Effect of Assertiveness Training Program on Nurse Interns' Self-esteem and Stress at El-Fayoum University Hospitals

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Abstract The internship year is a valuable prospect for new nurses to advance their practice in the real world setting. However, nurse interns are meeting a variety of stressors that could hinder their work outcomes and even their overall wellbeing. Therefore, assertiveness training is required to improve their self-esteem and decrease stress associated with the demanding nature of the nursing profession. The present study aimed to assess the effect of assertiveness training program on nurse interns' self-esteem and stress. A quasi-experimental design was followed to achieve the aim of the present study. It was carried out at El-Fayoum University Hospitals. The study subjects included all the available nurse interns who were enrolled at the academic year 2016-2017. Three tools were used to collect data for this study, the assertive behavior in nurses' questionnaire, the self-esteem scale, and the perceived stress scale. Results revealed that there was a significant improvement in nurse interns' assertiveness mean score after the program implementation (P < 0.05). As well, there was statistically insignificant enhancement in their self-esteem mean score, where P-value > 0.05. Additionally, there was a statistically significant reduction in their total mean score of stress after the program implementation (P < 0.01). Conclusion: The assertiveness training is beneficial in developing nurse interns' self-esteem and decreasing stress. Therefore, it is recommended to provide assertiveness training to the non-assertive nurse interns at the beginning of the internship year to build nurse interns' self-concept and self-esteem and subsequently decrease stress.

Keywords: assertiveness training, self-esteem, stress, nurse interns


1. Introduction

Following successful completion of the four years in the undergraduate nursing program, the student must spend 52 weeks of hospital based internship period in a recognized hospital that can offer proper training areas to meet the objectives of the internship program. This period of practical, managerial, and theoretical experience will enable each nurse intern to acquire more competency and experience to perform as an independent nurse specialist as well as, building clinical confidence and strengthening his/her clinical skills while developing positive professional qualities and working attitudes in the different clinical settings [1,2].

Nurse intern is a nurse that enters the professional workplace for the first time, usually takes place from the graduation point till capabilities required by the profession are acquired. Nurse interns are a singular aspect of instruction that integrates the study with planned and supervised career connected to work experience through the internship period [3]. The first three to six months of the internship year are the most stressful period in nurse interns' career and the most critical decision on whether to commit to the nursing career or not. Many nurse interns experienced reality shock, as they realize that their level of skills does not correspond to their expectations of the role and responsibilities of the practitioner [4].

Stress is a state of mental tension and anxiety that are caused by problems in the nurse intern life and work. It is a general term that is applied to several mental (psychological) and physiological (bodily) stressors experienced or felt by nurse interns during their lives [5]. Nurse interns face many factors that could lead to stress such as inadequate reward of training, staff shortage, heavy workload and unsuccessful work environment because of insufficient materials and supplies in the governmental health settings [6]. Moreover, the psychological effect of dying or critically ill patients is also a significant source of stress [7]. Likewise, providing comprehensive care for patients may expose the nurse interns to be involved in their patients' emotional distress as well as physical difficulties and this is considered an important source of stress [8].
Subsequently, nurse interns suffer from a high level of stress from the new environment and responsibilities that may be a contributor for high turnover and low self-esteem that could in turn affect negatively on the patient care [9]. Therefore, nurse educators or preceptors should learn the nurse interns how to deal with stress in a healthy positive manner through using assertiveness skills that can help to deal with stress that contribute in the achievement of the objectives of the internship program [5].

Self-esteem is recognized as a predictor of stress adjustment. Self-esteem is accurately defined as "how much value people place on themselves and it is the evaluative component of self-knowledge". Nurse interns in health care field especially hospitals need to be people with high level of self-esteem and assertiveness to be able to communicate comfortably and use their professional knowledge and skills more effectively as well as, reduce the rate of stress experience [10]. High level of self-esteem is considered important both in managing the demands placed on nurse interns during the hospital training and in developing a strong and therapeutic relationship with patients. Similarly, it influences how interns think, feel, motivate, and act that undoubtedly affects the care patients receive [11].

However, nurse interns, who have low self-esteem suffer from negative thoughts and fail to deal with stress, they fear from criticism and take compliments negatively and are anxious to take up responsibilities, and afraid of developing their own opinions that could in turn affect the patient care level and quality in a negative direction. Assertiveness training is the best technique to deal with those situations, both in and out of work, where they feel lack of self-esteem. It is a way of unhooking oneself from the learned behaviors in the past and reprogramming him to be more assertive [5].

Assertive training program can be defined as a systemic approach to more assertive self-expression, based on a balance between achieving nurse interns' goals and respecting the other individuals' needs. As well, it is a psychological intervention that helps participants learn to integrate assertive behavioral skills into their everyday lives [12]. Nurse interns need the skills of assertiveness in every place; these skills enhance self-esteem level and decrease stress. Likewise, assertive communication skills create an opportunity for open discussion with a variety of views, needs and choices to be respectfully heard and considered to achieve a win-win result to definite problems. It can strength personal relationship, decreasing stress from conflict and providing social support when fronting difficult times [13].

1.1. Significance of the Study

Nursing internship is a planned supervised experience in a hospital whereby nurse interns gain practical work experience; it is a supervised didactic work experience from one specialty area to another. This internship year is considered the most important transition phase for the nurse interns, in which the world around them changes in a significant manner and many of them experienced reality shock, as they become more aware that their skill levels are not on line with their expectations of the role and responsibilities of practitioner. So, it is very important to cope this change in a positive and an effective manner. Assertiveness training is the skill that could help them to standup for their rights, improve their self-esteem and deal effectively with stress. Accordingly, it is significantly important to implement assertiveness training program for nurse interns hoping to reflect on increasing self-esteem and decreasing stress of them.

1.2. Aim

The current study aimed to assess the effect of assertiveness training program on nurse interns' self-esteem and stress at El-Fayoum University Hospitals.

1.3. Hypotheses

- Nurse interns' assertiveness mean score will be increased after the implementation of the assertiveness training program.
- Nurse interns' self-esteem mean score will be increased after the implementation of the assertiveness training program.
- Nurse interns' stress mean score will be decreased after the implementation of the assertiveness training program.

2. Methodology

2.1. Design

A quasi-experimental design was used to achieve the aim of this study.

2.2. Setting

This study was conducted in the different clinical areas of El-Fayoum University Hospitals, where the nurse interns practiced the training in the academic year 2017–2018, which included intensive care, cardio-thoracic care, pediatric intensive care, operating room, and dialysis areas. El-Fayoum University Hospitals included two buildings namely; surgical and medical university hospitals and they included 300 beds.

2.3. Subjects

The sample of the study included all nurse interns who succeeded in the 4th academic year 2016 – 2017 and are practicing their internship year (2017 – 2018) at El-Fayoum University Hospitals (n = 80). The total number of nurse interns in the academic year 2017 – 2018, was 120 nurse interns from which 40 nurse interns were spending their internship year in private hospitals and the remaining number of nurse interns was 80 were practicing their internship year at El-Fayoum University Hospitals.

2.4. Instruments

Three tools were used to collect data for this study.

Tool 1: Assertive behavior in nurses' questionnaire:

It was developed by Begley and Glacken [14] to assess the assertive behavior among nurse interns. This tool
included two parts: The first part: Personal characteristics of nurse interns; this part was used to collect data about: Age, gender, marital status, and working during the internship year. The second part: Assertive behavior; this part included 28 items grouped under three domains, these were: The ability to deal with criticism (2 items), confronting others (13 items) and spontaneous expression of feelings (13 items). The responses of nurse interns to the items were measured on four-point Likert scale ranging from always (4) to never (1); while negative items had been scored reversely. For each domain; the scores of items were summed-up and the total divided by the number of the items, giving a mean score for the domain. The reliability of the tool was measured through estimating its internal consistency using the Cronbach alpha coefficient, and it was 0.87.

**Tool 2: Self-esteem scale:**

It was developed by Osman et al. [15] based on Rosenberg [16] and Sorensen [17] to measure nurse interns' self-evaluation and self-acceptance. This scale included 20 items subdivided into three domains: Positive personal self (7 items), negative personal self (6 items) and social self (7 items). The responses of nurse interns to self-esteem items were measured on four-point Likert scale ranged from strongly agree (4) to strongly disagree (1); while negative items had been scored reversely. For each domain of self-esteem items, the scores of the items were summed-up and the total divided by the number of the items, giving a mean score for the domain. The reliability of the tool was measured through estimating its internal consistency using the Cronbach alpha coefficient, and it was 0.92.

**Tool 3: Perceived Stress Scale (PSS):**

Developed by Sheu et al. [18], it was used to examine nurse interns' stress level and type of stressors. It consisted of 28 items grouped into six factors related to the sources of stress. These were: Stress from taking care of patient (7 items), stress from instructors and nursing staff (6 items), stress from assignments and workload (5 items), stress from peers and daily life (4 items), stress from lack of professional knowledge and skills (3 items), and stress from the clinical environment (3 items). The nurse interns' responses to stress items were measured on five-point Likert scale ranged from always (5) to never (1). For each factor of stress items, the scores of items were summed-up and the total divided by the number of the items, giving a mean score for the factor. The reliability of the tool was measured through estimating its internal consistency using the Cronbach alpha coefficient, and it was 0.90.

### 2.5. Field Work

#### 2.5.1. Preparatory Phase

It began with reviewing the theoretical and empirical literature of national and international resources concerning the topic of the study using textbooks, articles, magazines, researches, and internet search in order to get a clear picture of all aspects related to the study. The pre-test forms were distributed to the nurse interns to assess the baseline assertiveness, self-esteem and stress. Based on the results of pre-test, the nurse interns learning needs were identified. Accordingly, the objectives of the program were stated and the content was designed.

#### 2.5.2. Implementation Phase

The training program designed for this study has been implemented through 20 sessions (11 theory & 9 practical). These sessions lasted for 29 hours; 11 hours theory (one hour for each session) and 9 practical sessions with 18 hours (two hours for each session). It was difficult to take the whole number of the nurse interns at the same time; so, they were divided into 4 groups, every group consisted of 20 interns, who were divided into five small groups (4 each). All sessions were repeated to the four main groups until all of them completed the entire 29 hours of instructions.

The program sessions were implemented three days per week. The program consisted of two main parts; the first theoretical part covered knowledge about introduction to the program, definition and importance, types, and components of assertiveness, types and categories of assertiveness responses, communication styles, how to ask for request, conflict management skills, unassertive thoughts and ways used to challenge thoughts, how to handle anger and reduce physical tension, how to say no, how to deal with criticism and disappointment, and how to give and accept compliment.

However, the second part which is a practical part was applied in the form of giving activities and situations for nurse interns about assertiveness skills. A special class was allocated for teaching the program sessions at the Faculty of Nursing, El-Fayoum University. The researchers used various teaching methods to attract interns' attention and motivate them to participate. The teaching strategies included lectures, group discussion, brain storming, and role play. The teaching media included power point, colored posters, and an illustrated booklet which covered theoretical and practical information about assertiveness skills.

#### 2.5.3. Evaluation Phase

Focused on assessing the effect of the implementation of the training program on nurse interns' self-esteem and stress, the same tools used before program implementation were utilized. The program evaluation was applied two times for the same interns, one before the program and the second occurred immediately after the completion of the training program.

#### 2.6. Pilot Study

Before starting the actual data collection, a pilot study was carried out to confirm understanding, clarity, and applicability of tools, and to estimate the time needed to fill in the questionnaire sheets. The pilot study was carried out on 8 (10 % of the study sample) nurse interns. Minor modifications were done so, the subjects who participated in the pilot study were included in the main study sample.

#### 2.7. Methods of Data Collection

It was necessary for the researchers to introduce themselves and explain the purpose of the study for nurse interns included in the study. After an explanation of the study aim and tools, the questionnaire sheets were answered by nurse interns at their clinical settings, in El-Fayoum University Hospitals, where they were
receiving their training. The researchers were present all the time for any clarifications.

Data collection was carried out during the period from
the beginning of October 2017 to the end of December
2017. The researchers taught the training program in the
morning and afternoon shifts three days per week, they
began with a theory session and took a rest, then followed
by a practical session, about three weeks were needed for
the completion of the program sessions for each group of
nurse interns, these sessions were repeated for four groups,
so 12 weeks were needed for providing all sessions of the
training program.

2.8. Administrative and Ethical
Considerations

Approval to conduct the study was obtained from the
medical and nursing directors of the hospitals and the head
nurses of the units designed for interns' training after
explaining the aim of the study. The participants were
informed that their participation in the study is completely
voluntary and the cover letter introducing the study
addressed the confidentiality of the participants'
information given. Consent was established with the
completion of the questionnaires.

2.9. Statistical Design

Data entry and statistical analysis were done using the
Statistical Package for Social Science (SPSS), version
17.0. Cleaning of data was done to be sure that there was
no missing or abnormal data. Data were presented using
descriptive statistics in the form of frequencies and
percentages for categorical variables, and means and
standard deviations for continuous variables. Independent
t-test was used to detect the relation between the variables.
Paired t-test was used to compare between mean scores.
Pearson correlation analysis was used for assessment of
the inter-relationships between total scale scores. P-values
which were less than 0.05 and 0.001 were considered as
statistically significant and highly significant, respectively.

3. Results

Table 1: Presents the personal characteristics of nurse
interns. As shown from the table; 62.5% of studied nurse
interns aged less than 24 years, with a mean age of 23.48
± 0.73 years. Additionally, the highest percentages of
them were female, married, and were not working during
the internship year (98.7%, 71.2%, & 86.2% respectively).

Table 2: Shows the nurse interns' assertiveness domains' mean scores throughout the program phases. It is
clear from the table that, there were statistically significant
improvements in all domains as well as in the total mean score of assertiveness among nurse interns before and
immediately after the program implementation (P < 0.05),
except the improvement of confronting others' domain
was statistically insignificant, where P > 0.05.

Table 3: Displays the nurse interns' self-esteem domains' mean scores throughout the program phases. As
revealed from the table, there were slight enhancements in
all domains as well as in the total mean score of self-
estime among nurse interns before and immediately after
the program implementation with statistically insignificant
enhancements, where p-value > 0.05.

Table 1. Personal Characteristics of Nurse Interns (n= 80)

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in year:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 24</td>
<td>50</td>
<td>62.5</td>
</tr>
<tr>
<td>≥ 24</td>
<td>30</td>
<td>37.5</td>
</tr>
<tr>
<td>Mean ± SD</td>
<td>23.48 ±0.73</td>
<td></td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Female</td>
<td>79</td>
<td>98.7</td>
</tr>
<tr>
<td>Marital status:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>23</td>
<td>28.8</td>
</tr>
<tr>
<td>Married</td>
<td>57</td>
<td>71.2</td>
</tr>
<tr>
<td>Working during the internship year:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>13.8</td>
</tr>
<tr>
<td>No</td>
<td>69</td>
<td>86.2</td>
</tr>
</tbody>
</table>

Table 2. Nurse Interns' Assertiveness Domains' Mean Scores Throughout the Program Phases (n=80).

<table>
<thead>
<tr>
<th>Assertiveness domains</th>
<th>Mean score of the nurse interns</th>
<th>Paired t - test</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before program (n= 80)</td>
<td>After program (n= 80)</td>
<td>Mean ± SD</td>
</tr>
<tr>
<td>Ability to deal with criticism</td>
<td>5.70±0.906</td>
<td>5.99±1.119</td>
<td>-2.017</td>
</tr>
<tr>
<td>Confronting others</td>
<td>37.66±3.118</td>
<td>37.21±3.993</td>
<td>-0.866</td>
</tr>
<tr>
<td>Spontaneous expression of feelings</td>
<td>31.45±4.401</td>
<td>33.98±4.904</td>
<td>-4.079</td>
</tr>
<tr>
<td>Total assertiveness score</td>
<td>74.81±6.311</td>
<td>77.18±8.272</td>
<td>-2.400</td>
</tr>
</tbody>
</table>

Paired t-test: Compare mean scores pre-program and immediately post.
*Statistically significant at P < 0.05 ** Highly statistically significant at P < 0.001.

Table 3. Nurse Interns' Self-Esteem Domains' Mean Scores Throughout the Program Phases (n=80).

<table>
<thead>
<tr>
<th>Self-esteem domains</th>
<th>Mean score of the nurse interns</th>
<th>Paired t - test</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before program (n= 80)</td>
<td>After program (n= 80)</td>
<td>Mean ± SD</td>
</tr>
<tr>
<td>Positive personality</td>
<td>21.21±2.453</td>
<td>21.68±2.750</td>
<td>-1.211</td>
</tr>
<tr>
<td>Negative personality</td>
<td>18.14±2.782</td>
<td>18.79±3.149</td>
<td>-1.384</td>
</tr>
<tr>
<td>Social personality</td>
<td>18.23±2.256</td>
<td>18.36±2.296</td>
<td>-0.438</td>
</tr>
<tr>
<td>Total self-esteem score</td>
<td>57.58±5.372</td>
<td>58.83±5.555</td>
<td>-1.503</td>
</tr>
</tbody>
</table>

Statistically significant at P < 0.05.
Table 4. Nurse Interns' Stress Domains' Mean Scores Throughout the Program Phases (n=80).

<table>
<thead>
<tr>
<th>Stress domains</th>
<th>Mean score of the nurse interns</th>
<th>Mean ± SD</th>
<th>Mean ± SD</th>
<th>Paired t - test</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before program (n= 80)</td>
<td>After program (n= 80)</td>
<td>Paired t - test</td>
<td>P-value</td>
<td></td>
</tr>
<tr>
<td><strong>Stress from taking care of patients</strong></td>
<td>18.81±4.604</td>
<td>17.48±5.445</td>
<td>1.752</td>
<td>0.084</td>
<td></td>
</tr>
<tr>
<td><strong>Stress from assignments and workload</strong></td>
<td>16.24±3.395</td>
<td>13.88±4.033</td>
<td>4.122</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td><strong>Stress from lack of professional knowledge and skills</strong></td>
<td>7.53±2.306</td>
<td>6.84±2.631</td>
<td>1.986</td>
<td>0.050</td>
<td></td>
</tr>
<tr>
<td><strong>Stress from the clinical environment</strong></td>
<td>10.31±2.519</td>
<td>9.21±2.519</td>
<td>2.983</td>
<td>0.004**</td>
<td></td>
</tr>
<tr>
<td><strong>Stress from peers and daily life</strong></td>
<td>12.49±2.951</td>
<td>11.30±2.931</td>
<td>3.175</td>
<td>0.002**</td>
<td></td>
</tr>
<tr>
<td><strong>Stress from instructors and nursing staff</strong></td>
<td>18.36±4.640</td>
<td>15.81±4.401</td>
<td>4.106</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td><strong>Total stress score</strong></td>
<td>83.74±13.703</td>
<td>74.51±16.635</td>
<td>4.111</td>
<td>0.000**</td>
<td></td>
</tr>
</tbody>
</table>

** Highly statistically significant at P < 0.001.

Table 5. Correlations between Total Scores of Nurses Interns' Assertiveness, Self-Esteem and Stress Throughout the Program Phases (n=80)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Assertiveness</th>
<th>Self esteem</th>
<th>Assertiveness</th>
<th>Self esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before program (n= 80)</td>
<td>After program (n= 80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>r</td>
<td>P-value</td>
<td>r</td>
<td>P-value</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>0.281*</td>
<td>0.012</td>
<td>0.489**</td>
<td>0.000</td>
</tr>
<tr>
<td>Stress</td>
<td>-0.270*</td>
<td>0.015</td>
<td>-0.152</td>
<td>0.179</td>
</tr>
</tbody>
</table>

*Statistically significant at P < 0.05, ** Highly statistically significant at P < 0.001.

Table 6. Relation between Personal Characteristics of The Nurse Interns and their Assertiveness, Self-esteem, and Stress (n=80).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Assertiveness</th>
<th>Self esteem</th>
<th>Stress</th>
<th>Assertiveness</th>
<th>Self esteem</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
</tr>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 24 years</td>
<td>75.22 ± 6.46</td>
<td>58.38 ± 5.05</td>
<td>81.38 ± 14.54</td>
<td>76.74 ± 8.99</td>
<td>58.76 ± 5.51</td>
<td>73.62 ± 17.72</td>
</tr>
<tr>
<td>≥ 24 years</td>
<td>74.13 ± 6.10</td>
<td>56.23 ± 5.76</td>
<td>87.67 ± 11.33</td>
<td>77.90 ± 6.99</td>
<td>58.93 ± 5.71</td>
<td>76.00 ± 14.80</td>
</tr>
<tr>
<td>Independent t-test—P-value</td>
<td>-0.74 -0.45</td>
<td>-1.75 -0.08</td>
<td>0.96 -0.07</td>
<td>0.60 -0.54</td>
<td>0.13 -0.89</td>
<td>0.61 -0.53</td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83.00 ± 5.60</td>
<td>52.00 ± 0.00</td>
<td>87.00 ± 0.00</td>
<td>76.00 ± 0.00</td>
<td>61.00 ± 0.00</td>
<td>90.00 ± 0.00</td>
</tr>
<tr>
<td>Female</td>
<td>74.71 ± 6.28</td>
<td>57.65 ± 5.36</td>
<td>83.70 ± 13.78</td>
<td>77.19 ± 8.32</td>
<td>58.80 ± 5.58</td>
<td>74.32 ± 16.64</td>
</tr>
<tr>
<td>Independent t-test—P-value</td>
<td>1.31 -0.19</td>
<td>-1.04 -0.29</td>
<td>0.23 -0.81</td>
<td>-0.14 -0.88</td>
<td>0.39 -0.69</td>
<td>0.93 -0.35</td>
</tr>
<tr>
<td>Marital status:</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>76.35 ± 6.93</td>
<td>57.13 ± 5.52</td>
<td>82.70 ± 13.46</td>
<td>78.39 ± 9.30</td>
<td>58.57 ± 6.17</td>
<td>72.96 ± 17.68</td>
</tr>
<tr>
<td>Married</td>
<td>74.19 ± 5.99</td>
<td>57.75 ± 5.35</td>
<td>84.16 ± 13.89</td>
<td>76.68 ± 7.85</td>
<td>58.93 ± 5.34</td>
<td>75.14 ± 16.31</td>
</tr>
<tr>
<td>Independent t-test—P-value</td>
<td>1.39 -0.16</td>
<td>-0.46 -0.64</td>
<td>-0.43 -0.66</td>
<td>0.83 -0.40</td>
<td>-0.26 -0.79</td>
<td>-0.52 -0.59</td>
</tr>
<tr>
<td>Working during the internship year:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>77.82 ± 7.65</td>
<td>59.73 ± 4.17</td>
<td>80.00 ± 13.05</td>
<td>79.00 ± 6.32</td>
<td>60.18 ± 7.15</td>
<td>71.45 ± 14.18</td>
</tr>
<tr>
<td>No</td>
<td>74.33 ± 5.99</td>
<td>57.23 ± 5.48</td>
<td>84.33 ± 13.80</td>
<td>76.88 ± 8.54</td>
<td>58.61 ± 5.28</td>
<td>75.00 ± 17.03</td>
</tr>
<tr>
<td>Independent t-test—P-value</td>
<td>1.72 -0.08</td>
<td>1.44 -0.15</td>
<td>-0.97 -0.33</td>
<td>0.78 -0.43</td>
<td>0.87 -0.38</td>
<td>-65 -0.51</td>
</tr>
</tbody>
</table>

*Significant at p < 0.05.

Table 4: Clarifies nurse interns' stress domains' mean scores throughout the program phases. As indicated from the table, there were highly statistically significant reductions in all domains and total mean score of stress among nurse interns between before and immediately after the program implementation (P < 0.001); where the reductions in stress from taking care of patients and stress from lack of professional knowledge and skills' domains were statistically insignificant (P > 0.05).

Table 5: Reveals correlations between total scores of assertiveness, self-esteem and stress among nurse interns throughout the program phases. As shown from the table the before treatment implementation there was a statistically significant positive correlation between total scores of nurse interns' assertiveness and self-esteem (r=0.281 at p < 0.05), whereas there was a statistically significant negative correlation between total scores of their assertiveness and stress (r = -0.270 at p < 0.05). As well, after the program implementation there was a highly statistically significant positive correlation between total scores of nurse interns' assertiveness and self-esteem (r = 0.489 at p < 0.001), while there were statistically significant negative correlations between the total scores of nurse interns' assertiveness and self-esteem as regards their total score of stress (r = -0.490 & -0.309, respectively at p < 0.001).

Table 6: Displays the relations between personal characteristics of the nurse interns and their assertiveness, self-esteem and stress. The results show that there were no statistically significant relations between nurse interns' personal characteristics as regards their assertiveness, self-esteem and stress scores, where p-value > 0.05.
4. Discussion

The assertiveness training is based on the assumption that nurse interns do not act assertively because they have not had the opportunity to learn assertive responses in certain situations, both aggression and nonassertive behaviors are learned responses that can be replaced by assertive responses. The training programs of assertiveness also help nurse interns to realize themselves without abusing others' rights. Consequently, it is more appropriate to help nurse interns learn assertive skills through an assertiveness training program to work as practitioners with others. A previous research on assertiveness training has approved that the enhancement of assertiveness skills is linked to increased assertiveness, enhanced self-esteem, and decreased stress [11].

Therefore, the aim of the current study was to assess the effect of assertiveness training program on nurse interns' self-esteem and stress at El-Fayoum University Hospitals.

Regarding total mean score of assertiveness among nurse interns; the findings of the present study indicated that there were statistically significant improvements in all domains and the total score of assertiveness among nurse interns between before and immediately after the program implementation except the improvement of confronting others' domain was statistically insignificant. This finding supports the first research hypothesis which stated that nurse interns' assertiveness mean score will be increased after the implementation of the assertiveness training program.

The previous study finding might be due to that completing the assertiveness training program was useful for nurse interns to understand and differentiate the concept of assertive behavior from other behaviors and how to apply it practically. As well, the researchers encouraged the nurse interns to participate in role plays that involved confronting criticism and expressing dissatisfaction, refusing and requesting, and allowing interns to express their internal thoughts and feelings properly; that they were not expressed in the past. This also could be due to that the researchers provided the nurse interns with opportunities to interact and establish relationships with others that could promote the assertive behaviors and identify with others. Another possible reason for increasing assertiveness may be that participation in the program has helped less assertive nurse interns achieve the necessary self-analysis and practice assertive behaviors in real and natural communication with others and use them correctly.

These results go in the same line with those of a previous study conducted in Egypt by Abed et al. [11] to assess the effect of assertiveness training program on improving self-esteem, and found that assertiveness mean scores of participants increased immediately after program implementation. Likewise, Mohamed et al. [19], who conducted a study to determine the effect of assertiveness training program on communication skills and self-esteem in Egypt; they found that, there was a highly statistically significant difference in the total mean score of assertiveness among the study sample before and immediately after the program implementation.

However, the previous findings were incongruent with those of the study conducted to determine the effect of an assertiveness training program on participants' self-esteem and assertiveness skills in Egypt, by Hamoud et al. [20], who found that assertiveness mean score slightly decreased after program implementation in their study. Similarly, Mahmoud and Hamid [21], who carried out a study at Kingdom of Saudi Arabia to determine the effect of assertiveness training program on self-esteem, and found that there wasn't a significant improvement in mean score of assertiveness after the program implementation.

As regards the total mean score of nurse interns' self-esteem; the findings of the current study clarified that there were slight enhancements in all domains and the total score of self-esteem among nurse interns between before and immediately after the program with statistically insignificant differences. This finding justifies the second research hypothesis which stated that nurse interns' self-esteem mean score will be increased after the implementation of the assertiveness training program. This finding might be due to that the assertiveness training program has contributed to enhance self-esteem among nurse interns; where the nurse interns who had participated in the program became more positive in their communication with others through using assertive behaviors and accordingly these successes resulted in positive evaluation from others that reflected positively on their self-esteem. On the other hand, one cannot ignore the impact of the stress enforced on nurse interns through their internship year subsequently led to the statistically insignificant improvement of their self-esteem.

Similarly, this result is consistent with that of a study done by Bola and Akin [22], in Nigeria, to investigate the effect of mentoring assertive training on participants' self-esteem and found that there is no significant difference in the posttest mean scores of participants' self-esteem. However, this finding is contradicting with that of Hamoud et al. [20], who mentioned that the total mean score of self-esteem decreased after implementing the assertiveness training program. Also, this result is in disagreement with those of previous studies, the one conducted in Iran by Akbari et al. [23], who determined the efficacy of assertiveness training on increasing self-esteem and general self-efficacy and the other carried out by Mohamed et al. [19] and they found that there were significant differences of self-esteem mean scores before and after program implementation.

Concerning the total mean score of nurse interns' stress; the findings of the current study revealed that there were highly statistically significant reductions in all domains and the total score of stress among nurse interns between before and immediately after the program implementation; where the reductions in stress from taking care of patients and stress from lack of professional knowledge and skills domains were statistically insignificant. This finding supports the third research hypothesis which stated that there were statistically insignificant differences. This finding is in agreement with that of Mahmoud and Hamid [21].

During assertiveness training program, the researchers presented the necessary information and encouraged nurse interns to perform the appropriate assignments such as; proper social communication, voice
tone, practice, physical activity and eyes communication, all these lead to decrease stress and combat illogical expectations. Therefore, it clearly means that assertiveness training helps interns manage and solve their problems and difficulties. On the other hand, they are still relatively novices in the clinical areas and actually this is the first time to take care of patients without a well prepared training program that makes them aware that their levels of skills does not correspond to their expectations of the role and responsibilities of professional nurses. This explains the reduction in stress from taking care of patients and stress from lack of professional knowledge and skills domains, which were statistically insignificant.

This finding is in agreement with other previous studies as the one carried out by Eslami et al. [24], who determined the effectiveness of assertiveness training on the levels of stress, anxiety, and depression, in Iran, and the other done by Parray and Kumar [5], who investigated the impact of assertiveness training on the level of assertiveness, self-esteem, and stress, in India, and they found that the assertiveness training program reduced stress level of participants.

As for the correlations between total scores of assertiveness, self-esteem and stress among nurse interns throughout the program phases, the findings of the current study showed that there were statistically significant positive correlations between total scores of nurse interns' assertiveness and self-esteem before and after implementing the program. On the contrary, there were statistically significant negative correlations between the total scores of nurse interns' assertiveness and self-esteem as regards their total score of stress after the program implementation.

The positive correlation between assertiveness and self-esteem of participants can be due to that the assertiveness is an essential component of self-esteem, so increasing assertiveness will lead to increased self-esteem. Furthermore, the training of assertiveness is based on understanding that any nurse intern as a human being has a fundamental value and that certain rights accompany that fact. Such a deep sense of value and actual behavioral ability to preserve it seems to motivate interns to be self-responsible and to accept themselves comfortably [25]. Whereas, the possible reason for negative correlations between assertiveness and self-esteem as regards stress may be attributed to that assertive interns are likely to experience a higher degree of self-esteem and psychological well-being and a lower deficit in emotion. Due to their ability to manage their situations efficiently and ability to say ‘no’ to undesired work during the internship year, they also are able to maintain positive mental state. If a nurse intern accepts his/her faults and recognizes his/her strengths and positive qualities at the same time, he/she will experience strong self-esteem and low stress.

The previous results agreed with those of Akbari et al. [23] and Maheshwari and Gill [26], who carried out their study to examine the relationship of assertive behavior and self-esteem among nurses in India and found that there was statistically significant positive correlation between total scores of participants' assertiveness and self-esteem. Likewise, Abed et al. [11] study revealed that there was positive significant correlation between total assertiveness skills and total self-esteem score level. As well, Maheshwari and Gill [27], who carried out a study to examine the relationship of assertive behavior and stress among nurses, in India, mentioned that there was a statistically significant negative correlation between total scores of participants' assertiveness and stress. Moreover, in a study carried out by Moksnes et al. [28] to examine the association between stress, self-esteem and depressive symptoms, in Ireland, clarified that there was a statistically significant negative correlation between total scores of participants' self-esteem and stress.

Regarding to the relations between personal characteristics of the nurse interns and their assertiveness, self-esteem and stress; the results of the present study indicated that there were no statistically significant relations between personal characteristics of the nurse interns as regards their assertiveness, self-esteem and stress. The possible explanation for this finding was that there were alternative factors that could affect nurse interns' assertiveness, self-esteem and stress such as, the psychological empowerment, family income, the participation in decision making process, and having the required skills to solve problems and manage stress.

This finding is consistent with that of Abed et al. [11], who in their study found that there were no statistically significant relations between participants' gender and marital status as regards their assertiveness and self-esteem. Conversely, Moksnes et al. [28] in a similar study revealed that there was a statistically significant relation between participants' age and their level of stress. Likewise, Larijani et al. [29], who conducted a study, in Iran, to examine factors affecting participants' assertiveness found that there were statistically significant relations between participants' assertiveness level as regards their age and working beside studying.

5. Conclusion

The assertiveness training program is effective and beneficial in enhancing nurse interns' assertiveness and self-esteem as well as reducing their stress.

6. Recommendations

Based on the study findings, the following recommendations are suggested:

- Assertiveness training program may be given to the non-assertive nurse interns at the beginning of their internship year to build their self-concept and self-esteem.
- Assertiveness and self-esteem concepts should be an integral part of the undergraduate nursing curriculum.
- Nurse interns should practice assertiveness in their real life and determine the appropriate ways of asserting themselves.
- Nurse preceptors should conduct workshops about stress management and coping strategies to nurse interns.
- Nurse preceptors should motivate nurse interns to express their opinions and personal rights to enhance their autonomy and subsequently self-esteem.
7. Further Researches about

- Further research is needed to investigate the socio-cultural conditions that may hinder or enhance the assertiveness of the individual.
- Further research that assess the effectiveness of educational and counseling training program about stress on nurse interns stress and personality.
- Further research for determining the sources of stress and coping strategies as perceived by the students.

References