Psychosocial intervention program for school students for protection against substance abuse

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Abstract: substance abuse among school students may lead to criminal penalty in addition to possible physical, social, and psychological harm. Psychosocial intervention programs in schools focus on children’s social and academic skills, including enhancing peer relationships, self-control, coping skills, social behaviors, and drug refusal skills. Aim: to develop Psychosocial intervention program for school students for protection against substance abuse. Study design: a quasi-experimental design was utilized to conduct this study. Setting: this study was conducted at two schools (school for males (el-tabri preparatory school) and school for females (the new heliopolis preparatory school) at Cairo city. Subject: convenient sample of 262 students were recruited for conducting this study. Data collection tools: 1) Socio-demographic questionnaire for students. 2) Knowledge and attitude about substance abuse. 3) Self Concept Scale. Results: the present study revealed that there was a highly statistically significant improvement regarding knowledge and attitude scores post implementation of psychosocial intervention program. In addition, there were highly statistically significant positive correlations between knowledge and attitude of studied students. Conclusion: the implementation of psychosocial intervention program has a statistically significant positive effect on students knowledge and attitude concerning substance abuse. Recommendations: The developed program should be implemented on a wider scale in the study settings and in similar ones to confirm its positive effects and improvement. Future programs should include the parents of adolescents to teach them how to deal with their adolescents and to avoid risky behavior that may occur at this age. Moreover,

Keywords: psychosocial intervention, school students, substance abuse.

1. INTRODUCTION

Substance abuse, is a patterned use of a substance (drug) in which the user consumes the substance in amounts or with methods which are harmful to themselves or others. Use of these drugs may lead to criminal penalty in addition to possible physical, social, and psychological harm. There are many cases in which criminal or antisocial behavior occur when the person is under the influence of a drug. Long term personality changes in individuals may occur as well (Haber, Krainovich, McMahon & Hoskins, 2015).

School environment and the classroom climate are major variables influencing the effectiveness of education for drug abuse prevention. Students interact in the context of classrooms, each of which has its own normative climate, encouraging or discouraging certain behaviors. Classrooms exist within and form part of the school environment that provides the larger context for all activities in a school (Botvin, 2015).

Drug abuse causes poor performance for students in their school, students who have drug abuse develop aggressive behavior. Drug abuse become a stumbling block to the students learning behavior which is essential element in educational practice. Students believed that drug abuse contributes to withdrawal syndrome. It becomes impossible for such students to concentrate on studies or even interact with fellow students or teachers (Blandford, 2015). Added to that substance abusers often experience an array of problems, including academic difficulties, health-related problems, poor
peer relationships and involvement with the juvenile justice system. Additionally, there are consequences for family members, the community, and the entire society like conflict between friends, family breakdown, violence, gangs, drug trafficking etc. Declining grades, absenteeism from school and other activities, and increased potential for dropping out of school are problems associated with students substance abuse. (Hawkins & Calatano, 2016).

Psychosocial intervention programs in schools focus on children’s social and academic skills, including enhancing peer relationships, self-control, coping skills, social behaviors, and drug offer refusal skills. School-based prevention programs should be integrated within the school’s own goal of enhanced academic performance. school failure is strongly associated with drug abuse. Integrated programs strengthen students’ bonding to school and reduce their likelihood of dropping out. Most prevention curricula include a normative education component designed to correct the misperception that many students are abusing drugs (Barrera Biglan, Taylor, Gunn, Smolkowski, Black, Ary & Fowler, 2015).

The role of the psychiatric nurse in community substance abuse prevention program is increasing awareness of the need for prevention of substance abuse related problems. The psychiatric nurse is especially equipped to strengthen the bonds among citizens and parents, health agencies and schools, the nurse is able to facilitate own vested interests in a manner congruent with its needs. The nurse provides the knowledge and assists the community in its health enhancement by using nursing theory, interpersonal process, research, competencies and teaching skills (Finely, 2014).

Significance of the study:
Substance abuse increases the crime rate, auto accident deaths, number of teenage pregnancies and suicidal rate. Individuals and families are destroyed. Physical health is affected by substance use. In work environment, increase accidents, works compensation claims, theft and school absenteeism (Hassan, 2015).

Incidence of substance abuse in Egypt is six million adolescents in stages of school and university. They are addict to various kinds of drugs. Number of addict school students are 37% of number of students. Substance abuse is one of greatest health and social problem in Africa (vissera &Moleko, 2015).

Prevalence of substance abuse in Egypt varies between 7.25% and 14.5%. Prevalence in males 13.2% and 1.1% in females .the most common drug misused in Egypt is cannabis, alcohol is distant second. Smoking is the most common route. Friends pressures are the most common cause. So it is important to carry out an intervention program to school students for protection against substance abuse. (World Health Organization, 2016).

Aim of the study:
This study aims to develop Psychosocial intervention program for school students for protection against substance abuse.

Research hypothesis:
-Implementing psychosocial intervention program will protect school students against substance abuse.

2. SUBJECTS AND METHODS

The study will be portrayed under four main designs as following:
1. Technical design
2. Administrative design
3. Operational design
4. Statistical design

1-Technical design:
The technical design includes research design, setting, subjects and tools of data collection.

A-Research design: quasi experimental design will be utilized to achieve the objectives of this study.

B-Setting: Data was collected from two schools (school for males-Tabri preparatory school and school for females (the new Heliopolis preparatory school) at Cairo city.

C-sampling (study population): convenient sample of 262 students were recruited for conducting this study.
Inclusion criteria:
1. Aged (12-16 year)
2. Sex: males and females
3. School students must be in the preparatory stage

Tools of data collection:
Tools for collecting data of the present study will include the following:

- First part (Interview Questionnaire Sheet) include: personal data such as (name, age, sex)

- Second part (student knowledge and attitude about substance abuse): This tool was designed by Alsalkaoy (1997) to obtain detailed information about knowledge and attitude of the students toward substance abuse. This scale was divided into 36 questions, these questions about attitude toward addict persons, effects of substance abuse and role of the government toward addict persons...etc. Each item of the scale is based on three points (Agree – sometimes – Disagree). The score was designed to be agree (3), sometimes (2), and (1) for disagree. Subjects with a total score of positive response in each item reaching 60% or more were considered to have knowledge regarding substance abuse and those with less than 60% were not considered to have knowledge.

Third part: Self Concept Scale:
Prepared by Ahmed Abdel Rahman and Mr. Abu Hashim (2002), this scale consists of 38 questions to measure self-concept among school students. Students with higher positive scores indicating greater level of self-concept, while negative scores indicate lower level of self-concept.

2. Administrative design:
Official permission to conduct the study was obtained by submission of an official letter issued from Dean of the Faculty of Nursing at Ain Shams University and was directed to the directors of schools (The New Heliopolis Preparatory School for Girls and El-Tabri Preparatory School for Boys at Cairo city). The researcher contacted with the students in groups to explain the purpose and procedure of the study and arranged with them as well as the schools directors the available time to collect the data and implement the psycho social intervention program.

Ethical consideration:
The ethical research considerations in this study include the following:
1. A written initial approval was obtained from the research ethical committee at the Faculty of Nursing, Ain Shams University.
2. Parents’ written consent for their school students to participate was secured through schools administration.
3. The researcher cleared the objectives and aim of the study & its expected outcomes to participating school students.
4. The researcher maintained anonymity and confidentiality of participating school students.
5. Participating school students were allowed to choose to participate or not in the study, and given the right to withdraw at any time from the study without giving reasons.

3. Operational design:
The operational design includes preparatory phase, exploratory phase, designing phase and implementation phase.

Phase I: Preparatory phase (data collection):
First, tools of data collection were designed, developed and adapted by the researcher based on the relevant literature of review, where a review of the past and current related literature covering the various aspects of substance abuse was done using books, articles, periodicals, magazines and online references to get acquainted with the research problem and develop the study tools.
Phase II:(Exploratory phase):
A pilot study was carried out after the adaptation of the tools and before starting the data collection. It was conducted on 10% of the expected sample size to test the clarity, feasibility and applicability of the study tools. In addition, it served to estimate the approximate required time for interviewing the school students as well as to find out any problems that might interfere with data collection. After obtaining the result of the pilot study, the minor changes (item modifications, omissions and additions) were done and final form was developed under the guidance of supervisors. All participants in the pilot study were excluded later from the actual sample. The pilot study was conducted over a period of one week starting from 21 February 2017 till 26 February 2017.

Phase III: Designing phase (planning):
This phase aims at planning for psychosocial intervention program for school students for protection against substance abuse through setting objectives, preparing the educational skills and designing the methodology and media. The materials for the program were obtained from the textbook, journals, periodicals, magazines and the online references.

Phase IV: Implementation phase:
Field work:
The actual process of data collection consumed 9 months started from March 2017 until November 2018. Data were collected twice weekly (Saturday, Tuesday). Each interview lasted for 30-60 minutes, depending on the response of the participants. Before conducting the psychosocial intervention program, participating school students were asked to give a verbal agreement to participate in the study. The researcher explained the aim and objectives of the study to participating school students.

Psychosocial intervention program was then started on a pre-determined schedule, which every participating school students notified about one week before the actual date. The program is about psychosocial intervention program for school students for protection against substance abuse. Psychosocial intervention program was implemented in the form of sessions for small group of students in two schools, each group range from 45-to 50 students. The length of each session was variable according to student's responses and active participation, as well as the time available and the content of each session.

However, to ensure that every participating school students understands the session’s content, sessions started with objectives, taking into consideration using a simple language to suit personal differences. Pretest carried out in March 2017 (The New Heliopolis Preparatory School for Girls in Tuesday at 9-11Am and in El-Tabri Preparatory School for Boys at Cairo city in Saturday at 9:30to 11:30 Am).

Psychosocial intervention program consisted of 17 sessions to be converted in 12 sessions theoretical and 5 sessions practical. Each session last from 30 - 60 minutes.

Phase V: Evaluation of the program
After conducting the psychosocial intervention program the school students were thanked for their participation and asked to fill the post-test. The evaluation of the effectiveness of the program was done immediately after its implementation by comparing the change in student's attitudes and knowledge through applying the same tool of the pre-test.

4- Statistical design
The collected data were organized, analyzed using appropriate statistical significant tests. The data were collected and coded using the Computer Statistical Package for Social Science (SPSS), version 20, and was also used to do the statistical analysis of data. Data were presented using descriptive statistics in the form of frequencies and percentages. Chi-square, Pearson and (t) tests were used to compare frequencies and correlation between study variables and using anova test for measuring quantity.

3. RESULTS
Table (1) show that, the mean age of the studied students of 12±0.81, the majority of them (54.2 %) were males, while (45.8%) were females. Concerning to academic years about (34.7 %) have second year level of education. About( 99.2% ) of the studied sample not failed in the school years.
Table (2): clarifies that, majority of the family were nuclear family type (77.5%). Regarding to father education (57.6%) were university education and (57.3%) of them were worked. Concerning to mother education (36.3%) were illiterate and (59.2%) of them were house wives. Also, (76.3%) of their families were barely enough.

Figure (1): indicates that there were highly statistical improvements between pre and post program regarding knowledge about substance abuse.

Figure (2): indicates that there were highly statistical improvements between pre and post program regarding attitude and beliefs about substance abuse.

Figure (3): indicates that there no statistical significant improvements between pre and post program regarding self concept about substance abuse.

Table (3): denotes that, there was highly statistical significant correlation between studied student total knowledge score and their total attitude and self concept score during pre and post phases of intervention.

Table (4): denotes that, there was highly statistical significant correlation between studied student total attitude score and total self concept score during pre and post phases of intervention.

Table (1): Distribution of studied sample according to their socio-demographic characteristics (n=262).

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11&gt;12 years</td>
<td>85</td>
<td>32.4%</td>
</tr>
<tr>
<td>12&gt;13 years</td>
<td>91</td>
<td>34.7%</td>
</tr>
<tr>
<td>13 years or more</td>
<td>86</td>
<td>32.8%</td>
</tr>
<tr>
<td>Mean ± SD : 12±0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>142</td>
<td>54.2%</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
<td>45.8%</td>
</tr>
<tr>
<td><strong>Academic years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>85</td>
<td>32.4%</td>
</tr>
<tr>
<td>Second</td>
<td>91</td>
<td>34.7%</td>
</tr>
<tr>
<td>Third</td>
<td>86</td>
<td>32.8%</td>
</tr>
<tr>
<td><strong>Ranking between the brothers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>100</td>
<td>38.2%</td>
</tr>
<tr>
<td>Second</td>
<td>25</td>
<td>9.5%</td>
</tr>
<tr>
<td>Third</td>
<td>111</td>
<td>42.4%</td>
</tr>
<tr>
<td>Fourth</td>
<td>26</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>Have you ever failed in your school year?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>0.8%</td>
</tr>
<tr>
<td>No</td>
<td>260</td>
<td>99.2%</td>
</tr>
</tbody>
</table>

Table (2): Distribution of family of the studied sample according to theirs socio-demographic characteristics (n= 262):

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Nuclear</td>
<td>203</td>
<td>77.5%</td>
</tr>
<tr>
<td>- Extended</td>
<td>59</td>
<td>22.5%</td>
</tr>
</tbody>
</table>
### Table: Distribution of studied sample according to their total score of knowledge

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Together</td>
<td>260</td>
<td>99.2%</td>
</tr>
<tr>
<td>Separated</td>
<td>2</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Father's education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>10</td>
<td>3.8%</td>
</tr>
<tr>
<td>Basic</td>
<td>10</td>
<td>3.8%</td>
</tr>
<tr>
<td>Secondary</td>
<td>91</td>
<td>34.7%</td>
</tr>
<tr>
<td>University</td>
<td>151</td>
<td>57.6%</td>
</tr>
<tr>
<td><strong>Father occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>200</td>
<td>76.3%</td>
</tr>
<tr>
<td>Not work</td>
<td>62</td>
<td>23.7%</td>
</tr>
<tr>
<td><strong>Mother education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>95</td>
<td>36.3%</td>
</tr>
<tr>
<td>Basic</td>
<td>67</td>
<td>25.6%</td>
</tr>
<tr>
<td>Secondary</td>
<td>75</td>
<td>28.6%</td>
</tr>
<tr>
<td>University</td>
<td>25</td>
<td>9.5%</td>
</tr>
<tr>
<td><strong>Mother occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>107</td>
<td>40.8%</td>
</tr>
<tr>
<td>Housewife</td>
<td>155</td>
<td>59.2%</td>
</tr>
<tr>
<td><strong>Family income satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>50</td>
<td>19.1%</td>
</tr>
<tr>
<td>Barely enough</td>
<td>200</td>
<td>76.3%</td>
</tr>
<tr>
<td>Not enough and borrow</td>
<td>12</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

**Figure (1): Distribution of studied sample according to their total score of knowledge:**

- **Total Knowledge Scale**
  - Pre: 55.40
  - Post: 96.08
Figure (2): Distribution of studied sample according to their total score of attitude:

Figure (3): Distribution of studied sample according to their total score of self concept:

Table (3): Correlation between knowledge of the studied student and total score of their attitude and self concept (n=262):

<table>
<thead>
<tr>
<th>Item</th>
<th>Total score of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
</tr>
<tr>
<td></td>
<td>R</td>
</tr>
<tr>
<td>Total score of attitude</td>
<td>0.44</td>
</tr>
<tr>
<td>Total score of self concept</td>
<td>0.08</td>
</tr>
</tbody>
</table>

- Highly statistical significant difference P≤ 0.001
Table (4): Correlation between attitude of studied students and total score of their self concept (n=262).

<table>
<thead>
<tr>
<th>Item</th>
<th>Total score of attitude</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>R</td>
<td>P-value</td>
</tr>
<tr>
<td>Total score of self concept</td>
<td>0.02</td>
<td></td>
<td>0.79616</td>
</tr>
</tbody>
</table>

- Highly statistical significant difference $P \leq 0.001$

4. DISCUSSION

The study findings table (1): revealed that mean age of the sample were $(12 \pm 0.81)$. This result may be due to, the selection of the study sample from this age group, first, second and third year of preparatory phase of education as these students are transferred to a new phase, mixing with others who may have more influence on them in risk taking habits. Going from elementary to middle or middle to high school means teens are often introduced to new pressures and influences, and new social circles could introduce teens who are already using drugs.

It may also be due to that the teenage years are a critical window of vulnerability to substance use disorders, because the brain is still developing and malleable (a property known as neuroplasticity), and some brain areas are less mature than others. The parts of the brain that process feelings of reward and pain crucial drivers of drug use are the first to mature during childhood. What remains incompletely developed during the teen years are the prefrontal cortex and its connections to other brain regions. The prefrontal cortex is responsible for assessing situations, making sound decisions, and controlling emotions and impulses.

This explanation was consisted with Office of Juvenile Justice and Delinquency Prevention (2017), in the study entitled "Negative Consequences of Teen Substance Abuse", which found that this age is characterized by rapid maturation of brain systems mediating behavioral control and reward and increased experimentation with drugs of abuse.

Regarding to the sex, The current study revealed that the majority of sample were males, this results may be due to the known fact that males have higher tendencies to experiment new matters, especially the risky ones as substance abuse, also males have the courage to participate in program about addiction than females, in addition, males are the most vulnerable to drug addiction as a result of many factors, early drug use, ease of drug abuse, male ease of attachment, availability of drug abuse, The causes of girls addiction are not very different from male's addiction. Many girls also resort to addiction as a result of family disintegration and separation, and lack of awareness and ignorance has a significant impact on girl's addiction.

This results was agreed with (Anglin, Hser &McGlothlin, 2016), who conducted study about "sex differences in addict careers", who found that the rates of drug abuse are currently lower in females than in males. Nevertheless, the number of females using and abusing prescription and illegal drugs is on the rise. Males are 2 to 3 times more likely than females to have a drug abuse/dependence disorder, but this current sex difference may reflect differences in opportunity, rather than vulnerability to drug use.

Concerning to failed in the school years, The current study clarified that, the majority of the studied sample doesn't failed in the school year, these results could be due to regular attendance at the school and continuous test of the lessons and lack of family problems and the existence of a spirit of family cohesion among family members, these results in the same line with (Souef, Youssuf&Taha, 1990), which conducted study about "Use of psychoactive substances among preparatory school students pupils in Egypt" which found that most of the students not failed in school years.

Regarding to the family type, it was found that, the majority of the studied sample were nuclear family type, with both parents being together, thus indicating generally good family functioning and close intra family relationships, which important to protect adolescents from risks of the drug addiction and substance abuse, these results may be due to...
substance abuse frequently effect the nuclear family. These results matched with (Soueif, Yunis & Taha, 1986) in the study entitled “Extent and patterns of drug abuse and its associated factors in Egypt” which reported that The majority of the studied sample were nuclear family type, with both parents being together.

Also, this results consistent with (Chilcoat, & Anthony, 2017) in the study entitled “Impact of parental monitoring on initiation of drug use through late childhood” which revealed that the majority of the studied sample were nuclear family type.

On the other hand, this results contradicted with a study done by Wahdan, (2017) in the study entitled “Social and economic effects of the phenomenon of spread of narcotics in Egypt” which reported that the majority of the studied sample were extended family type. The researcher in this study findings explained that there were many benefits to live in an extended family but there were many problems. Among the benefits of the extended family is the fact that there were many more adults available to help raise the children. This takes a lot of pressure off of the parents to be the only role models and sources of discipline at home. Grandparents are also were a great source of information for their grandchildren about the past. This is really important at a time when change is constantly occurring throughout the world. Grandparents are a link to that past history that is part of family role, history and ways of life, however, there are many problems that can crop up. When multiple generations are living together. For example, young parents or couples can experience the presence of relatives as intrusive. In other words, boundaries become a much bigger issue in an extended family, as compared to a nuclear one.

Regarding level of education for parents, the current study showed that the majority of fathers of students in the current study were university education and were worked. Meanwhile mothers of students were illiterate and housewives. Also, more than three quarters of their families were barely enough. These results may be due to when mother was illiterate and housewife, she does not have enough information to educate her children against substance abuse, while when father was university educated, he had the ability to educate his children against risks of addiction.

These results matched with Mikhail & Abed El Aziz, (2017), in the study entitled Hospitalized Drug dependence their profile and perception of hospital experience “who found that fathers were employed and university educated. Mothers of the students were illiterate and housewives.

Also these results matched with cooper, (2016) in the study entitled “Substance misuse in mental health nursing ” who mentioned that the majority of the study sample, concerning father level of education, were university and employee. While mothers were illiterate and house wives and family income were barely enough.

Furthermore, these results matched with Hamdi, Sabry, Sedrac & Refaat, (2015). In the study entitled The national addiction survey - final report. Egypt” who reported that fathers were university education and employed, mothers were illiterate and house wives and family income were barely enough.

On the other hand, these results are contradicted with study by Abdel mougoud, Khalil & Morgan, (2015), who mentioned that the majority of sample were illiterates and employed father and mother were secondary educated and worked and family income were enough, the researchers in this study findings explained that mothers were busy by their work and couldn't give enough care and intervention for their children. However, working mother was identified as significant independent predictor of positive attitude towards addiction and drug abuse, this might be attributed to wider network to which working mother is exposed, compared to housewives, which may make her more aware of risks that may prevent children from substance abuse as supported by Okasha, Khalil, Fahmy & Ghanem, (2015) in the study entitled “Psychological understanding of Egyptian Heroin Users in Egypt ”who found that the majority of sample were illiterates and employed father and mother were secondary educated and worked and family income were enough.

As regard to knowledge, the current study indicated that there was highly statistical significant improvement between pre-post program about substance abuse in all items of knowledge. These results may be due to awareness of the students which had been created through psycho social intervention program for protection against substance abuse. Also might be due to, the intervention program sessions provides students with special information about substance abuse such as the causes of substance abuse, the types and methods of prevention, and therefore their information increases after undergoing the program this mean that awareness of the students had been increased through psycho social intervention program for protection against substance abuse.
These results matched with Bryan, Moran, Farrell & O'Brien (2016) in the study entitled “Drug-Related Knowledge, Attitudes and Beliefs in Ireland” which revealed that there were highly statistical significant improvement between pre-post program about substance abuse.

Furthermore, this results matched with Akabawi, (2015), in the study entitled ”Drug abuse in Arab world” who stated that drug education and preventive programs was more effectual when initiated between ages of 11 to 14 years old and suggested improvement can be done on existing prevention program.

Also these results agreed with Bassiony, (2015), in the study entitled” Stages of progression in drug abuse involvement across generations in Jeddah ” who mentioned that knowledge of students have been increased after intervention of educational program about substance abuse.

On the other hand, these results were contraindicated with El-Sawy, Abdel hay & Badawy (2014) in the study entitled” Gender differences in risks and pattern of drug abuse in Egypt ” who found that knowledge of students in the pre program equal the post and not changed after implementation of the program these may be due to awareness of students about hazards of substance abuse before program implementation. These findings may be due to, the difference of cultures and the range of education from country to country affects on student responsiveness to programs.

Concerning to the attitudes and beliefs about substance abuse, the findings of the present study revealed that, there were highly statistical significant improvement between pre-post intervention program. This results could have been due to, the program sessions contributes to the improvement of attitude related to addiction by altering the mistaken beliefs of substance abuse and replacing them with right beliefs.

This findings were consistent with Arun, Priti, Chavan & Bir Singh, (2017) which conducted study about attitudes of school students toward substance abuse in Chandigarh, who found that there were highly statistical significant improvement between pre-post intervention program regarding attitude about substance abuse.

In the same line, this results came in agreement with the study of Pillon SC, O’Brien B, Chavez KAP, (2015), in the study entitled: The relationship between drugs use and risk behaviors in Brazilian University Students, that found that there were highly statistical improvement pre ,post intervention regarding attitudes about substance abuse. Furthermore, these results were in harmony with the study conducted by Ahmed, Rana, Chowdhury, Motin, Mills & Bennett, (1996), who noted that, there were highly statistical significance improvement pre –post intervention regarding attitude in the study entitled” knowledge, attitude and perception of adolescents going school in bangladesh ”.

On the other hand, these result was contradicted with study conducted by Bryan, Moran, Farrell & O’Brien, (2016) in the study entitled as ” Drug-Related Knowledge, Attitudes and Beliefs in Ireland” they clarified that, there were no statistical difference improvement pre-post intervention regarding attitude about substance abuse. This inconsistency may be due to, in some countries due to the information, behaviors and beliefs that are related to addiction and drug abuse are right and do not require interventions to improve them.

Regarding to the self concept of the studied sample, the current study revealed that there were highly statistical significant improvement pre-post intervention program regarding self concept about substance abuse as well as before the program. This could be attributed to the positive effect of this program or may be related to the good relationship and communication between the researcher and studied students. These results may be due to self concept is very important during middle school years among children because much of child’s daily interactions is related to school, once these academic self concepts has been established it can be difficult to alter them.

These results matched with Bassiony, (2015) in the study entitled ” Stages of progression in drug abuse involvement across generations in Jeddah, Saudi Arabia” who stated that self concept increased after intervention of the program.

These results were incongruent with El-Hassan, (2004) who founded that there were no statistical significant improvement regarding self concept about substance abuse pre-post intervention program, these results may be due to in some countries the duration of intervention programs not sufficient to improve the negative aspects of self concept, also the difference in social culture and the ability to respond for intervention programs between Egyptian population and population of other countries.
The current study also revealed that there were highly statistical correlation between knowledge and attitude about substance abuse. These results may be due to, the more information about substance abuse can cause the better attitudes and beliefs toward addiction.

These results matched with Syed Masud, AkmMasud & Shamim Matin, (2015) in the study entitled "The substance abuse attitude survey: An instrument for measuring Attitudes." who mentioned that there were highly statistical correlation between knowledge and attitude regarding substance abuse.

On other hand, these findings contraindicated with Amaral-Sabadini, Saitz & Souza-Formigoni, (2016) in the study entitled "Do attitudes about unhealthy alcohol and other drug (AOD) use impact primary care professionals’ readiness to implement AOD-related preventive care?" who stated that there were no statistical correlation between self concept, knowledge and attitude about substance abuse. This results might be due to, difference of culture, level of knowledge and attitude differ from population to another population.

5. CONCLUSION

Based on the findings of the current study the following conclusion can be detected:

- Highly statistical improvements between pre and post program regarding knowledge about substance abuse.
- Highly statistical improvements between pre and post program regarding attitude and beliefs about substance abuse.
- Highly statistical significant improvements between pre and post program regarding self concept about substance abuse.
- Highly statistical significant correlation between studied students' total knowledge score and their total attitude and self concept score during pre and post phases of intervention.

6. RECOMMENDATIONS

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

Clinically:

- The developed program should be implemented on a wider scale in the study settings and in similar ones to confirm its positive effects and improvement.
- Future programs should include the parents of adolescents to teach them how to deal with their adolescents and to avoid risky behavior that may occur at this age.
- All treatment services provided should be affordable and evidence-based and delivered with recovery as the ultimate goal integrating sustained recovery management into all treatment and care services.

In the school:

1-Develop behavioral rules and school laws that aim at rooting out the proper behavior that fights crime in general, including the crime of drug abuse, and establishing laws binding students to follow this behavior while spreading awareness of these rules and laws and their importance through various activities.

2-Engage students in classroom management by assigning students to groups within the classroom to create smaller units for interaction to train students on positive behavioral rules that urge them to adhere to school etiquette and distance from crime.

3-Monitoring the patterns of behavior of pupils to observe changes in their behavior that may help in early detection of drug users.

4-Take care of leisure and enrichment activities that contribute to leisure time to provide positive alternatives that keep students away from the climate that may lead to drug abuse.

5-Establish a system of daily monitoring and follow-up of absence through the computer and inform the student's guardian of absence on the same day. And follow the cases of students who stay on the absence and monitor their behavior.
In the community:

- Strengthening the role of sources of support (family, teacher, media and social networking), and maintaining its positive role.
- Available data should be used when designing and implementing a drug dependence treatment system. However, the non-availability of data should not be an obstacle for the implementation and delivery of drug dependence treatment and care services.

REFERENCES


