjecture. This finding is inconsistent with the finding of Samir (2003) at Alexandria University who concluded that the majority of nursing students were ambivalent disposed toward critical thinking.

As regard to dispositional characteristics of critical thinking, truth seeking was the highest disposition for staff nurses. It is probably due to that, nurses especially new nurses have a desire to seek the best knowledge in a given context and they encouraged to ask question. In this same respect, Harrington & Terry (2009) mentioned that critical thinking in nursing is all about seeking truth and demonstrating tolerance to other views. This findings also inconsistent with the studies of (Bers, Mc Gowan, & Rubin, 1996; colucciello, 1997, Wilson, 2000 and Blackwell, 2010). They stated that, truth seeking scored was the lowest of critical thinking dispositions among respondents. Also, Samir (2003) mentioned that the mean scores of the student nurses were high in all of the dispositional characteristics except in truth seeking.

The present study also revealed that, maturity was the lowest disposition among dispositions of critical thinking. This finding disagree with (James, 2004) who stated that, environmental health majors were higher in maturity. It is expected that the older the age, the more mature nurses would be. However, other factors than age may affect the degree of nurses' maturity such as experiences. In the present study –at Mansoura University Hospital- there were no relationship between staff nurses' age and experience with maturity disposition. This finding is inconsistent with Powel and Luzzo (1987) who demonstrated no relationship between age of participants and their level of maturity.

Concerning the quality of staff nurses' performance, the majority of staff nurses had inadequate performance. That may be due to lack of the right equipment to do the job properly as material resources that will affect negatively on quality of care, as did disrepair and malfunctioning equipment. In addition the inadequate staff nurses and lack of necessary guidance in carrying out their roles can affect nurses' performance negatively. Accordingly, Shehata (2008) concluded that lack of coworkers as secretaries or unit managers increase workload on staff nurses At Mansoura University Hospital with their reduced number. Moreover, Ali (2006) stated that attention has to be given for providing adequate resources, training and development as well as

supportive work environment for nursing personnel.

Furthermore, **Tanner (2000)** added the current climate of short staffing, cost containment and high expectations for quality nursing care, there is an urgent need for nurses to recognize and act upon organizational and system problems. Failure to act to these problems may result in inequitable, poor quality or even dangerous nursing care. This finding were disagreed with **Mohamed (2006)** who observed that the greatest percentage of nurses valued dimensions of their performance as "well performed" in their units. In this same respect the Joint Commission of Accreditation of Health care Organizational standards announced the need for nurses to be proactive in identifying opportunities for improving care, documenting that care and recommending, implementing and evaluating actions to bring about improvements (**Chase, 1997**).

Concerning the dimension of performance, medication, vital signs and professionalism were the highest dimensions among staff nurses at Mansoura University Hospital. It is may be due to that, patient' medication and patient medical records are potentially beneficial and valuable as evidence in legal cases. In this respect, **Tanner (2000)** added that, as nursing has evolved from an occupation to a profession requiring cognitive and relational skills, nurses have progressed from task orientation to skilled professionalism based on well-developed knowledge. This finding is consistent with **Ahmed (2007)** who mentioned that, nurses' professional competence, together with the quality of the nurse-patient relationship, are assumed to be key predictors of patients' overall satisfaction with general medical practice.

The finding of the present study also, revealed that psychosocial individual, patient status and communication was the lowest performance dimension. It is probably due to that nurses act only as followers of physician orders and hospital rules in addition to assigning indirect nursing duties as request, nutrition or paperwork. Also, it may be due to nurses work without setting goals and objectives of their work that give the impression of routine work and affect quality of nurses' performance and in turn on quality of patient care. This finding was in accordance with **Mohamed (2000)** who mentioned that the absence of regular meetings conducted by head nurses working in these units to share with nurses in developing and revising unit's goals and objectives. So, they may be unable to clearly understand the activities needed for their achievement and to respond to any changes. This finding was also Inconsistent with **Ahmed (2007)** who mentioned that, nurses have a central role in communicating with patients and their relatives.

The present study showed that there was a significant relationship between staff nurses' disposition critical thinking and quality of their performance. It is may be due to that, nurses need to incorporate several dispositions of critical thinking to become competent professionals. They should be open minded and inquisitive regarding the range of interventions available to their clients. They also need to be willing to seek the truth about the evidence supporting the interventions they are providing, which involves being able to critically analyze and synthesize information. They also develop the self-confidence to trust their professional decisions. Furthermore, (**Scheffer & Rubenfeld 2000**) mentioned that critical thinking in nursing is an essential component of professional accountability and quality nursing care. This finding is consistent with (**Facione, Facione & Giancarlo, 2000; Halex & Reybold, 2005**) who concluded that to be competent practitioners, nurses must have frequent opportunities to develop their disposition to think critically. This also agreed with **Rim (1998))** who found a relationship between the level of one's critical thinking ability and performance in the role of the professional nurse.

In this same respect **Tanner (2000)** added that, nurses are accountable on a daily basis for the quality of care provided to their patients. As much, nurses utilize critical thinking abilities to guide quality improvement initiatives effectively by coaching staff and/or their peers in a variety of ways so as to improve patient care, hence, a harmonious relationship exists between the use of critical thinking strategies and effective quality improvement initiatives. Furthermore, **Del Bueno, (2005)** added that without critical thinking, patients can be mismanaged, leading to adverse outcomes. It can also result in missed opportunities, faulty decisions, inefficiencies and ineffectiveness.

This finding also confirmed by **Chuang Feng (2010)** who acknowledge that critical thinking is essential in nursing practice. Promoting critical thinking competence in clinical nurses is an important way to improve problem solving and decision making competence to further improve the quality of patient care. Furthermore, nurses should think critically to provide effective care whilst coping with the expansion in role associated with the complexities of current health care systems. In this same respect, **James (2004)** added that an environmental health professional with well developed critical thinking dispositions can be a powerful force for effectiveness and improvement in environmental health efforts. Conversely, a profession with poorly developed critical thinking dispositions will be ineffective, or worse.

As regard to the relationship between staff nurses' disposition critical thinking and their demographic characteristics, there were negative statistical relationship between staff nurses' disposition critical thinking with both staff nurses' age and their years of experience. It means that young nurses with decreased years of experience were disposed toward critical thinking more than old nurses with more years of experience. This finding is unexpected because novice nurses become experts and develop clinical expertise through experience and the acquisition of knowledge. As **Kelly (2008)** that skills in thinking develop over time through varied experiences, it's may be due to that new graduate nurses are faced with the responsibility of making decisions regarding patient care and they have more questions need answers through using critical thinking skills.

In this same respect, newly graduated nurses are being curious and eager to acquire new knowledge and to learn the explanations for things even when the applications of that new learning are not immediately apparent. This finding is consistent with **Colucciello (1999)** who found that senior nurses scored low in several dispositions of the California Critical Thinking Disposition Inventory, including self-confidence, analyticity, systematicity and inquisitiveness. This finding disagree with the study of (**Khosravani, Manoochehri & Memarian, 2005 and Chuang Feng, 2010**) who showed a positive correlation between nurses' age as well as clinical experience and scores of critical thinking.

The finding of the present study also revealed that, there were negative relationship between staff nurses' performance with both age and years of experience. This means that young nurses had adequate performance than old nurses. This finding was inconsistent with **Shehata, (2008)** who found that older nurses had more experience in providing nursing care to take a challenging tasks and better communication skills, cooperate with others in a friendly and pleasant way. He added that, older nurses were more confident to pursue a standard of excellence and emphasize quality over quantity. This finding also disagreed with (**Ahmed 2007**) who mentioned that there was a positive statistical significant relationship between nurses' age and performance. Hence, the older nurses perceived effectiveness more than the younger nurses. This also in contrast with **Ali (2006)** who concluded that there were no significant relationship between socio-demographic characteristics of nurses and their performance.

Conclusion and Recommendation

There was a statistical significant relationship

between total critical thinking dispositions and staff nurses' total quality of performance at Mansoura University Hospital.

The majority of staff nurses were positively scored regarding the total critical thinking dispositions, but had inadequate performance at Mansoura University Hospital.

In the light of the findings, the following recommendations are suggested;

- Critical thinking skills should be a part of the educational system for student nurses.
- The nurse leaders should allow nurses greater participation in decision making and encourage nurses to think open-mindedly within alternative system of thought, recognizing and assessing their assumptions, implications and practical consequences.
- The nurse leaders should hold regular scheduled meeting with the nursing staff and clarify the organization's goals and purposes and build a bond of mutual trust with them by maintaining open communication channels.
- The organization should design job description in a way that transmit the role of professional nurse from traditional role of being task oriented to one of being role oriented, including being a problem solver, decision maker, educator and change agent.
- The nurse leaders should act as a role model and use critical thinking skills to make wide decisions and collaborate on change that will have a positive impact on future generations.
- Regular evaluation of staff nurses' performance, rewarding good performance and giving them feedback describing the desirable behaviors and their impact on the outcome of patient care for effective performance.
- Encourage nurses to be proactive in identifying opportunities for improving care, documenting that care and recommending, implementing and evaluating actions to bring about improvements.

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References

1. Abdrabou F. (2002): Relationship between Nurses' Job Satisfaction and Quality of their Performance, Master Degree, Faculty of Nursing Ain Shams University. p 62-70.
2. Ahmed S. (2007): Assessment of organizational performance in ICUs at Alexandria University hospitals. Master Degree, Faculty of Nursing, Alexandria University. P 57-60.
3. Ali S. (2006): The relationship between head nurses' commitment and their performance. Master Degree,

- Faculty of Nursing, Alexandria University. P 73-81.
4. Beach D. (2009): Foundation for critical thinking, Available at, <http://www.criticalthinking.org>. Retrieved at 20 January 2010.
 5. Bers T., McGowan M., and Rubin A. (1996): The disposition to think critically among community college student: The California Critical Thinking Disposition Inventory. *Journal of General Education*; 45(3): 197-223.
 6. Blackwell W. (2010): Critical thinking dispositions among newly graduated nurses. *Journal of Advanced Nursing*. 66(10): 2170-2181.
 7. Bowles K. (2000): The relationship of critical-thinking skills and the clinical-judgment skills of baccalaureate nursing students. *Journal of Nursing Education*; 39(8): 373-376.
 8. Chase S. (1997): Charting critical thinking: Nursing judgments and patient outcomes. *Dimensions of Critical Care Nursing*; 16(2): 100-111.
 9. Chuange Feng R. (2010): The relationship between critical thinking competence and critical thinking disposition in clinical nurses. *The Journal of Nursing Research*. 18(2): 77-87.
 10. Colucciello M. (1997): Critical thinking skills and dispositions of baccalaureate nursing students: A conceptual model for evaluation. *Journal of professional Nursing*; 13(4): 236-245.
 11. Colucciello M. (1999): Relationship between critical thinking dispositions and learning styles. *Journal of Professional Nursing*; 15:294-301.
 12. DelBueno D. (2005): A crisis in critical thinking. *Nursing Education Perspectives*; 26(5): 278-282.
 13. Facione N, Facione P and Sanchez C. (1994): Critical Thinking Disposition as a measure of competent clinical judgment: The development of the California Critical Thinking Disposition Inventory. *Journal of Nursing Education*; 33(8): 345-350.
 14. Facione P, Facione N, and Giancarlo C. (2000): The California Critical Thinking Disposition Inventory: CCTDI Test Manual. Millbrae: California Academic Press.
 15. Facione P. (1990): Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction; Executive summary: "The Delphi Report." Millbrae, CA: insight assessment. P: 3
 16. Facione P. (2006): Critical thinking: what it is and why it counts. Millbrae CA, California Academic Press p: 21
 17. Feld S. (2007): Repairing the healthcare system. What is the definition of quality in medical
 18. Retrieved at 13 January 2010. www.directionsmag.com/article/care/
 19. Girot E. (2000): Graduate nurses: critical thinkers or better decision makers. *Journal of Advanced Nursing*. 31(2):288-297.
 20. Gordon J. (2000): Congruency in defining critical thinking by nurse educators and non-nurse scholars, *Journal of Nursing Education*. 39(8): 340-351.
 21. Halex M., and Rybold L. (2005): A pedagogy of force: Faculty perspectives of critical thinking capacity in undergraduate students. *Journal of General Education*; 54:293-315.
 22. Harrington N., and Terry C. (2009): LPN to RN Transitions. Achieving success in your new role. 3rd ed., Wolters Kluwer, Lippincott Williams & Wilkins, China pp: 208-227.
 23. James B. (2004): Critical thinking among environmental health undergraduates and implications for the profession. *Journal of Environmental Health*; 10(1): 2-9.
 24. Johnson R. (2004): National voluntary consensus standards for nursing sensitive care; An initial performance measure set. National Quality Forum. Available at: www.rwjf.org/research/researchdetail. Retrieved at 23 March 2011.
 25. Kakai H. (2000): The use of cross-cultural studies and experiences as a way of fostering critical thinking dispositions among college students. *The Journal of General Education*; 49(2): 112-31.
 26. Kelly P. (2008): *Nursing leadership and Management*. 2nd . USA. Thomson Delmar Learning P: 483-485.
 27. Kelly Y. (2009): Assessing student's critical thinking performance: urging for measurements using multi-response format. *Thinking skills and creativity*; 4(1): 70-76.
 28. -Khosravani S., Manoochehri H., and Memarian R. (2005): Developing critical thinking skills in nursing students by group dynamics. *The internet Journal of Advanced Nursing Practice* 7(2): 1523
 29. May B., Edell V., Butell S., Doughty J., and Langford Ch. (1999): Critical thinking and clinical competence: A study of their relationship in BSN senior. *Journal of Nursing Education*. 38(3): 101-109.
 30. Mohamed Gh. (2000): Head Nurses' perception and performance of the elements that promote effective teamwork among nurses at Alexandria University hospitals. Master Degree, Faculty of Nursing, Alexandria University. P 41-46.
 31. Mohamed R. (2006): Relationship between nurses intra group conflict and their performance at Alexandria Main University hospital. Master Degree, Faculty of Nursing, Alexandria University. P 59-62.
 32. Papastephanou M. & Angeli C. (2007): Critical Thinking Beyond Skill, *Educational Philosophy and Theory*, 39(6) pp. 604-621.
 33. Powel D., and Luzzo D. (1987): Evaluating factors associated with the career maturity of high school students. *The Career Development Quarterly*; 47:145-158.
 34. Rim K. (1998): Critical thinking ability and clinical decision-making skills among senior nursing students in associate and baccalaureate programmes in Korea. *Journal of Advanced Nursing*; 27:414-481.
 35. Samir Gh. (2003). The Disposition of the undergraduate university nursing students toward critical thinking, Master Degree, Faculty of Nursing, Alexandria University. P 81-82.
 36. Scheffer B., and Rubenfeld G. (2000): A consensus statement on critical thinking in nursing. *Journal of Nursing Education*; 39(8): 353-363.
 37. Shehata R, (2008): Organizational culture versus occupational stress among staff nurses at Mansoura University Hospital. Unpublished Master Thesis. Mansoura University. Faculty of Nursing. p 106-107.
 38. Smith-Blair N. and Neighbors M. (2000): Use of critical thinking disposition inventory in critical care orientation. *Journal of Continuing Education in Nursing*. 31(6) 251-257.
 39. -Tanner C. (2000): Critical thinking beyond nursing process. *Journal of Nursing Education*; 39(8): 338-339.
 40. Walsh C., and Hardy R. (1999): Dispositional differences in critical thinking related to gender and academic major. *Journal of Nursing Education*. 38(9): 149-155.
 41. While A. (1994): Competence versus performance: Which is more important. *Journal of Advanced Nursing*; 20(3): 525-531.
 42. Wilson B. (2000): Disposition toward critical thinking related to analytic writing. *Journal of Business and Training Education*; 9:71-84.

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