

## Knowledge , Self Concept and Attitude among School Students toward Protection Against Substance Abuse

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### Abstract

**Background:** Substance abuse among school students may lead to criminal penalty in addition to possible physical, social, and psychological harm. Psychosocial support 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. **Aim:** to assess knowledge, self concept and attitude among school students toward protection against substance abuse . **Study design:** Descriptive design was utilized to conduct this study. **Setting:** this study was conducted at two schools (one school for male and one school for female). These are The New Heliopolis Preparatory School for Girls and El-Tabri Preparatory School for Boys 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 oscores post implementation of psycho social intervention program. In addition, there were highly statistically significant positive correlations between knowledge and attitude of studied students. **Conclusion:** there is a statistically significant relationship among students knowledge, self concept and attitude concerning substance abuse. **Recommendations:** 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, hotlines must be available to solve immediate problems of adolescents.

**Key words:** knowledge, self concept and attitude, school students, substance abuse.

### 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 et al.,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**).

#### **Significance of the study:**

Substance abuse increase 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,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 Orgnization,2016**).

#### **Aim of the study:**

To assess knowledge , self concept and attitude among school students toward protection against substance abuse .

#### **Research question**

What are the levels of knowledge , self concept and attitude among school students toward protection against substance abuse ?

#### **Subjects and Methods:**

**The study was portrayed under four main designs as following:**

#### **Technical design:**

The technical design includes research design, setting, subjects and tools of data collection.

**A-Research design:** Descriptive design was utilized to conduct this study

**B-Setting:** Data was collected from two schools (one school for male and one school for female). These are The New Heliopolis Preparatory School for Girls and El-Tabri Preparatory School for Boys at Cairo city.

**C-sampling:** convenient sample of 262 students were recruited for conducting this study

**Inclusion criteria:**

A-Aged (11-16year)

b-gender: males and females

c-School students must be in the preparatory stage

**Tools of data collection:**

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

A questionnaire sheet was developed by the researcher and consist of:

**1- Interview Questionnaire include these parts:** such

personal data such as (name, age, sex) **-first part:**

**-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, this questions about your attitude toward addict persons , effects of substance abuse and role of the government toward addict persons.

**3- Self Concept Scale:**

Prepared by **Ahmed Abdel Rahman and Mr. Abu Hashim (2002)**,this scale consist 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.

**-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 director of schools (The New Heliopolis Preparatory School for Girls and El-Tabri Preparatory School for Boys at Cairo city). The researcher contacted to 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 investigator cleared the objectives and aim of the study & its expected outcomes to participating school students.

4.The investigator 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.

**Results:**

**Table (1):** shows 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 doesnot 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 total score of knowledge equal 55.4% , while total score of self concept equal 36.2% and total score of attitude equal 59.1 %

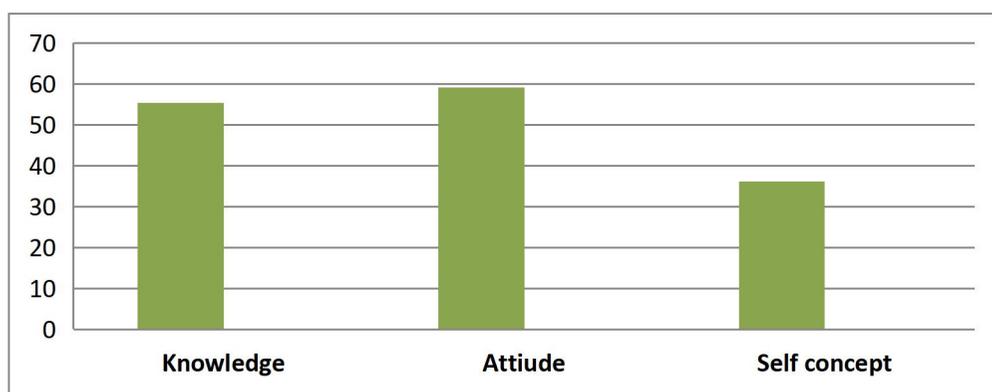
**Table (3):** denotes that, there was highly statistical significant correlation between studied student total knowledge score and their total attitude and self concept score .

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

| Items  | N   | %     |
|--|-----|-------|
| <b>Age</b>                                       | 85  |       |
| • 11>12 years                                    | 91  | 32.4% |
| • 12>13 years                                    | 86  | 34.7% |
| • 13 years or more                               |     | 32.8% |
| <b>Mean + SD :12+0.81</b>                        |     |       |
| <b>Gender</b>                                    |     |       |
| • Male   | 142 | 54.2% |
| • Female   | 120 | 45.8% |
| <b>Academic years</b>                            |     |       |
| • First  | 85  | 32.4% |
| • Second   | 91  | 34.7% |
| • Third  | 86  | 32.8% |
| <b>Ranking between the brothers</b>              |     |       |
| • First  | 100 | %38.2 |
| • Second   | 25  | %9.5  |
| • Third  | 111 | %42.4 |
| • Fourth   | 26  | 9.9%  |
| <b>Have you ever failed in your school year?</b> |     |       |
| • Yes  | 2   | %0.8  |
| • No   | 258 | 99.2% |

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

| Items                             | N   | %     |
|-----------------------------------|-----|-------|
| <b>Family type</b>                |     |       |
| - Nuclear                         | 203 | %77.5 |
| -Extended                         | 59  | 22.5% |
| <b>Parents</b>                    |     |       |
| Together-                         | 258 | %99.2 |
| -Separated                        | 2   | 0.8%  |
| <b>Father's education</b>         |     |       |
| -Illiterate                       | 10  | %3.8  |
| -basic                            | 10  | %3.8  |
| -secondary                        | 91  | %34.7 |
| -University                       | 151 | 57.6% |
| <b>Father occupation</b>          |     |       |
| -work                             | 150 | %57.3 |
| -not work                         | 62  | 23.7% |
| <b>Mother education</b>           |     |       |
| -Illiterate                       | 95  | %36.3 |
| -basic                            | 67  | 25.6% |
| secondary-                        | 75  | 28.6% |
| -University                       | 25  | 9.5%  |
| <b>Mother occupation</b>          |     |       |
| - work                            | 107 | %40.8 |
| - House wife                      | 155 | 59.2% |
| <b>Family income satisfaction</b> |     |       |
| Enough-                           | 50  | %19.1 |
| -Barely enough                    | 200 | 76.3% |
| -Not enough and borrow            | 12  | 4.6%  |

**Figure (1)** Disturbuation of the study sample according total knowledge , attitude and self concept

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

| Item                          | Total score of knowledge |         |      |         |
|-------------------------------|--------------------------|---------|------|---------|
|                               | Pre                      |         | Post |         |
|                               | R                        | P-value | R    | P-value |
| • Total score of attitude     | 0.44                     | 0.00000 | 0.48 | 0.00000 |
| • Total score of self concept | 0.08                     | 0.20073 | 0.12 | 0.05831 |

### Discussion:

The study findings revealed that study sample of adolescence were males with mean age around 12 years. This result may be due to, the selection of the study sample from this age group, first, second and third year of primary 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 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 our 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 gender, 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 among males, male ease of attachment, availability of drug abuse. The causes of women's addiction are not very different from men'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 girls addiction.

This results was agreed with **Anglin, Hser & McGlothlin, (2016)**, who conducted study about Sex differences in addict careers in America , who found that the rates of drug abuse are currently lower in women than in men. Nevertheless, the number of women using and abusing prescription and illegal drugs is on the rise. Adult men are 2 to 3 times more likely than women to have a drug abuse/dependence disorder, but this current gender 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 **Soueif, Youssuf&Taha, 2016)** ,which conducted study about "Use of psychoactive substances among secondary 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 The effects of substance abuse frequently extend beyond the nuclear family. Extended family members may experience feelings of

abandonment, anxiety, fear, anger, concern, embarrassment, or guilt; they may wish to ignore or cut ties with the person abusing substances. Some family members even may feel the need for legal protection from the person abusing substances, These results matched with **Soueif, Yunis& Taha, (2015)**.,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 consisted 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 with **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 . These results may be due to there were many benefits to life 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 lore, history and ways of life .

However, there are many problems that can crop up. When multiple generations are living together. For example, you 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. Mean while 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 house wife, 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" who found that fathers were employed and university educated. Mothers of the students were illiterate and house wives.

Also these results matched with **cooper (2016)** in the study entitled "Substance misuse 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 is contraindicated with study by **Abdel mougoud (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, these results may be due to 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".

As regard to knowledge, the current study indicated that more than half of study sample have un satisfactory knowledge. These results may be due to impaired of awareness of the students in Egypt toward addiction. 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 impaired of knowledge toward addiction.

Concerning to the attitude and beliefs about substance abuse, the findings of the present study revealed that, more than half of the studied sample have negative attitude toward addiction. This results could have been due to, in Egypt present the mistaken beliefs about substance abuse

This findings were consisted with **Arun,et al, (2017)** which conducted study about attitudes of school students toward substance abuse in Chandigarh , who found that negative attitude toward addiction

Regarding to the self concept of the studied sample , the current study revealed that one thirds of the studied sample have positive self concept . These results may be due to self concept is connected with knowledge and attitude .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 impaired self concept.

The current study revealed that there were highly statistical correlation between knowledge and attitude, 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 **Adebowale , Olatona , Abiola , Oridota , Goodman & Onajole ,(2014)**.in the study entitled " Knowledge, attitude and practice of drug abuse among public secondary school students in Lagos, Nigeria" , who stated that there were highly statistical correlation between knowledge and attitude, Also these results similar with **Syed, Akm & Shamim ,(2015)** in the study entitled "Substance and Drug Abuse: Knowledge, Attitude and Perception of School going Adolescents which carried out in Bangladesh." who mentioned that there were highly statistical correlation between knowledge and attitude.

On other hand , this findings contraindicated with **Amaral, Saitz &Souza, (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 . This results might be due to, difference of culture , level of knowledge and attitude from population to another population .

### **Conclusion:**

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

- Total score of knowledge equal 55.4% , while total score of self concept equal 36.2% and total score of attitude equal 59.1 %

### **Recommendations:**

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

- The need to activate the prevention of second-class drugs in secondary school students, Activating sources of social and cognitive support provided by associations, clubs and youth associations.
- Strengthening the role of sources of support (family, teacher, media and social networking), and maintaining its positive role,
- It is recommended to carry out more studies, research and training programs in the field of drug prevention among secondary students and its relation to other psychological

and educational variables, such as thinking methods, mental beliefs, control center, and academic ambition.

- Hotlines must be available to solve immediate problems of adolescents.

### References:

- Abdel El-Mawgoud M, Khalil AF and Morgan D. (2015):** Substance Misuse /Dependence. workshop. Ain Shams Univ. vol(1). Institute of Psychiatry). P(11-13).
- Adebowale AT, Olatona FA, Abiola ABO, Oridota ES, Goodman OO, Onajole AT,(2014).** Knowledge, attitude and practice of drug abuse among public secondary school students in Lagos, Nigeria. African Journal Online. High Med Res J; 13:44-48.
- Amaral-Sabadini MB, Saitz R, Souza-Formigoni MLOS(2016).** Do attitudes about unhealthy alcohol and other drug (AOD) use impact primary care professionals' readiness to implement AOD-related preventive care? Drug Alcohol Rev.;29(6):655-61
- Anderson, A. R. & Henry, C. S. (2016).** Family system characteristics and parental behaviors as predictors of adolescent substance use. *Adolescence*, 29, 405–420
- Arun, Priti and Chavan, Bir Singh( 2017).** Attitudes towards alcoholism and drug taking: a survey of rural and slum areas of Chandigarh, India, *International Journal of Culture & Mental Health*, 3 (2): 126-136. Betty
- Ahmed S,Rana A, Chowdhury S, Mills A, Bennett S(2017).** Substance and drug abuse: Knowledge, attitude and perception of school going adolescents in Bangladesh. Regional Health Forum, World Health Organization, South-East Asia Region.;6: 59-71.
- Anglin MD, Hser YI, McGlothlin WH(2016).** Sex differences in addict careers. 2. Becoming addicted. *American Journal of Drug & Alcohol Abuse*;13:59–71. [PubMed] [Google Scholar]
- Akabawi A (2015).** Drug abuse in Arab world: a country profile of Egypt. In: Okasha A, Maj M, editors. Images in psychiatry, an Arab perspective. 5th ed. Egypt: Scientific Book House; 148-150.
- Blandford, S. (2015).** Managing Discipline in Schools. London: Routledge.
- Botvin,(2015),** Prevention Update (Cornell University Medical College, Institute of Prevention Research, United States of America.
- Bryan A,Moran R ,F arrell E,O'Brien M(2016).** Drug-Related Knowledge, Attitudes and Beliefs in Ireland: Report of a Nation-Wide Survey. Dublin: The Health Research Board.
- Bassiony MM (2015).** Stages of progression in drug abuse involvement across generations in Jeddah, Saudi Arabia. *Neuroscience* 13:37-40.
- Chilcoat, H. D. & Anthony, J. C. (2017).** Impact of parental monitoring on initiation of drug use through late childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 91– 100
- Cooper D.B. (2016):** Substance misuse mental health nursing (5th ed.): champan and Hall, London 290-299.
- El-Hassan, K (2016).** Structure and correlates of self-concept in Lebanon. Paper presented at the international symposium on “Multiple dimensions of academic self-concept, forms of reference, transitions, and international perspectives: Studies from the SELF Research Center. AERA Annual Meeting, New Orleans, April 2000.
- El-Sawy H, Abdel Hay M, Badawy A (2010).** Gender differences in risks and pattern of drug abuse in Egypt. *Egypt J Neurol Psychiat Neurosurg* 47:413-418.
- Ghanizadeh A(2016),** Shiraz university students attitude towards drugs : an exploratory study. *Eastern Mediterranean health journal*,7(3)452-60.
- Haber, J., Krainovich, B., McMahon, M. and Hoskins, P. (2015):** Comprehensive psychiatric nursing,(5th ed.). Philadelphia: Mosby Company.
- Hamdi E, Sabry N, Sedrac A, Refaat O (2015).** The national addiction survey - final report. Egypt: Research Unit of General Secretariat of Mental Health, Ministry of Health.
- Hassan,Z.(2010):**behavioral and emotional problems among substance dependent

- patients during hospitalization. Master thesis, faculty of nursing, Ain Shams University, Egypt.
- Hawkins, J.D. & Catalano, R.F. (2016):** Communities that care: Action for Drug Abuse Prevention, San Francisco: CA: Jossey-Bass.
- Mikhail M. and Abed El Aziz S. (2017):** Hospitalized Drug dependence their profile and perception of hospital experience Tanta Medical Journal vol.14 No. 1.
- Office of Juvenile Justice and Delinquency Prevention. (2017).** Consequences of Youth Substance Abuse. Retrieved on August 26, <http://www.ojjdp.gov/pubs/drugid/rat03.html>
- Okasha A., Khalil A.H., Fahmy M. and Ghanem M.H. (2015) :** “Psychological understanding of Egyptian Heroin Users “ Egypt . J. Psychiat.; 13:37-49.
- Pillon SC, O’Brien B, Chavez KAP(2015).** The relationship between drugs use and risk behaviors in Brazilian University Students. Rev Latino-am Enfermagem.: Novembro-Dezembro, 13:1169-76.
- Syed Masud A, Akm Masud R, Shamim Matin C(2015)..** Substance and Drug Abuse: Knowledge, Attitude and Perception of School going Adolescents in Bangladesh. BRAC Research and Evaluation Division.
- Souief, MI, Youssuf, GS, Taha HS, (2016).** Use of psychoactive substances among secondary school students pupils in Egypt: a study on a nationwide representative sample. Drug Alcohol Depend 26:63-79.
- Souief MI, Yunis FA, Taha HS (2015).** Extent and patterns of drug abuse and its associated factors in Egypt. Bull Narc 38:113-120.
- Vissera, M & Moleko, A. (2016):** high risk behavior of primary school learners, retrieved from: [http://www.sahealthinfo.org/admodule/high\\_risk.htm](http://www.sahealthinfo.org/admodule/high_risk.htm).
- Wahdan N (2017).** Social and economic effects of the phenomenon of spread of narcotics in Egypt. National Institute for Planning. Social and Cultural Planning Center and Police Research Center Report No. 1425..
- World health organization, (2016):** Guide to drug abuse epidemiology, Geneva: world health. WHO/MSD/MSB/00.3.