ABSTRACT

The career of Nursing involves interpersonal relations on a daily basis which can lead to conflict. So, nurses should learn how to handle the work conflict effectively. Because the management of conflict may lead to desired organizational results like: satisfaction, effectiveness, fairness, as well as improve emotional and social intelligence. This study aims at examining the program influence of Conflict management strategies on social intelligence of head nurses. Quasi-experimental design is used to perform this study. The study includes all head nurses (n= 41) who work in health insurance hospital at Mansoura. Three tools are used to collect data, namely Conflict management questionnaire, Social Intelligence Questionnaire and knowledge Test. The main result of the study was statistical significant correlation between conflict management strategies and social intelligence. Highly statistical correlation found between collaborating and social problem solving and significant correlation between compromising and social skills. Highly statistical significant improvement of head nurses’ knowledge were found immediately and 3 months after the program than before starting it. The result revealed high change regarding knowledge in relation to conflict management strategies and later social intelligence. It is recommended that social intelligence is a foundation for, and can help to facilitate the head nurses to be more effective and successful. So, the paper suggests an emphasis on the importance of social intelligence which promoting understanding, moderating conflict and fostering stability, learn how to enrich the abilities of social intelligence, measure a head nurses’ social intelligence and helps them develop a plan for improving it, increase social intelligence through building teams, some activities of training, and spending some hours in social communication between supervisors and subordinates. Other training programs are still needed to improve nurses’ social intelligence to enable them to manage conflicts effectively.

Keywords: Conflict, Conflict Management Strategies, Social Intelligence

Introduction:

Wherever two or more people come together, there is bound to be conflict. Nursing, as a career, involves interpersonal relations on a daily basis between co-workers, patients, staff, supervisors, and doctors. All these interrelations may cause conflict. This occupational conflict is a major concern. Nurses must learn how to handle these conflicts effectively. Because the management of conflict may lead to desired organizational results like: satisfaction, effectiveness, fairness, and improve emotional and social intelligence[1].

Conflicts are found in all organizations but it may be weak, strong, or silent, outstanding or indistinctive. Researches also suggest that 20% of managers' time is spent for resolving organizational conflicts.
Conflict can be defined as a state of disharmony between incompatible or antithetical persons, interests or, ideas. In other words, it is a clash. Resolution means the expression of opinions or intentions formally that a legislative body agreed on like in committee, or other formal meetings [4].

Handling conflicts efficiently and effectively can improve the quality, safety of the patients, achieve the staff morals, and also can limit the work stress. The manager should meet this challenge thoughtfully as it involves inter-working relations that should be dealt with effectively—all the nursing stuff must cooperate while navigating roles and responsibilities that are often overlapped. The nurse manager should be skillful enough to help his/her team to handle the different situations they face every day [5].

Seraji et al. [6] identified that the most important thing to resolve organizational conflicts is awareness of the five conflict management strategies and their appropriate contexts and applications in order to select the appropriate strategy for each situation; not only to prevent damage to the organization, but also leading them to the realization of organizational goals. On both the personal and the professional levels; all people can make a great use of learning how to manage conflict.

These strategies are: Collaborating, Competing, Avoiding, Harmonizing and Compromising. Each one of these strategies has two scales: None of them can be wrongly used, but the timing of applying them may be right or wrong. Describing these strategies is going to be discussed in the following sections. The information helps the team members to realize her/his conflict management model.

Assertive and cooperative (Collaborating) are called the win-win strategy. It is the opposite of avoiding. Each party respects the concepts, ideas, and values of the other party, to reach a solution that makes all parties satisfied. But this strategy consumes time, but it’s a resolution for any conflict on the long-term [7]. While, the strategy of Assertive and uncooperative (Competing) are a win-lose approach. Each party tries to force its own ideas. It can be useful only in emergency and urgent situations when there is no time for discussion a decision is quickly needed [8, 9].

The strategy of Unassertive and uncooperative (Avoiding) is a lose-lose approach, in which the two parties prefer the withdrawal leaving the problem unresolved. The strategy of Avoidance is useful sometimes when the situation needs more details and analysis, or if there is a party that is more powerful than the other [10]. Unassertive and cooperative strategy or (Harmonizing) is a lose-win approach. It is the opposite of competing. The parties neglect their own interests for the satisfaction of the other party [11]. While Moderation in both assertion and cooperation (compromising) is a lose-lose approach, in which each party has to give up an important part of his/her interests. This strategy can be applied as a temporary solution for complicated problems [12].

Nursing stuff should learn how their feelings work and how to use them to develop the competencies of handling conflict effectively which necessary for improving social intelligence. Increasing one’s Social Intelligence is like exercising a muscle rather than learning more about a topic. It requires the appropriate action and reinforcement, much like lifting weights to develop stronger muscles rather than reading an exercise book. The approach of using neuroscience, psychology and biology to interpret how the conflict resolution affects the human social intelligence is a relatively new knowledge. Several evidences were found supporting the concept that the conflict results of
social interactions affect profoundly, on both positive and negative levels, all of the brain, the chemistry of the human body, responses of hormones, and cognitive abilities. So, social intelligent has a significant role on achieving success and happiness in life [13].

The theories and approaches of soft skills and social intelligence began to attract the academics. They recognized its role and priority in determining success in life [14]. Social intelligence can be defined as a stage in which the individual has the ability of adaption (getting along) to communicate with other people around him. People in general are "social animals", and their social intelligence is the force that enables them to continue living and facing life problems. [15].

Koch (2004) [16] says that leadership is a process of building social information, relationships, and connections. The most powerful leaders are those who are able to build social rapport, awareness and relations with other people surrounding them. Obviously, the new mandates for Magnet designation need head nurses as a leader to form connection channels with their staff, empower them to develop social problem solving skills, and encourage the growth of each individual in their team. Kanter (2006) [17] explains the future need to leaders who will be able to build bridges of communication and to break the wall between “us” and “them”. The need for leaders who can find and create effective ways of understanding and improvement the way they handle both their and social intelligence and other people’s different conceptions.

Social Intelligence is defined as the ability of interacting, maintaining and building relationships with other people. In 1920, Edward Thorndike was the first one to create the original ability, which is: "the ability to understand and manage men and women, boys and girls, to act wisely in human relations". According to Narayana & Narasimham, (2017) [18] social intelligence is the ability to understand the person’s environment optimally and react properly to achieve the social success. Another definition of social intelligence is the ability of getting along with other people to achieve cooperation with you. In spite of the simplicity of this definition, achieving social intelligence needs a complex understanding of the requirements and interests of others. It also needs generosity, consideration, and a set of practical skills to interact successfully with others in any different environment[19].

Social intelligence, in terms of behavioural results, is “one’s ability to accomplish relevant objectives in specific social settings” [20]. The most recent definition divides social intelligence into two categories: social awareness and social facility. Social awareness can be defined as “what we feel about others”, while social facility as “what we then do with that awareness”. Moreover, the concept of social intelligence is more interested in what changes in a person as he/she gets engaged in a relationship with other people. It’s more than just awareness or management in a social setting, but rather the concept incorporates what transpires within each person in the relationship [21]. Social scientist Honeywill (2015) [22] believes that social intelligence is an aggregated measure of both personal and social awareness, evolved social attitudes, beliefs, the capacity to manage a complex social change. So, Social intelligence is the capacity to navigate and negotiate effectively within the context of complex social relationships.

So improving the importance of social Intelligence is represented on a number of different levels. First, the age of technology has affected the social interaction between people making it less and less. Social Intelligence in the modern
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Age helps young people to express themselves correctly, handle friendship miscommunications and interact personally, not just through technological means of social media. Second, Social Intelligence supports the family communication in home. To help the family members how to understand each other and how to ask their needs is helpful in bringing harmony into the home. Recently, the Social Intelligence becomes essential in the career of nursing, and in almost every career [23].

In Primal Leadership, four main dimensions, or what is known as building blocks of the “emotional mind”, are identified. They are the essential elements for achieving the social intelligence which are: Social Information Processing, Social skills, Social problem-solving, and Social Awareness. According to Wikipedia article, the Social Information Processing can be defined as: ‘the activity of collecting human actions that organize knowledge.’ It is the process of creating and processing of information by a group of people” [24]. Baddar et al., (2016) defines the Social skills as the behaviours that promote positive interaction with both people and the environment. Social skills are the used skills in every environmental context that includes two or more persons, including: manners, reading and reacting appropriately in ‘social Environments’. These skills also include expressing empathy, acting with generosity and helpfulness, taking part in group activities, negotiating, communicating with others, and problem solving [25].

Social problem-solving, occurs in the natural environment D’Zurilla, et al (2002) [26], it is the reference for the cognitive-behavioral process in which one tries to cope with daily problematic situations. This process is conscious, self-directed, cogent, effortful, and focused. Social problem-solving skills are effective coping skills in the stressful situations. It refers to the techniques and skills the person uses to search and apply these skills to find the most proper available solutions for a specific situation. And lastly, Social Awareness is the ability to read or feel other people’s emotions and how these emotions affect their situation or concern. The competencies for this dimension include empathy and organizational awareness. And is the ability to observe and understand the situation context, and to understand the ways the behavior of the people is dominated or shaped [27].

The most successful executive coaches help their nurses develop the social intelligence that enables the nurses to expand their perspective and appreciate those they lead on the basis of the social connections that facilitate trust, synergy, and effective conflict resolution. The participants will become more confident in the social situations by learning how to use conflict strategies effectively. They will create positive connections and increase the influence during social situations which provide benefits throughout the professional and personal lives [28].

Significance of the study

People skills, social intelligence, playing well with others…whatever you want to call it, a big part of being successful in the professional world is based on how well you interact with people. Supervisors, peers and co-workers, clients and customers…if you can’t communicate, get along and build relationships; you’re likely headed for major failure. So People of high social intelligence—those who have a high level of social awareness and nourishing behavior—are magnetic to others. On the other hand, people of low social intelligence—who are primarily toxic to others are anti-magnetic. The extremes of SI can be thought of as either “toxic” or “nourishing.” Whereas, toxic behaviors cause other people to feel inadequate, intimidated, frustrated, angry or guilty. On
the other hand, nourishing behaviors cause others to feel positively, they feel valued, loved, capable, appreciated, and respected. Conflict resolution programs help organizations to achieve the promotional change necessary for both creating a responsible citizenship behavioral, and the systemic change required to maximize production. Conflict is considered as the inevitable fact of human existence. If efforts were exerted to understand and manage such conflict effectively, both the productivity and satisfaction about social relationships will be improved. Conflict has the potential for either a great deal of destruction or much creativity and positive social change [29]. Nurses with high SI (who are of a great level of social awareness and nourishing) are magnetic—or have what is called “magnetic personality.”

**Research hypothesis:** Conflict management strategies program will improve social intelligence of head nurses.

**Aim of the study**
- To assess social intelligence of head nurses.
- To assess conflict management strategies used by head nurses.
- To examine the effect of Conflict management program strategies on social intelligence of nurses.

**II. Materials and Methods**

2.1 **Design:** quasi-experimental design is used in this study.

2.2 **Setting:** The study is performed at Mansoura health insurance hospital with bed capacity 360 beds. This hospital provides a wide spectrum of health insurance services at Dakahlia Region.

2.3 **Subjects:** the study includes all head nurses in the study sitting available at time of data collection (41 head nurses).

2.4 **Data collection Tools:**

2.4.1 **Tool 1.** Conflict management questionnaire modified by the researchers based on conflict management styles quiz by Adkins (2006) [30] and included two parts:

   a) Data of Socio-Demographic for collecting information concerning head nurses that include personal information like: name, age, education, marital status, and work experience.

   b) Conflict Management Questionnaire used to measure strategies applied by head nurses. It consists of a 15 items grouped under five subscale namely; avoiding (3items), collaborating (3 items), competing (3), harmonizing (3) compromising (3). Head nurses responded using a 4-point Likert scale, 1 = Rarely 2 = Sometimes 3 = Often 4 = Always

2.4.2 **Tool 2.** Social Intelligence Questionnaire:

The questionnaire was developed by the researchers based on TromsØ social intelligence scale by Silvera et al. (2001)[31] and Social intelligence scale by Mohamed (2008)[32]. It consists of a 28 items grouped under four subscale namely; the processing of social information (7), social skills (7), social awareness (7), and social problem solving(7). Head nurses respond using a 5-point Likert scale that ranged from 1 to 5. 1 refers to strongly disagree, while 5 means strongly agree.

2.4.3 **Tool 3.** Knowledge Test

The researchers developed the knowledge test using collected data on the head nurses knowledge about conflict and strategies used to manage conflict. The knowledge test questions were constructed in the form of multiple choice (20 questions) and true or false (10 questions).

The knowledge test total scores were 30 score, one point for each correct answer. High knowledge ranges from approximately (<85-75), moderate knowledge ranges from (>75-60), and finally the low knowledge is (>60). The high and moderate scores refers to the adequate knowledge head nurses have, and
low scoring refers to the poorness of that knowledge

2.5 Methodologies:

- Obtaining an official permission to conduct the study from the hospital administration.
- Oral consent of head nurses was taken before the beginning. The right to withdraw from the research at any stage is approved.
- Data collection tools were translated to Arabic. Content validity was tested and revised by a committee of 5 experts in nursing administration department.
- A pilot study was carried out on 10% of head nurses working in outpatient to assess the tools applicability and clarity and to determine the necessary modifications according to their responses. These head nurses were not included in this study.
- The researchers collected data and distributed the tool 1 (Conflict Management Questionnaire) to head nurses before and after a period of three months of the program to evaluate the strategies used to manage conflict.
- Tool 2 (Social Intelligence Questionnaire) was distributed before and after three months of the program to evaluate the influence of conflict management strategies program on social intelligence of head nurses.
- The head nurses performed the knowledge test pre, immediately after and three months after the program to evaluate their background about conflict management strategies and knowledge acquisition and retention.
- Researchers have developed and implemented an educational program for head nurses about strategies used for managing conflict.
- The process of collecting data lasted 8 months beginning from August 2015 till March 2016. The stage of assessment started at the beginning of August 2015 and followed by the program preparation period. The actual program implementation started from October 2015 and ended in the last week of November 2015, followed up phase started from December 2015 till the end of March 2016.

2.6 Statistical analysis:

SPSS software (Statistical Package for the Social Sciences, version 16, SPSS Inc. Chicago, IL, USA) was used for organizing the collected data, tabulating and statistically analyzing them. The range, mean, and standard deviation were calculated for the quantitative data. Chi-square test was used for comparing between two groups and more using ($\chi^2$). Paired t-test was used for comparing between two related groups means (pre and post-program data) of parametric data. F value of ANOVA test was calculated to compare between more than two parametric data means. Pearson’s correlation coefficient (r) was used to evaluate the correlation between variables. Significance was adopted at $p<0.05$ to interpret the results of significance tests [33].

2.7 Educational program for conflict management strategies

2.7.1 General objectives

The program main goal is to improve the head nurses’ knowledge and skills about conflict and strategies used to manage conflict.

2.7.2 Specific Objectives

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

1. Recall common related definition of terms (conflict, conflict strategies,).
2. Identify conflict aspects (nature, type, causes and sources).
3. Describe conflict symptoms and effect.
4. Discuss how to deal with conflict on personal and organizational levels.
5. Determine strategies used to manage conflict.
6. Identify different situation for each strategies.

2.7.3 Content Selection and organization
After careful studying and analysis of collected data from head nurses concerning their knowledge about subjects of managing conflict strategies; the content was selected based on the collected data. Simple scientific and professional language was considered to make sure of improving the head nurses knowledge about the topic.

2.7.4 Teaching Methods
Some specific characteristics were considered in selecting the teaching methods to meet the needs of the subject and the contents of the program. These methods included lecture, problem from real life and group discussion.

2.7.5 Aids means of Teaching
Handouts and power point were the main teaching aids used in the program.

2.7.6 The Program Implementation
2.7.6.1 Settings
The program was conducted in a hospital classroom of the under study.

2.7.6.2 Participants
41 head nurses participated; divided into two groups, the number in each group (20 & 21). The program was repeated two times.

2.7.6.3 Time
The time determined for the program was 12 hours. (6) Hours for each group of head nurses divided into three sessions, two hours for each.

III. Result
"Table & fig 1" shows the mean scores of conflict management strategies among head nurses at Mansoura health Insurance hospital. The result showed significant statistical differences among head nurses pre and after 3 months concerning competing strategies with mean scores 8.58 ± 1.32 pre and 9.19 ± 1.36 after 3 months. Change of most strategies post program ranged from ↓ 3.00-4.00 except avoiding 5.00-3.00, and total change mean score of conflict management strategies was ↓0.20±5.47.

"Table & fig 2" illustrates the mean scores of social intelligence among head nurses at Mansoura health Insurance hospital pre and post- 3 month's program intervention. It point to no significant differences between the items pre and 3 months post program. Total social intelligence score pre- program 96.05± 8.95, post program 96.12± 5.85 with mean score of change 0.07±10.34.

"Table & fig 3” present mean total scores of knowledge levels among head nurses about conflict management strategies at Mansoura health Insurance hospital pre, immediate and 3 months after the program intervention. It indicates highly obvious statistical improvement of their knowledge immediate and 3 months after the program than pre-program with scores of 18.39± 4.25 pre- program, 23.93± 3.20 immediate and 23.49± 3.98 three months after the program, with change mean score 5.40±4.20.

"Table 4" shows Correlation between scores of change 3 months post program of conflict management strategies, knowledge about it and social intelligence among head nurses at Mansoura health Insurance hospital 3 months post-program. The result revealed high percent of change 33.98% regarding knowledge in relation to conflict management strategies 1.02% and social intelligence 0.87%.

"Table 5” display the correlation between scores of change 3 months post program of conflict management strategies, knowledge
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about it and social intelligence among the head nurses at Mansoura health Insurance hospital and their age and experience years. There was statistical correlation between conflict management strategies and social intelligence.

Table 1: Mean scores of conflict management strategies among head nurses at Mansoura health Insurance hospital pre and 3 months after the program intervention (n=41).

<table>
<thead>
<tr>
<th>Conflict management strategies</th>
<th>The studied head nurses in Mansoura hospital (n=41)</th>
<th>Paired-t test</th>
<th>P</th>
<th>Change of score post program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborating:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>4-12</td>
<td>7-12</td>
<td>0.522</td>
<td>0.603</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>9.63±1.74</td>
<td>9.46±1.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>6-11</td>
<td>6-12</td>
<td>2.055</td>
<td>0.043*</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>8.58±1.32</td>
<td>9.19±1.36</td>
<td></td>
<td>0.61±1.83</td>
</tr>
<tr>
<td>Avoiding:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>4-11</td>
<td>4-11</td>
<td>1.181</td>
<td>0.241</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>7.71±1.73</td>
<td>7.27±1.63</td>
<td></td>
<td>0.44±2.13</td>
</tr>
<tr>
<td>Harmonizing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>3-12</td>
<td>5-12</td>
<td>0.309</td>
<td>0.758</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>8.63±1.70</td>
<td>8.54±1.10</td>
<td></td>
<td>0.10±1.58</td>
</tr>
<tr>
<td>Compromising:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>5-12</td>
<td>6-12</td>
<td>0.311</td>
<td>0.757</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>9.07±1.42</td>
<td>8.97±1.42</td>
<td></td>
<td>0.10±1.56</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>23-57</td>
<td>34-57</td>
<td>0.180</td>
<td>0.857</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>43.63±5.49</td>
<td>43.44±4.23</td>
<td></td>
<td>0.20±5.47</td>
</tr>
</tbody>
</table>

*Significant (P<0.05)

Fig 1: Mean scores of conflict management strategies among head nurses at Mansoura health Insurance hospital pre and 3 months after the intervention of the program (n=41).
Table 2: Mean scores of social intelligence among head nurses working at Mansoura health insurance hospital pre and 3 months after the program intervention (n=41).

<table>
<thead>
<tr>
<th>Social intelligence sub items</th>
<th>The studied head nurses in Mansoura hospital (n=41)</th>
<th>paired-t test</th>
<th>P</th>
<th>Change of score post program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-program (n=41)</td>
<td>3 months post-program (n=41)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social information processing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>19-34</td>
<td>22-32</td>
<td>0.537</td>
<td>0.593</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>27.73±3.81</td>
<td>27.36±2.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social skills:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>16-26</td>
<td>17-29</td>
<td>0.041</td>
<td>0.967</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>21.39±2.76</td>
<td>21.41±2.64</td>
<td></td>
<td></td>
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<tr>
<td>Social awareness:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>14-24</td>
<td>12-28</td>
<td>0.113</td>
<td>0.911</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>18.80±2.90</td>
<td>18.73±2.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social problem solving:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>19-35</td>
<td>22-35</td>
<td>0.705</td>
<td>0.483</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>28.12±3.80</td>
<td>28.61±2.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78-117</td>
<td>86-114</td>
<td>0.044</td>
<td>0.965</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>96.05±8.90</td>
<td>96.12±5.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant (P<0.05)*

Fig 2: Mean scores of social intelligence among head nurses at Mansoura health insurance hospital before and after the program intervention (n=41).
Table 3: Mean total scores and levels of knowledge among head nurses about conflict management strategies at Mansoura health Insurance hospital pre, immediate and 3 months after the program intervention (n=41).

<table>
<thead>
<tr>
<th>Total knowledge about conflict management strategies</th>
<th>The studied head nurses in Mansoura hospitals (n=41)</th>
<th>χ²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-program (n=41)</td>
<td>Immediate post-program (n=41)</td>
<td>3 months post-program (n=41)</td>
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<td>Total knowledge levels:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>14</td>
<td>34.1</td>
<td>0</td>
</tr>
<tr>
<td>Moderate</td>
<td>26</td>
<td>63.4</td>
<td>28</td>
</tr>
<tr>
<td>High</td>
<td>1</td>
<td>2.4</td>
<td>13</td>
</tr>
<tr>
<td>Total knowledge</td>
<td>14</td>
<td>34.1</td>
<td>0</td>
</tr>
<tr>
<td>Inadequate knowledge</td>
<td>14</td>
<td>34.1</td>
<td>0</td>
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<tr>
<td>Adequate knowledge</td>
<td>27</td>
<td>65.9</td>
<td>41</td>
</tr>
<tr>
<td>Total knowledge scores:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>8-26</td>
<td>18-30</td>
<td>12-29</td>
</tr>
<tr>
<td>Mean±SD</td>
<td>18.39±4.25</td>
<td>23.93±3.20</td>
<td>23.49±3.98</td>
</tr>
<tr>
<td>Median</td>
<td>18.00</td>
<td>24.00</td>
<td>24.00</td>
</tr>
<tr>
<td>F value</td>
<td>26.377</td>
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</tr>
<tr>
<td>P</td>
<td>0.0001*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant (P<0.05)

Fig 3: Mean total scores and of knowledge levels among head nurses about conflict management strategies at Mansoura health Insurance hospital before, immediate and 3 months after the program intervention (n=41).
**IMPACT OF CONFLICT MANAGEMENT STRATEGIES** etc...

**Fig 4:** Percentage of change of conflict management strategies, knowledge about it and social intelligence among head nurses at Mansoura health Insurance hospital 3 months post-program (n=41).

**Table 4:** Correlation between scores of change 3 months post program of conflict management strategies and social intelligence among the head nurses at Mansoura health Insurance hospital (n=41).

<table>
<thead>
<tr>
<th>Scores of change of social intelligence sub-items 3 months post-program</th>
<th>Scores of change of conflict management strategies 3 months post-program among the studied head nurses in Mansoura hospitals (n=41)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborating</td>
<td>Competing</td>
</tr>
<tr>
<td>( r )</td>
<td>( P )</td>
</tr>
<tr>
<td>Social information processing</td>
<td>0.206</td>
</tr>
<tr>
<td>Social skills</td>
<td>-0.285</td>
</tr>
<tr>
<td>Social awareness</td>
<td>-0.096</td>
</tr>
<tr>
<td>Social problem solving</td>
<td>0.394</td>
</tr>
</tbody>
</table>

*Significant \((P<0.05)\)
Table 5: Correlation between scores of change 3 months post program of conflict management strategies, knowledge about it and social intelligence among the head nurses at Mansoura health Insurance hospital and their age and experience years (n=41).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Conflict management strategies</th>
<th>Social intelligence</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>p</td>
<td>r</td>
</tr>
<tr>
<td>Conflict management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strategies</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Social intelligence</td>
<td>0.341</td>
<td>0.002*</td>
<td>-</td>
</tr>
<tr>
<td>Knowledge</td>
<td>-0.112</td>
<td>0.485</td>
<td>0.261</td>
</tr>
<tr>
<td>Age years</td>
<td>0.027</td>
<td>0.326</td>
<td>-0.157</td>
</tr>
<tr>
<td>Experience years</td>
<td>-0.023</td>
<td>0.886</td>
<td>-0.023</td>
</tr>
</tbody>
</table>

*Significant (P<0.05)

IV. Discussion:
The main objective of this study is to examine the Impact of Conflict Management Strategies on Social Intelligence of Head Nurses Working at Health insurance hospital. Despite the conflict and its importance in the organization, what is important in ways that managers in dealing with conflict and resolve it. Managers of organizations with good practices in a coherent solution for all parties. Dealing with conflict can increase social intelligence of staff and creating a friendly environment and friendly effectiveness of their organizations [34].

Data analyzing shows that the competing style is the most often conflict management style used among the head nurses and change uses of most strategies except avoiding style is less light that some head nurses use it in dealing with conflict. Using competing style is healthy for creating a competing environment and friendly atmosphere that encourage people to express their opinions and engage in creative solutions. This result is on contrary with a study of Abudahi, et al (2012) [35] who stated that nursing staff, including nurses and nurse-managers, considers competing as the least favored conflict management strategy.

Regarding Experts who have high social intelligence cannot be indifferent to the feelings of their employees so never do not use the conflict management avoiding styles but, involved to find a coherent solution for all parties.

In the same line; Kenneth W’s conflict style profiles, Thomas and Ralph explain in Eilerman (2006) [36], “avoiding” is the least in assertion and the least in cooperation. When using this conflict mode; the person becomes aware of conflict, but he/she decides not to handle the situation by sidestepping, ignoring, or just withdrawing from any interaction. The result is the participated parties are involved in a lose/lose relationship, where the choice is not made to affect the views,
feelings, or goals of either party. Without any doubted we all agree that the choice of conflict management style, depending mainly on the circumstances. Which illustrate the result of change uses the most strategies.

It was not expected that the study results would reveal that there was no statistically significant relationship between demographic factors such as gender, job, marital status, department, qualification, and education, and the used conflict management strategies, except age, and years of experience. On the other hand, many studies proved a significant relationship between demographic factors and the strategies of conflict management.

Among conducted studies using the ROCI-II, the most popular strategy for conflict management the nurses used were obliging, integrating, compromising, avoiding, and dominating [37]. Similarly, another study revealed that nurses use the last mentioned strategies for conflict management at a moderate level [38]. In the light of study results about conflict strategies, it was suggested that the head nurses often used different items of strategies at a moderate level, while avoiding was rated as the least effective.

Because the strategy of avoidance seeks to put off conflict indefinitely through ignoring or delaying the conflict, the avoider hopes a resolution without a confrontation. People who avoid confrontation frequently have lower esteem or hold a lower position than the second party.

There are several explanations for this study results. The theory of social cognitive proposes that behaviour is affected by several factors such as: environmental, personal, and the behaviour attributes itself. May be the environmental factors contribute to the styles of accommodating and avoiding conflict management [39].

There were statistical significant correlation between conflict management strategies and social intelligence. Perhaps that is because using a conflict management technique appropriately which involves higher levels of concern for self and others was predicted to be was associated with higher social intelligence scores. Rahim et.al. (2002) [40] theorized that individuals handle conflict through two basic dimensions, concern for self and others. Conflict management is an important function in work life. Conflict management skills are necessary to be successful at any professional level [41].

This part of findings suggests that the statistical significant correlation found between collaborating and social problem solving and between compromising and social skills. As the complexity of social problem increase the need for collaboration become more urgent. Social Problem-solving has been the subject of intense investigation since the dawn of artificial intelligence; recently, there has been an increasing interest in the study of human beings as (collaborative) problem-solving agents. Such investigations have shed new light on the way humans interact to solve social problems as well as on the dynamics of working groups [42]. The analysis of collaboration has gained attention and several authors have indicated that it is an essential feature in problem-solving [43]. By understanding the dimensions and patterns of collaborative human problem-solving, we
can improve (human) organizations’ performance, thus devising stronger ones [44]. In some other papers, many researches were done to determine why compromising or collaborating is the most favourable conflict-management style used to date. Srinivasan & George, 2005 [45] concluded that Compromising is generally perceived positively as both moderately cooperative and highly assertive, although from reviews; compromising is perceived as highly cooperative, and moderately assertive. From this results; people in competitive situations consider compromising as a weakness and they are less likely to compromise in both situations of actual and hypothetical conflict. It can be inferred that compromising is not an immediate style of handling conflict for competitive people. These findings seem to be the major differences between competitive and co-operative groups.

V. Conclusion & Recommendation
Conflict management and Social intelligence as personality traits as well as a performance characteristic are regarded as important social competence of the head nurses. The result concluded that effective handling of conflict management strategies program can get better affect social intelligence and high improvement level of staff knowledge immediate and post program. Besides using collaborating and compromising as a strategy for managing conflict have highly influence the social problem solving and social skills as a dimension of social intelligence. High level of change regarding knowledge in relation to conflict management strategies and social intelligence. This study suggests that social intelligence can help the head nurses to be more effective and successful. So, it is recommended that
- Emphasize the importance of social intelligence which promoting understanding, moderating conflict and fostering stability learn to enrich their abilities of social intelligence.
- Measure a head nurses’ social intelligence and helps them develop a plan for improving it.
- Increase social intelligence by enhance the using of collaborating and compromising, learning how to build a team, train activities and spending more hours in social communication between supervisors and subordinates.
- Other training programs are still needed to improve nurses’ social intelligence to enable them to manage conflicts effectively.
- Further studies are needed to include nurse's manager and investigate related to work environment differences by including other institutions where nursing services are given.

VI. References
IMPACT OF CONFLICT MANAGEMENT STRATEGIES  etc...


[22] Honeywill, R. (2015) Social intelligence is also being able to make important social decisions which can change your life The Man Problem: destructive masculinity in Western culture, Palgrave Macmillan, New York.


IMPACT OF CONFLICT MANAGEMENT STRATEGIES etc...


