Effect of Educational Program on Head Nurses' Coaching Skills to Manage Novice Nurses' Role Ambiguity

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Abstract

Background: Coaching has been identified as a key managerial behavior that organizations must promote to develop novice nurses and achieve higher levels of performance. The transition process of novice nurse to the clinical environment is a critical phase in the professional life. Factors linked with transition process include head nurses coaching skills, insufficiency of practical training, lack of confidence, lack conflict management, unrealistic expectations, stress, lack of supervision or support and burnout. Aim: The aim of the study was to determine the effect of educational program on head nurses' coaching skills to manage novice nurses' role ambiguity. Subjects and Method: Setting of study Tanta International Teaching Hospital. Subjects: All (n=123), head nurses (50) and novice nurses (73). Tool: Three tools were used to collection data; (1) Head nurses coaching skills knowledge questionnaire (2) Head nurses coaching skills self-assessment questionnaire (3) Novice nurses' role ambiguity questionnaire. Results: Preprogram about 82% of head nurses had poor level of knowledge and had either low or moderate level of total coaching skills, while (78.1%) of novice nurses showed high total level of role ambiguity. There was highly statistically significant difference between total knowledge and skills practice post than preprogram. There was also statistical significant positive correlation between head nurses total knowledge, total coaching skills practice and novice nurses total role ambiguity preprogram at (P = 0.001) and post program at (P = 0.001). As well as between head nurses total coaching skills and novice nurses total role ambiguity preprogram at (P = 0.044) and post program at (P = 0.001). Conclusion: Head nurses were demanding for educational program to develop their knowledge and coaching skills practice to manage novice nurses’ role ambiguity, Recommendations: Maintain periodical in-service program to head nurses about coaching skills and to novice nurses about their roles and responsibilities.

Keywords: Head nurses, coaching skills, novice nurses and role ambiguity.


Introduction

Teaching hospitals are increasing turning to coaching as one key strategy in responding to the growing uncertainty, change and complexity in today's world. The coaching skills used to support the learning and development of novice (1). Novice nurses are enter the work force and find that they have neither the practice expertise nor the confidence to navigate what has become a highly dynamic and intense clinical environment burdened by escalating levels of patient acuity and nursing workload, as well as role ambiguity. The head nurse is responsible for guiding and developing the novice nurse in clinical skills, interpersonal communication, and how to overcome role ambiguity (2, 3).

Ambiguity is the absence of satisfactory information which is required in order for novice to efficiently accomplish their role. It occurs when novice tasks or authority are not clearly defined and novice becomes afraid to act or take responsibility for anything. Role ambiguity defined as lack of clarity of plans and goals, and uncertainty about the authority or knowledge on how to perform assigned jobs (roles). It can appear as a result of inadequacy of information on role extent, role behavior and role hierarchy. And occurs when novice are required to meet incompatible demands and expectations, while their organization does not define their job functions and responsibilities (4, 5).

Role ambiguity cause lower productivity, tension, dissatisfaction and psychological withdrawal from the work group and have negative impacts on novice with increasing of stress (6). Role ambiguity is the opposite of role clarity and increase the incidence of adverse outcomes for patients. Also, role ambiguity is facilitated when novice receives complexity or limited messages about patient requires. It is greatest when there is poor communication of expectations, relationships and responsibilities and it affects novice in particular because of the nature of their work situated between other allied health professionals and patient (6).

Management of novice nurse's role ambiguity emphasizes the head nurse coaching role as developer rather than controller (7). Coaching head nurses has been suggested as a valuable assist in the development of novice. Coaching is partnership of equals whose aim to achieve speedy increased and sustainable effectiveness through focused learning in every aspect of the novice as (role responsibilities, behaviors, performance evaluation and the consequences to full fill the role responsibilities). It raises self-awareness and identifies choices (7).
Also facilitate exploration of needs, motivations, skills and thought processes. Facilitate real, lasting positive change, observe, listen and ask questions. Use questioning techniques to identify solutions, support goal setting and assessment. Encourage commitment to action, maintain positive, supportive and non-judgmental point of view. Develop/improve novice competences and not become dependent on coach. But work within their area of personal competence, manage the team relationships and support each other (8,9).

Head nurse uses coaching skills as listening, inquiry and questioning and clarifying skills. Active listening is a communication form that is described as a set of verbal and nonverbal skills is to build or demonstrate empathy by listen to the novice problem and search for solutions. Active listening can consists of nodding the head, making eye contact and restarting important information. Goal setting skills and feedback skills, to encourage novice to develop their self-confidence, resourcefulness and beliefs in the value of their own decision-making (8,9).

The head nurse and novice have sole aim of closing gabs between novice potential and actual performance, gaining an understanding of their responsibilities and accountabilities as well as help them to gain more effectiveness in their given role (10). Clarifying is one of the most powerful head nurses coaching tools include repeating back different words, summarizing and reflecting back the exact words. The skill of clarifying is a combination of listening, asking and reframing, where by the head nurse can offer different perspectives in order to help the novice gain clarity (10).

Beside that head nurse coach works as an effective mentor who helps novice in becoming best team leader as well as becoming available assist for the organization. As well as helps them to discover his/her potential strengthen skills and work in his/her weakness after receiving honest feedback from the coach. Also helps in developing and executing a well-structured professional growth plan for novice by helping them in gaining perspective about inherent leadership, improve emotional intelligence, enabling them to have greater empathy and self-awareness (11).

Implementing of coaching skill program for head nurses has been found to be correlated with improvement of both their management and leadership skills (12). Coaching program can be used to develop head nurses understanding of their own approach with novice and to gain insights how to develop this to be most effective. Also seen as one of effective method for
managing talent novice and head nurses insightful conversation and reflect with them (13).

**Aim of the study**
The aim of this study was to determine the effect of educational program on head nurses' coaching skills to manage novice nurses' role ambiguity.

**Research hypothesis**
After implementation of the educational program it is expected that.
- Head nurses' coaching skills will be improved.
- Novice nurses' role ambiguity will be managed.

**Subjects and method**

**Study design**
Quasi experimental research design was used to achieve the aim of the present research. Such design fits the nature of the problem under investigation. A quasi-experiment is an empirical interventional study used to estimate the causal impact of an intervention on its target population without random assignment (14).

**Setting**
The study was conducted at Tanta International Teaching Hospital.

**Subjects**
The study subjects consisted of all (n=50) head nurses that working in previous mentioned setting and all (73) novice nurses with more than six month of experience working in previous mentioned setting.

**Tools of data collection**
Three tools were used for data collection:

- **Tool 1: Head Nurses' Coaching Skills Knowledge Questionnaire** developed by the researcher guided by Kabeel (2016) (15), Passmore (2015) (16) and Baxter (2013) (17) and review of literature including 2 parts:
  - **Part 1**: Characteristics data of head nurses as age, gender, marital status, department, level of education, years of experience, and coaching program head nurse attended.
  - **Part 2**: Head Nurses' Coaching Skills Knowledge Questionnaire. It consisted of (51) question. In the form of multiple choice (20 items), complete (5 items), true &false (17 items), and match (9 items). These questions were classified into 6 categories as follows:
    1. Coaching concept
    2. Coaching skills
    3. Coaching models
    4. Effective coaching process
    5. Types and styles of coaching
    6. Novice nurses role ambiguity management
Scoring system
Head nurses responses measured according to correct answer take (1) score and wrong answer take (0) score.

Levels of knowledge as follows:
- Good knowledge (> 75%)
- Fair knowledge (60-75%)
- Poor knowledge (< 60%)

Tool 11: Head Nurses’ Coaching Skills
Self-assessment Questionnaire
developed by researcher guided by Bruce (2017) (18), Mannion (2015) (19), Passmore (2015) (16), Mc Carthy and Milner (2013) (20) and literature review. It translated into Arabic language. This tool used to assess head nurses coaching skills with the following subscales:
1. Skill of active listening subscale
   includes 32 items divided into 4 skills:
   - Paying close attention skill
   - Demonstrating physical expressions skill
   - Paraphrasing skill
   - Respond appropriately skill
2. Skill of inquiry and questioning subscale
3. Skill of clarifying subscale
4. Skill of goal setting
5. Skill of feedback subscale

Scoring system
Responses of head nurses measured on 5 points Likert Scale ranging from always done = (5), usually done = (4), frequently done = (3), sometimes done = (2) to rarely done = (1).

Levels of head nurses coaching skills:
- High level of coaching skills (>75%)
- Moderate level of coaching skills (60-75%)
- Low level of coaching skills (< 60%)

Tool III: Novice Nurses Role Ambiguity
developed by researcher guided by Palmino and Freazti (2016) (21), Tang (2010) (22) and the recent literature review. It translated into Arabic language. With two parts:

Part 1: Characteristics data of novice nurses as age, gender, marital status, level of education, years of experience and department.

Part 2: Novice Nurses Role Ambiguity
includes 20 items under 4 subscales as follows:
- Ambiguity related to role definition
- Ambiguity related to role performance and job description
- Ambiguity related to role training and experience
- Ambiguity related to social and psychological aspect

Scoring system
Responses of novice nurses measured on five points Likert Scale ranging from strongly agree = (5), agree = (4), Natural= (3), disagree = (2) to strongly disagree = (1).

Levels of role ambiguity:
- High level role ambiguity (> 75%)
- Mild level role ambiguity (60 -75%)
Low level role ambiguity (< 60%)

**Method**

1. Official permission from Faculty of Nursing, Tanta University to managers of each unit under study to obtain their cooperation to conduct the study after explanation the purpose of this study.

**Ethical consideration:** head nurses and novice nurses consent for participation in the study obtained after explanation of the nature and the purpose of the study, confidentiality of the information's obtained from them and the right to withdrawal.

2. After reviewing of the related literature and different studies in this field, the study tools (I, II, III) were developed by the researcher based on recommended and relevant review.

3. The three tools (I, II and III) presented to a jury of five experts in the area of specialty to check content validity of the tools. The five experts were two assistant professor and two lecturers from Faculty of Nursing Tanta University (Nursing Service Administration) department and one assistant professor from Psychiatric Nursing department.

4. The expert's responses were represented in four points rating score ranging from (4-1); 4 = strongly relevant, 3 = relevant, 2= little relevant, and 1= not relevant. Necessary modifications were done including; clarification, omission of certain questions and adding others and simplifying work related words. **The face validity** was 94% for head nurses coaching skills knowledge, head nurses coaching skills self-assessment was 93% and 94% for novice nurses' role ambiguity.

5. Reliability of tools was tested using Cronbach's Alpha and coefficient test and take mean average of scores, which must not be less than 3 score. Its value 0.803 for head nurses coaching skills self-assessment, 0.865 for novice nurses’ role ambiguity, and 0.845 for head nurses coaching skills knowledge.

6. The aim of the study was explained to head nurses and novice nurses to gain their cooperation, and obtain verbal consent for their participation in the study.

7. A pilot study was conducted on (5) head nurses and (7) novice nurses randomly selected to test the tools for clarity and applicability, not from study subjects. It was conducted two times to the same head nurses and novice nurses after two weeks later (test - retest) to assess reliability of tools. The first time was implemented after the development of
the tools and the second time was implemented before starting the actual data collection to test the clarity, applicability, and relevance of the questions.

**Data collection phase**

8. Knowledge questionnaire about head nurses' coaching skills, tool (I) was used before, implementation of program.

9. Self-assessment questionnaire about head nurses' coaching skills, tool (II) was used before, implementation of program.

10. Novice nurses role ambiguity questionnaire tool (III) was used before, implementation of program.

11. The researcher collected data and gave direction of program for duration of 6 months (start from December month at 2019 to April 2020.

**Construction of educational program**

Putting of statement of instructional objectives, which derived from the assessed need of the sample and literature review.

**Instructional objectives general**

The main objective of the program is to improve head nurses coaching skills and make them able to manage novice nurses' role ambiguity.

**Specific objectives**

At the end of the program the head nurses should be able to

- Recognize coaching concepts
- Demonstrate coaching skills.
- Use coaching model.
- Discuss coaching process.
- Describe types and styles of coaching.
- Describe novice nurses' role ambiguity management.

**Program contents**

The content was designed to provide knowledge related to coaching skills through 6 sessions as follows:-

- **Session** (1) Coaching concept.
- **Session** (2) Coaching skills.
- **Session** (3) Coaching models.
- **Session** (4) Coaching process.
- **Session** (5) Types and styles of coaching.
- **Session** (6) Novice nurses role ambiguity management.

**Selection of teaching methods**

The methods used were lecture, group discussion, example from role play or real life, and work situations.

**Teaching aids**

The teaching aids used for attainment of program objectives were data show, flow sheets, hand out, pens, and papers.

**Implementation of program**

The study was carried on 50 head nurse.
The head nurses were divided into six groups. The program time was 12 hours for each group. The program was conducted for head nurses at meeting hall of Tanta International Teaching Hospital or inside head nurses office as available. The head nurses were informed about objectives of program. The researcher built good relationship and motivated them to participate and share in program activities.

**Evaluation the effectiveness of the program** is the final step that was planned to determine the extent to which head nurses subjects have acquired knowledge and self-assessment and novice nurses role ambiguity management it through:

- Pre and post implementation of the program testing of head nurses knowledge using (tool I) and level of skills using (tool II) and novice nurses role ambiguity management using (tool III).

**Results**

**Table (1):** Shows the age, gender, marital status, department, level of education, years of experience in nursing in unit as well as attended educational program about coaching skills were included. The age of head nurses ranged from 30 -<40 years with mean35.36±7.01. Head nurses 92% were female, 84% married. 92% had bachelor degree and 8% had master degree. They 48% had 10 < 20 years of experience in the unit with mean experience 13.2±6.6 years, and 82% not attended coaching skills program. Head nurses 34% worked as quality/infection control team, (16%) worked at internal ward / outpatient, while equal (8%) worked at surgical ICU and OR. All novice nurses' were nursing specialist, 54.8% aged 25 or more, the rest age <25 years, with mean 26.73±1.6, 72.6% were married. Novice nurses 20.5%, worked at surgical ICU and equal (16.4%) worked at neonate unit and medical ICU.

**Figure (1):** Shows levels of head nurses total knowledge about coaching skills pre and post program. Preprogram majority of head nurses had poor level of knowledge for coaching skills, but post program the majority were at good level.

**Table (2):** Shows that there was highly statistically significant improvement of head nurses level of total knowledge about coaching skills post than pre at (p<0.001). Preprogram majority (88%, 86% and 82%) of head nurse showed poor level of knowledge for dimension of novice nurses’ role ambiguity management, coaching process and types and styles of coaching respectively. Most (80%, 76% and 74%) of head nurses showed poor level of knowledge for coaching skills, coaching concept and coaching models respectively. While, post program range (92%-82%) of head nurses showed good
level of knowledge for all dimension of coaching skills.

**Table (3):** Shows that there was highly statistical significant improvement of head nurses of all items of coaching skills post than preprogram (p= <0.001). Preprogram head nurses range (60% - 56%) showed low level for feedback, goal setting, clarifying, inquiry and questioning, and active listening skill. Post program changed to be range (80%- 86%) showed good level for all items of coaching skills.

**Figure (2):** head nurses’ levels of total coaching skills pre and post program. Preprogram majority of head nurses had either low or moderate level of total coaching skills, changed post program to be majority of them had high level of skill.

**Figure (3):** Novice nurses levels of total role ambiguity pre and post program. Preprogram three quarter of novice nurses showed high level of total role ambiguity, changed to be majority of them had low level of total ambiguity post program.

**Table (4):** Shows that there was highly statistical significant change of novice nurses level of each item for role ambiguity post than preprogram (p= <0.001). Preprogram majority range (83.6% - 72.6%) of novice nurses showed high level of role ambiguity related to role definition, ambiguity related to training and experience, ambiguity related to role performance and job description and ambiguity related to social psychological aspects. They changed to be range (86.3%- 82%) had low level of ambiguity post program respectively.

**Table (5):** Shows that there was highly statistical significant change of novice nurses of all items of ambiguity related to role definition post than preprogram (p= <0.001). Preprogram majority ranged (89.0%- 79.5%) of novice nurses showed high level of ambiguity for items of lack of clear job description, lack of clear instruction for specialized skills, lack of self-confidence, lack of clear responsibilities to carry out ethical professional and lack of consistent information about adequate performance. They changed post program to be 75.3%, 89.0%, 80.8%, 83.6% and 84.9% had low level of ambiguity respectively.

**Table (6):** Shows that there was highly statistical significant change of novice nurses ambiguity of role performance and job description all items post than preprogram (p= <0.001). Preprogram majority ranged (84.9%, 80.8%) of novice nurses showed high level of ambiguity for lack of support from head nurse, absence of orientation program to perform task. They changed to be 79.5%, 86.3% respectively had low level of ambiguity post program. Also, preprogram range (72.6% -64.4%) of novice nurses showed
high level of ambiguity for lack of leadership, lack of sufficient information about work objectives and lack of appropriate supervision. They changed post program to be range (83.6%-76.7%) had low level of ambiguity post program range.

**Table (7):** Shows that there was highly statistical significant change of novice nurses all items of ambiguity related to training and experience post than preprogram \((p<0.001)\). Preprogram majority (84.9%, 80.8%) of novice nurses showed high level of ambiguity for unclear criteria by which my role is evaluated and insufficient clinical practice experience to carry out duties properly, which changed respectively to be 82.2% and 79.5% had low level of ambiguity post program. Also, preprogram 78.1%, 74.0% and 72.6% of novice nurses showed high level of ambiguity for have insufficient training, not receive work assignment and variability work related tasks and lack of autonomy to make decisions, which changed respectively to be 79.5%, 83.6% and 87.7% had low level of ambiguity post program.

**Table (8):** Shows that there was highly statistical significant change of novice nurses for all items of ambiguity of social and psychological aspect post than preprogram \((p<0.001)\). Preprogram majority (83.6%, 75.3% and 74.0%) of novice nurses showed high level of ambiguity for inadequate functional support, lack of meeting, lack of basic knowledge and skills and insecurities in personal communication, which changed respectively to be 80.8%, 78.1% and 84.9 had low level of ambiguity post program. Also, preprogram 67.1% and 64.4% of novice nurses showed high level of ambiguity for insufficient emotional support and lack of adaptation to new organizational climate, which changed respectively to be 83.6% and 89.0%, had low level of ambiguity post program.

**Figure (4):** Shows statistical significant positive correlation between head nurses total coaching skills and novice nurses total role ambiguity preprogram at \((P=0.044)\) and post program at \((P=0.001)\).
Table (1): Subjects characteristics (N= 123)

|                               | Head nurse |       | Novice |       |
|--------------------------------|------------|-------|--------|-------|
|                               | N          | %     | N      | %     |
| **Age**                       |            |       |        |       |
| <30                            | 16         | 32    | 33     | 45.2  |
| 30- <40                       | 20         | 40    | 40     | 54.8  |
| 40 or more                    | 14         | 28    |        |       |
| **Mean±SD**                   | 35.36±7.01 |       | 26.73±1.6 |   |
| **Gender**                    |            |       |        |       |
| Female                        | 46         | 92    | 51     | 69.9  |
| Male                          | 4          | 8     | 22     | 30.1  |
| **Marital status**            |            |       |        |       |
| Single                        | 8          | 16    | 20     | 27.4  |
| Married                       | 42         | 84    | 53     | 72.6  |
| **Department**                |            |       |        |       |
| Neonate unit                  | 3          | 6     | 12     | 16.4  |
| Renal dialysis unit           | 2          | 4     | 6      | 8.2   |
| Lab/cath                      | 2          | 4     | 4      | 5.5   |
| Surgical ICU                  | 4          | 8     | 15     | 20.5  |
| Operating room/OR             | 4          | 8     | 5      | 6.8   |
| Sterilization                 | 2          | 4     |        |       |
| Cardiology CCU                | 3          | 6     | 5      | 6.8   |
| Bone marrow transplantation unit (BMT) | 1 | 2 | 7 | 9.6 |
| Medical /chest ICU            | 2          | 4     | 12     | 16.4  |
| Pediatric unit                | 2          | 4     | 7      | 9.6   |
| Internal ward/outpatient      | 8          | 16    |        |       |
| Quality team/infection control team | 17 | 34 | | |
| **Level of education**        |            |       |        |       |
| Bachelor                      | 46         | 92    | 73     | 100   |
| Master degree                 | 4          | 8     |        |       |
| **Years of experience**       |            |       |        |       |
| <10                            | 16         | 32    | 33     | 45.2  |
| 10- <20                       | 24         | 48    | 16     | 21.9  |
| 20 or more                    | 10         | 20    | 24     | 32.9  |
| **Mean±SD**                   | 13.2±6.6   |       | 2.4±1.47 |   |
| **Attended coaching program** |            |       |        |       |
| Once                          | 9          | 18    |        |       |
| None                          | 41         | 82    |        |       |
Figure (1): Levels of head nurses total knowledge about coaching skills pre and post program

Table (2): Level of head nurses total knowledge about coaching skills items pre and post program (No = 50)

| Coaching skill Dimension | Pre | Post | X² (P-value) |
|--------------------------|-----|------|--------------|
|                          | Good | Fair | Poor | N % | N % | N % | Good | Fair | Poor | N % | N % | N % |            |
| Concept                  | 10   | 14   | 76   | 86  | 10  | 4   |       |      |      |     |      |      | 62.817 (<0.001**) |
| Skills                   | 6    | 14   | 80   | 82  | 10  | 8   |       |      |      |     |      |      | 62.606 (<0.001**) |
| Models                   | 10   | 16   | 74   | 88  | 8   | 4   |       |      |      |     |      |      | 63.784 (<0.001**) |
| Process                  | 4    | 10   | 86   | 90  | 6   | 4   |       |      |      |     |      |      | 77.196 (<0.001**) |
| Types and styles         | 12   | 6    | 82   | 92  | 6   | 2   |       |      |      |     |      |      | 68.864 (<0.001**) |
| Ambiguity management     | 2    | 10   | 88   | 84  | 12  | 4   |       |      |      |     |      |      | 77.532 (<0.001**) |

**Highly significant at P < 0.01
Figure (2): Head nurses levels of total coaching skills pre and post program.
Table (3): Levels of percent of head nurses total of each coaching skills dimension pre and post program (N=50)

| Skills items                  | Pre          | Post         | X² (P-value) |
|-------------------------------|--------------|--------------|--------------|
|                               | High | Moder | Low | High | Moder | Low |
| 1- Active listening           | 16   | 28    | 56  | 82   | 12    | 6   | 45.586 ( <0.001** ) |
| - Paying close attention       | 12   | 26    | 62  | 86   | 12    | 2   | 58.643 ( <0.001** ) |
| - Demonstrating physical expressions | 16   | 38    | 46  | 82   | 12    | 6   | 44.369 ( <0.001** ) |
| - Paraphrasing                | 8    | 30    | 62  | 80   | 16    | 4   | 57.070 ( <0.001** ) |
| - Respond appropriately       | 18   | 22    | 60  | 82   | 10    | 8   | 42.612 ( <0.001** ) |
| 2- Inquiry and questioning    | 10   | 34    | 56  | 80   | 14    | 6   | 51.550 ( <0.001** ) |
| 3- Clarifying                 | 14   | 30    | 56  | 82   | 12    | 6   | 48.102 ( <0.001** ) |
| 4- Goal setting               | 6    | 36    | 58  | 84   | 10    | 6   | 62.273 ( <0.001** ) |
| 5- Feedback                   | 12   | 28    | 60  | 86   | 8     | 6   | 55.585 ( <0.001** ) |

**Highly significant at P < 0.01**
Table (4): Levels of percent novice nurses role ambiguity dimensions pre and post program (N=73)

| Items of role ambiguity                              | Pre          | Post         | X²       | P-value   |
|------------------------------------------------------|--------------|--------------|----------|-----------|
|                                                      | High | Mild | Low | High | Mild | Low |          |           |
| Ambiguity related to role definition items           | 83.6 | 11.0 | 5.5 | 6.8  | 6.8  | 86.3 | 100.163  | (<0.001**) |
| Ambiguity related to role performance and job description | 75.3 | 16.4 | 8.2 | 6.8  | 11.0 | 82.2 | 86.648   | (<0.001**) |
| Ambiguity related to training and experience         | 78.1 | 16.4 | 5.5 | 6.8  | 11.0 | 82.2 | 93.413   | (<0.001**) |
| Ambiguity related to social psychological aspects    | 72.6 | 20.5 | 6.8 | 5.5  | 11.0 | 83.6 | 91.768   | (<0.001**) |

**Highly significant at P < 0.01
Table (5): Levels of percent novice nurses ambiguity of role definition items pre and post program (N=73)

| Ambiguity related to role definition items | Pre | Post | $X^2$ | P-value |
|-------------------------------------------|-----|------|-------|---------|
|                                           | High | Mild | Low   | High    | Mild  | Low  |
| %                                        | %    | %    | %     | %       | %     | %    |
| Lack of clear job description             | 89.0 | 8.2  | 2.7   | 11.0    | 13.7  | 75.3 |
| Lack of clear instruction for specialized skills | 86.3 | 11.0 | 2.7   | 5.5     | 5.5   | 89.0 |
| Lack of consistent information about adequate performance | 79.5 | 12.3 | 8.2   | 6.8     | 8.2   | 84.9 |
| Lack of clear responsibilities to carry out ethical professional | 80.8 | 13.7 | 5.5   | 4.1     | 12.3  | 83.6 |
| Lack of self confidence                   | 82.2 | 11.0 | 6.8   | 6.8     | 12.3  | 80.8 |

**Highly significant at P < 0.01**

Table (6): Levels of percent novice nurses ambiguity of role performance and job description items pre and post program (N=73)

| Ambiguity related to role performance and job description | Pre | Post | $X^2$ | P-value |
|----------------------------------------------------------|-----|------|-------|---------|
|                                                          | High | Mild | Low   | High    | Mild  | Low  |
| %                                                       | %    | %    | %     | %       | %     | %    |
| Lack of appropriate supervision                          | 64.4 | 23.3 | 12.3  | 2.7     | 13.7  | 83.6 |
| Lack of sufficient information about work objectives      | 72.6 | 17.8 | 9.6   | 8.2     | 15.1  | 76.7 |
| Absence of orientation program to perform task           | 80.8 | 12.3 | 6.8   | 5.5     | 8.2   | 86.3 |
| Lack of leadership                                       | 72.6 | 19.2 | 8.2   | 6.8     | 9.6   | 83.6 |
| Lack of support from head nurse                          | 84.9 | 13.7 | 1.4   | 9.6     | 11.0  | 79.5 |

**Highly significant at P < 0.01**
Table (7): Levels of percent novice nurses ambiguity of role training and experience items pre and post program (N=73)

| Ambiguity related to training and experience | Pre | Post | \(X^2\) P-value |
|---------------------------------------------|-----|------|-----------------|
|                                             | High | Mild | Low | High | Mild | Low |        |
| - I have insufficient training              | 78.1 | 16.4 | 5.5 | 5.5  | 15.1 | 79.5 | 93.125 (<0.001**) |
| - Insufficient clinical practice experience to carry out duties properly | 80.8 | 15.1 | 4.1 | 4.1  | 16.4 | 79.5 | 100.214 (<0.001**) |
| - I not receive work assignment and variability work related tasks | 74.0 | 24.7 | 1.4 | 8.2  | 8.2  | 83.6 | 102.465 (<0.001**) |
| - Unclear criteria by which my role is evaluated | 84.9 | 8.2  | 6.8 | 6.8  | 11.0 | 82.2 | 95.317 (<0.001**) |
| - Lack of autonomy to make decisions        | 72.6 | 19.2 | 8.2 | 9.6  | 2.7  | 87.7 | 92.324 (<0.001**) |

**Highly significant at P < 0.01**

Table (8): Levels of percent novice nurses ambiguity of social and psychological aspects items pre and post program (N=73)

| Ambiguity related to social psychological aspects | Pre | Post | \(X^2\) P-value |
|-------------------------------------------------|-----|------|-----------------|
|                                                 | High | Mild | Low | High | Mild | Low |        |
| - Inadequate functional support (lack of meeting) | 83.6 | 16.4 | 0.0 | 5.5  | 13.7 | 80.8 | 109.166 (<0.001**) |
| - Insufficient emotional support                | 67.1 | 20.5 | 12.3 | 6.8  | 9.6  | 83.6 | 77.390 (<0.001**) |
| - Insecurities in personal communication        | 74.0 | 16.4 | 9.6 | 8.2  | 6.8  | 84.9 | 85.123 (<0.001**) |
| - Lack of basic knowledge and skills            | 75.3 | 23.3 | 1.4 | 2.7  | 19.2 | 78.1 | 103.640 (<0.001**) |
| - Lack of adaptation to new organizational climate | 64.4 | 28.8 | 6.8 | 5.5  | 5.5  | 89.0 | 99.243 (<0.001**) |
Figure (4): Correlation between head nurses total coaching skills and novice total role ambiguity pre and post program
**Discussion**

Coaching is a training method to develop novice nurses' qualifications to work effectively to provide high quality care and services \(^{(23)}\). Through their head nurses having coaching skills, novice nurse can receive sound mentoring and feedback on technical aspect of their responsibilities. As well as head nurses was held accountable to help novice nurses to practice their new role through using of interactive listening and clarifying coaching skills \(^{(24)}\). So the present study education program is very important not only to improve head nurses coaching skills but also to manage novice nurses role ambiguity and held them being accountable for efficiently practice their new role.

Result analysis indicated that majority of present study head nurses at preprogram showed poor level of knowledge about total coaching skills. Actually they were unequipped with enough knowledge about total coaching skills because they not attend any related orientation or training programs. But those head nurses significantly improved immediately post attendance of present program sessions. The program gave them information about coaching concepts, skills, models, process and styles, as well as gave them information about novice nurses’ role ambiguity management. Really the well-designed program attracted those head nurses to manage novice nurses’ role ambiguity and educate them about their job description.

Actually the program clarified to head nurse's professional and psychological aspects of coaching role, so that they start to appreciate shared the opinion as the main purpose for coaching. They understand that coaching is useful tool for head nurses and novice nurses alike because it encouraged participants to learn about their strengths and weaknesses, develop their competencies and gain new skills and perspective. Beside that organizations can use coaching in various ways, such as to respond to performance problems, as a developmental tool, training, succession planning, and change management.

**Bozer and Jones (2018)** \(^{(25)}\) stated that coaching is about the mutual relationship between head nurse and novice, that process has the purpose of facilitating professional and personal growth within the novice. Adding that **Rekalde et al. (2017)** \(^{(26)}\) found that coaching was a lot more effective than other developmental tools in regards to the observed behavioral changes and sustainability.

Current study result revealed that pre-program majority of head nurses showed either low or moderate level of total coaching skills, most probably due to most
of head nurses had 30-<40 years and not attend previous training program about coaching skills. Actually they need to be stimulated to make workshop about coaching skills as active listening, questioning, clarifying, goal setting and feedback skills. Those head nurses are responsible to enhance novice work performance and to improve their communication skills, cooperation and ethical relationship. Most probably those head nurses are in need for either self-learning or educational program to improve personal development, helps to realize novice potential, supporting, encouraging, and most importantly transferring responsibility for their own development directly to the novice who benefits from coaching.

Really the education program can help novice find more and new professional opportunities, as well as create and learn new skills that will contribute not only to organizational objectives, but also to a novice individual career goals. Malling et al. (2020) (27) suggested the use of coaching skills in hospitals is less than in private and public organizations where coaching is often utilized as a professional development strategy in continuing professional development. The participants perceived that coaching program improved their work attitude and it was effective in enhancing core-performance.

Finding of present study illustrated that pre-program more than half of head nurses showed low level for total active listening coaching skills. Most probably due to head nurses not paying close attention or serve as role model for novice nurses and not demonstrating physical expression every time.

Gad (2019) (28) support the present study and found that minority of technical nursing students know that effective listening is giving attention to the patient effectively until he finished. They might need to improve their ability to listen and utilize nonverbal communication skill to use silence with full connection on patient through using small comments (like uh-huh, yes, right). But post program majority of technical nursing students started to give full attention to verbal message, tone of voice, posture and gesture to understand their patient problems.

Finding of present study illustrated that pre-program half of head nurses showed low level of inquiry and questioning skill. Unfortunately, those head nurses not make space for novice nurses responses to the question and they don’t used questions as how we solve this problem. Those coaching head nurses overlook asking the novice nurses if understand their direction and giving information about their work objectives and not give chance to ask question or to clarify that they comprehend
the message. Those coaching head nurses need to know the importance of asking questions to novice nurses. Really asking questions can increase motivation, develop novice way of comprehending things, and positively influence novice. Novice nurses will be more confident in their own potential, especially in a situation of change, and help them to approach their set goals.

Training to use open end questions is very important for head nurses to stimulate creative thinking, problem solving and cognitive growth of novice nurses. As well as encourage novice nurses full meaningful response relying on novice own knowledge, feeling perspective and have ideas. The skillful use of open end question focused on the needs of the novice, opening up new learning is very important for their work experience. **Sibiya (2018)** explained that the head nurse can use verbal methods as questioning, facilitation, empathic statements, clarification, and summarizing in an appropriate instructive communication for effective decisions for novice nurses. She/he can use closed questions to check information. Added that head nurses uses facilitation to help novice verbalize their concerns by acknowledging and legitimizing the problem, showing respect, and a willingness to share the feelings and needs. Results revealed that pre-program head nurses showed low level of clarifying coaching skills. Actually those head nurses lack experience in using reflecting back ethical professional responsibilities and lack use of paraphrasing method for what the novice has said. Most probably those head nurses need to be trained for using reflecting back and paraphrasing tools. The coach head nurses required to check the novice understanding of the message through giving short statement or summary and helps them clarify their thinking. As well as they have to demonstrate attentive listening for what the novice has said and way of helping them reflect on their own situation. Beside make summarizing as a shared activity skill not only to allow the novice to pause for thought, but also for the head nurse coach to draw out the key themes for the novice to verify and build upon.

The present study finding illustrated that pre-program sixty percent of head nurses showed low level of total feedback skill. Really those head nurses are in great need to practice using feedback skill after identify strength and weakness point of novice, identifying gap and show them how to improve and overcome their weakness. Immediately post program, head nurses gave attention in their practice to give feedback to the novice as the right
way and major key for success. They take care to give clear feedback being constructive, relevant, solution focused, positive and motivating. They practice the art of feedback and have the ability to transmit and receive in the most effective way and achieved the dual purpose of motivation and development. Head nurses realized that feedback is a very useful part of the performance evaluation process and by practice convinced it would be unwise to just think what it would be unwise to just think of feedback as part of the annual performance evaluation review.

Actually head nurses immediately post program committed to be undertaken the feedback in a fairly regular and consistent manner to be really effective. As Moore (2019) (30) state that specific feedback, head nurse provide novice with increased awareness of their strengths and deficiencies, and help clarify their understanding of the nature of any problems they need to address. Without such assessment, it would be unclear which change efforts would have the most impact. Therefore, when coaching includes significant assessment and feedback, head nurse should be more successful in furthering their development and changing their novice behavior in important ways. Current study result revealed that three quarter of novice nurses showed high level of total role ambiguity pre-program. Most probably those novices were lacking orientation program explain their role definition, training and experience. Apparently this due to most of those novice nurses were <25 years and lack knowledge about their job description and responsibilities. Their role ambiguity leads them to have dissatisfaction with work, increase their emotional exhaustion and decrease their personal accomplishment. Role ambiguity may also influence those novice personal life and correlated with work-life conflict. Apparently novice nurses need educational program to improve their knowledge and practice about different roles. Yet when novices have role clarity they will have satisfaction with work and increase their job performance in complex organizations.

Carmina et al. (2018) (31) found that majority of novice nurses came from the 20-24 age groups. Most of the novice nurses were assigned in the special areas of the institution. Also, majority of the novice nurses have less than 6 months of experience in the institution, so that there is need for training courses about their role to accomplish their tasks effectively. Morrison (2017) (32) state that role ambiguity is seen as a serious obstacle for novice nurses and can cause consequences such as preventing novice from using their skills at full capacity as well as causing burnout due to work overload.
Post-program novice nurses had low level of ambiguity due to the training program for head nurses lead them to provide a safe learning environment for managing novice nurses ambiguity. Really the program promoted opportunities for practicing ambiguity management skills and building effective teams. As well as novice nurses can define effectively their roles and responsibilities within the workplace boundaries.

Analysis of results revealed that majority of novice nurses showed high level of ambiguity of role definition pre-program. Those novices reported that they lack clear job description and lack clear instruction for specialized skills. As well as reported lack of self – confidence and lack of clear responsibilities to carry out ethical professional. Most probably that was due to their lack of information required for adequate performance to carry out professional and ethical practice. Role theory was used to understand that any role (like that of a nurse specialist) requires that a part or identity be assumed by specific social participants, with expectations held and understood for that role by all participant's including patterned and characteristic.

Abd-Elaziz (2017) (33) supported present result and asserted that majority of nursing interns showed high ambiguity related to role definition. The nursing interns reported lack of orientation program and lack of authority to carry out job assignment. They also lack realistic hospital expectations of their job, and lack clear information needed to carry their job. Results illustrated that majority of novice nurses showed high level of ambiguity related to role performance pre-program. Actually preprogram those novice have lack of support from head nurse, absence of orientation program to perform task, lack of leadership, objectives and lack of appropriate supervision. Also feelings of inadequacy and lack of necessary knowledge for carrying out specific procedures often leads them to fear of making a mistake. Role theory provides a way of incorporating the wider contextual elements that are needed to develop a sustainable approach to nurse specialist development. Role performance is concerned with how nurses perceive the boundaries of their role within their organization, and is often used to distinguish in-role from extra-role behavior, especially in relation to organizational citizenship behavior.

Pre-program majority of novice nurses showed high level of ambiguity related to role training and experience, and social and psychological aspects. Most probably they have unclear criteria for their role evaluation, insufficient clinical practice experience to carry out duties properly,
and they not receive work assignment. They also have variability work related tasks, and they lack of autonomy to make decisions. Beside that novice nurses have inadequate functional support (lack of meeting), and lack of basic knowledge and skills. As well as they have insecurities in personal communication, insufficient emotional support and lack of adaption to new organizational climate.

Actually, post program those novice nurses receive adequate functional and emotional support, have securities in personal communication, availability of knowledge and skills and adapt to new organizational climate. As well as statistical significant positive correlation found between head nurses total knowledge, total coaching skills and novice nurses role ambiguity post program. This could direct the attention that implementation of program about coaching skills improved head nurses knowledge and skills and decreased novice nurses’ role ambiguity. Really, the coaching skills program maximized the head nurses knowledge about effective coaching skills to manage role ambiguity for novice nurses because the program was planned and implemented according to their pre assessed needs. Furthermore, simplification and well-presented educational matter with suitable educational aids attracted head nurses to practice their coaching knowledge and properly manage role ambiguity, and build good relationship with novice nurses.

Akhtar and Rehman (2018) assert that managerial coaching result in psychological ownership and learning goal orientation and creative behaviors of nurses.

Ideally coaching is a one-to-one process of head nurses helping novice nurses to improve, grow and get to a higher level of performance. Through providing focused feedback, encouragement and raising awareness, as well as used to access the roots of what is causing the problem with the novice in question and then empower them to take the necessary steps to create their own action plan to move forward.

The present study coaching programs have impacted positively on head nurses and facilitated behavioral changes in some key leadership competencies, such as self-awareness, emotional intelligence and strategic thinking. Really the effective coaching skills program permit head nurse be trained in required tools and methods for improving novice nurses performance and managing their role effectively. Using coaching skills supported head nurse in novice nurses’ orientation role transitions, initiatives changing responsibilities for ongoing development and succession planning.
Conclusion
Tanta International Teaching Hospital head nurses were lacking coaching skills and practice while novice nurses have high level role ambiguity which reflected on their demand for educational program to explain necessary information and train them for practicing effective coaching skills. The present study well designed program improved their knowledge and coaching skills practice. As well as novice nurses became oriented about their job description and decreased their role ambiguity. Still apparently head nurses need specific follow up and periodical orientation program to always develop their coaching skill knowledge and practice and to remove novice nurses' role ambiguity.

Recommendation
- Head nurses should periodical attend education program to update their coaching skill knowledge and practice.
- Periodical orientation program to novice nurses about their job description.
- The head nurse should periodically examine the novice performance against the standard to help them identify strength, weakness and needs. Records such as novice complaints, absenteeism, productivity reports can be used to determine the novice needs.
- The head nurse should undergo self -learning and workshops to acquire skills and best practice in coaching. This will assist them in identifying the specific job performance skills needed and developing specific measurable and performance objectives.
- Head nurses encourage novice nurses for self -learning on their items of role ambiguity.
- The impact of coaching program should be evaluated. The head nurse should compare the benefits of coaching with the objectives that were set before coaching commenced. This can be reflected through performance rating, and novice reaction to the benefits of coaching.

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