Assessment of Knowledge and Attitudes of Secondary School Students Regarding Drug Abuse at Minia City

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Abstract

Background: Drugs abuse a very big problem in the world today and it is ruining the lives of many millions of people both in adolescent and general population. The use of illegal drugs has spread at a high rate and has penetrated every part of the world. No nation has been spared from the devastating problem caused by drugs and substance abuse.**Aim** of this study is to assess knowledge and attitude of secondary school students regarding drug abuse at Minia City. **Study design:** Descriptive research design was utilized in this study. **Subject:** 400 students from High Secondary Schools and Technician Schools. **Setting:** The study was conducted in Minia City Secondary Schools. **Tools:** Two tools were utilized in this study, the **first tool** was an interviewing structured questionnaire sheet was contained two parts: **Part 1:** Socio-demographic characteristics about student's. **Part II:** Secondary school students' knowledge regarding drug abuse **second tool** Secondary school students' attitudes regarding drug abuse. **Results**: The results show that 78% of students in secondary have poor knowledge scores and 50 % of students in technical school have poor knowledge score regarding drug abuse, the mean score of students' knowledge was 5.9±2.3, also 75% of secondary students have positive attitudes and 62% of technical students have negative attitudes with mean attitudes score of study subjects is [16.7±5.4. **Conclusion:** the majority of students in Secondary School have poor knowledge scores, while half of students in Technical School have poor knowledge score, moreover three quarters of Secondary School students have positive attitudes while less two thirds of Technical School students have negative attitudes. **Recommendation**s: Increase students awareness through social media and network regarding drug abuse, and educational programs for the Secondary and Technician Schools personnel (teachers and social workers), regarding understanding of student drug abuse concept and proper handling of such cases.

Keywords: Knowledge, Attitudes, Secondary School Students, Drug Abuse

Introduction

Adolescence is regarded as a transitional phase between childhood and adulthood in both of these perspectives, the cultural aim of which is to prepare children for adult roles, it is a time of many transformations, including schooling, training, work, and unemployment, as well as transitions from one living situation to another. Including psychology, genetics, history, sociology, education, and anthropology, a comprehensive understanding of adolescence in society relies on knowledge from different perspectives. **(Dahl et al., 2018).**

Drug Abuse is one of the banes of modern society. Drug abuse has hit all regions and all sections of our society. Drug abuse is found in rural and urban areas, among poor and the rich, among the men and women, among young or old. But it is most overwhelmingly practiced by young boys and girls especially in hostels and in almost all educational and technical institutions. Thus drug abuse is there in almost all the countries of the world. Day by day alcohol is becoming increasingly available and is used widely. Addiction has become really a curse upon human beings. Drug abuse affects not only the drug addicts but also others directly or indirectly. For common people, it is a weakness of character. A moral theologian may see it as a matter of vice while as sociologists see it as a social problem. Drug abuse is considered sin by religious people and as a crime by law enforcement groups **(Possi, 2018)**. The World Health Organization estimates that the world's overall use of substances consists of two (2) billion alcohol users, 1.3 billion cigarettes and 185 million other drug users **(Kingsbury et al., 2016).** It is estimated by the United Nations Office on Drugs and Crime that 15.5-38.6 million people were problem drug users worldwide in 2010. Every year, approximately 200,000 people worldwide die from drug-related overdoses. 320,000 young people between the ages of 15-29 die annually from alcohol-related causes, according to the World Health Organization. Overall, excessive alcohol consumption leads to 2.5 million deaths per year due to accidental and deliberate accidents **(Burns, 2014).**

Numerous bad habits often start during adolescence and pose significant challenges to public health, as its consequences are cumulative, leading to expensive socioeconomic, physical, and mental health issues, unsafe drug use has a significant impact on people, families, and neighborhoods. Secondary school is the teenage phase that is known as the period of initiation of habits and circumstances that influence not only health restricted to that time, but also contribute to adult disorders. During adolescence, unhealthy habits such as smoking, drinking and illegal drug use often start; they are closely associated with increased morbidity and mortality and pose major public health challenges **(Tan et al., 2017)**.

Drug abuse can trigger health, conduct, family, job, money and law-related problems. Scientific research shows that drug-dependent people fall ill more often than non-users. Their nutrition is very low, making them more vulnerable to infection. Stomach disorders, inflammation of the throat and lungs due to smoking, swelling of the nasal cavities due to sniffing and damage to blood vessels and widespread infection due to injections are some of the health problems. Drug use is also accompanied with emotional and mental issues, which in

Om Hashem M., et al

turn cause conflicts and disagreements within families, at work and between friends **(Jalilian et al., 2015)**.

A person who suffers from opioid dependence may need support to prevent or reduce the effects of withdrawal during the initial stage of abstinence. The method is called detoxification. This type of care is typically done in a hospital or other hospital environment where it is possible to have medication used to alleviate symptoms of withdrawal and routine medical monitoring **(Weiss et al., 2015)**.

Community health nurses play an active role in mental wellness promotion, mental health screening, and early intervention programs and to assist in managing the ongoing treatment of mental health and unsafe substance use among peoples. Community health nurses play an important in the public health awareness about unsafe substance use and its hazards and how avoid it **(World Health Organization(WHO), 2014)**.

Significance of the study

In all nations, substance addiction is a dangerous problem. Globally, 29.5 million people suffer from substance use disorders, according to the World Drug Survey (2017) **(World drug report 2017)**. A latest report by the United Nations Office on Drugs and Crime (UNODC) demonstrated "the high affect of drugs not only on people's health and well-being, but also on families and communities around them, particularly women and children" (UNODC, 2016) **(UNODC, 2016)**.

The last National Survey reported that 9.6% of Egyptians have used drugs at least once in their lives, and 20% of Egyptian male students have used drugs. Among male high school students, 5.05 percent hashish abused, 0.84 percent opiates abused, 2.72 percent tranquillizers abused, 1.79 percent stimulants abused and 2.26 percent hypnotics abused Substance abuse in mina city has a prevalence of 39 percent lanolin, lalika and medrathid abused among yout **(Volkow, 2014)**. Adolescent substance addiction is a point of concern because use is associated with an increased risk of injuries, aggression and high-risk sexual activity in this age group **(Raja & Devi, 2018)**.

Aim of the Study

The aim of this study is to assess knowledge and attitude of secondary school students regarding drug abuse at Minia City.

Research question

1. What are secondary school student's knowledge and attitude regarding drug abuse?
2. Is there a relationship between students' knowledge and their socio-demographic characteristics?
3. Is there a relationship between students' knowledge and their attitude regarding drug abuse?

Subjects and Method
Research Design

Descriptive research design was used in this study.

Setting:

The study was conducted in Minia City Secondary Schools.

Sample: Simple Random Sample will include:

- n=N/1+N X 0.0025
- =26.157/1+26.157X0.0025
- =26.157/66.3925

=three hundred and ninety four (**394**) students from; High Secondary Schools, Industrials Schools, Agriculture Secondary School, and Commercial Secondary Schools, they distributed as followed

Schools	High seconday (Elthad.)	Agriculture Secondary School	Commercial Secondary Schools	Industrials Schools	Total
Total Number of Secondary School Students	5268	6234	2833	11822	20889
Ratio (%)	25%	29%	13,5%	56%	100%
Number of the sample	200	50	70	80	394

Data Collection Tools: Two tools were utilized in this study as the following,

The first tool: an interviewing structured questionnaire sheet was contained two parts:

Part 1: Socio-demographic characteristics about student's, it was developed by investigator including Socio-demographic characteristics about student's items including age, residence, social status, place of living, educational level of mother and father, job of father and mother, number of brothers, number of school subjects, and income.

Part II: Secondary school students' knowledge regarding drug abuse to assess student's knowledge regarding drug abuse, it was adopted from **(Bhattarai &Chudal 2018),** it was consist of 12 questions, used to find student knowledge toward drug abuse, (definition, types, causes, common setting, how are getting, signs symptoms, side effect on individual –family and society, source of information, main problem in this age, and common drugs used).

System for Scoring:

The knowledge scores are determined on the basis of **one point** for the correct answer and **zero** for the incorrect answer or the answer is not known**.**The overall knowledge score is 12 (The representation of the knowledge score will be distributed as

- **Good level of knowledge: >75 %,**
- **Satisfactory level of knowledge: 50- 75 %,**
- **Poor level of knowledge: < 50 %**

Second tool: Secondary school students' attitudes regarding drug abuse: assess student's attitudes regarding drug abuse, (feelings, beliefs, and behavior of student towards drug abuse).it was adopted from **(Geramian et al., 2014) and** modified to suit the situation in Egypt. It consists of 18 items.

System for Scoring:

The attitude scores are determined on the basis of **two points** for the agreement, **one point** for disagreement and **zero** for not sure or not understanding.

The students who get score

- **from18to 36 considered positive attitude**
- **less than 18 considered negative attitude**

The Validity of the Tool:

The tool was submitted to a jury of 5 experts in the field of community health from the faculty of nursing at Minia Universities and Ain- shams Universities. Tool content validity was done to identify the degree to which tools supposed to be measured. The tools were examined for content coverage, the sequence of items, clarity, relevance,

Om Hashem M., et al

applicability, wording, length, format, and overall appearance. Some modifications were done

Reliability of the Tool:

Cronbach's alpha for reliability test was performed for secondary school students' knowledge evaluation questionnaire was 0.87, Cronbach's alpha for reliability test was performed for substance abuse attitudes of secondary school students was 0.78.

Pilot Study:-

A pilot study was conducted on 10%of participants which equal 40 students to ascertain the clarity and comprehensiveness of the tools as well as to estimate the appropriate time required to fill the questionnaire. The necessary modification was done, and pilot study was involved on the study.

Data Collection Procedure:
- Before starting data collection, two formal letters were issued from faculty of nursing, Minia University to the directorate of education in Minia governorate, then to the director Secondary and Technician Schools to gain the administrative approval.
- The researcher establishes with the director of Secondary and technician Schools, to obtain informed consent after clarifying the meaning and purpose of the research, and obtained all permissions to collect data.
- Each assessment sheet was coded anonymously.
- The data were collected through about three months from 10 February 2019 to 30April 2019, two day/week at official school time from 9Am: 12Pm.
- The researcher met participants in their schools at times that were convenient for them. According to the appropriate clarification, the time spent completing the questionnaire ranged from 25 to 30 minutes, after outlining the significance and purpose of the research. Steps have been taken to protect the respondent's ethical rights.

- The researcher collect a group of students (20; 25 student each time) in a class and explain the sheet, the students fills the sheet.

Administrative Design:

The research ethics committee of the Faculty of Nursing, Minia University, has confirmed written initial approval. The Director of Education in Minia Governorate received written approval. Also approval from the director of Secondary and Technician Schools to gain the administrative approval.

Ethical Consideration:
- The students were informed that their participation in the study was completely voluntary and there was no harm if they not participated in the study.
- Oral consent was taken to be included in the study subject.
- Explanation about the study was done to the students included the aim of the study and the potential benefits.
- The participant was informed about the withdrawal procedures if they decided to leave the study at any time before and during the completion of data collection,
- Confidentiality of data, privacy, identity, voluntary participation, and the right to refuse to participate in the study was emphasized to subjects.

Statistical Analysis

The data analysis was done using version 20 of the Social Science Statistical Package (SPSS). Average and SD were represented as numerical data. Quantitative information was expressed in terms of frequency and percentage. For quantitative results, a t-test was used to compare two variables, and a chi square test was used to compare more than two variables. Using the Pearson correlation, relations between different numerical variables were confirmed. When the p-value was less than 0.05, a statistically relevant amount was considered

Results

Table (1). Distribution of the secondary school Students according to their Socio Demographic Characteristic (n=400)

Socio Demographic Characteristic	Secondary=200 Elthad school		Technical=200	
	No	%	No	%
Age				
• Less than 20 years	200	100.0	194	97.0
• More than 22 years	0	00.0	6	3.0
Living site:				
• Rural	170	85.0	99	49.5
• Urban	30	15.0	101	50.5
With whom you are living:				
• Parent	168	84.0	162	81.0
• Mother only	14	7.0	26	13.0
• Father only	2	1.0	6	3.0
• Alone	1	0,5	3	1.5
• Others	15	7.5	3	1.5
Educational level of father:				
• Reading and writing	47	23.5	71	35.5
• No reading and no writing	25	12.5	49	24.5
• Primary education	3	1.5	19	9.5
• Deplume	62	31	33	16.5
• High qualified	63	31.5	28	14.0
Father`s job:				

Om Hashem M., et al

Socio Demographic Characteristic	Secondary=200 Elthad school		Technical=200	
	No	%	No	%
• Employed	100	50.0	113	56.5
• Free work	74	37.0	31	15.5
• Farmer	2	1.0	37	18.5
• Other	24	12.0	19	9.5
Educational level of mother:				
• Reading and writing	48	24.0	69	34.5
• No reading and no writing	21	10.5	31	15.5
• Primary educational	13	6.5	40	20.0
• Moderate education	71	35.5	34	17.0
• High qualified	47	23.5	26	13.0
Mother`s job;				
• House wife	151	75.5	130	65.0
• Employed	49	24.5	70	35.0

Table (1) shows that all (100%) secondary students their age less than 20 years old, the majority (85% & 84% respectively) of them lives in rural area and live with their parents. Regarding educational level of father (31.5%) had high education, (50%) employed. Also educational level of mother (35.5%) had moderate education and (75%) are house wife. While in technical secondary students reveals that (97%) their age less than 20 years old, (50.5%) live in urban area and (81%) live with their parents. Regarding educational level of father (35.5%) read and write only, (56.5 %) was employed. Also (34.5%)of their mothers ware read and write and (65%)ware house wife.
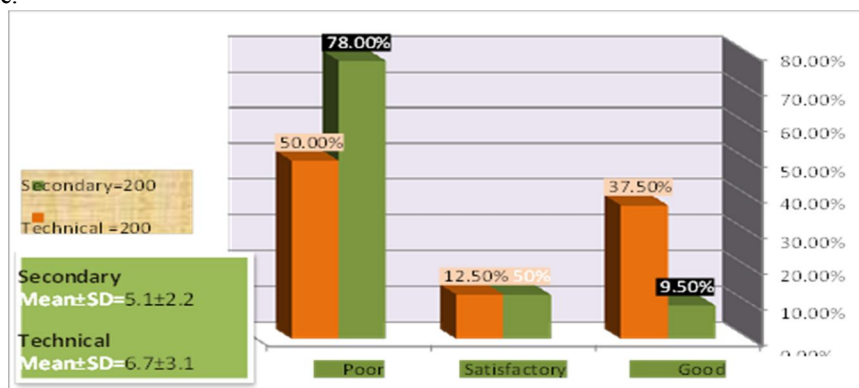

Figure (1) Total Levels of Knowledge between Secondary and Technical Students at Minia City (n=400)

Figure (1) shows that (78%) of students in secondary have poor knowledge scores. While (50%) of students in technical school have poor knowledge score.
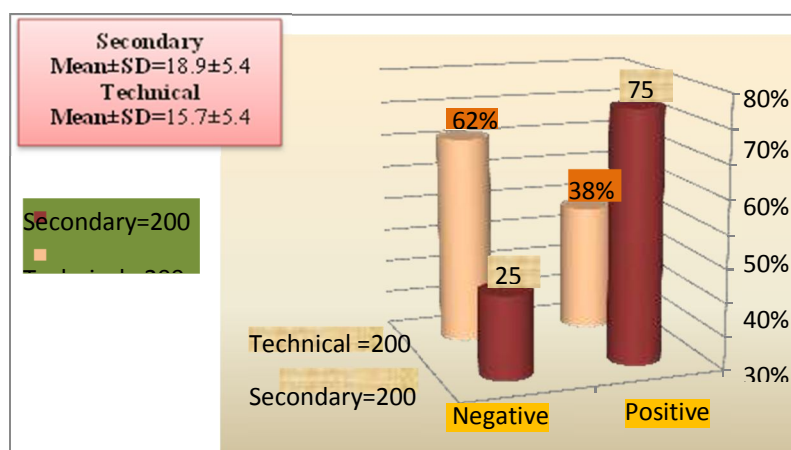

Figure (2) Total Levels of Attitudes between Secondary and Technical Students at Minia City (n=400)
Figure (2) shows that (75%) of secondary students have positive attitudes while (62%) of technical students have negative attitudes.

Table (2) Comparison between Mean Scores of knowledge between secondary students and technical students regarding Drug Abuse (n=400)

	Secondary	Technical	T-value	Df	P value
Total mean score of Knowledge	5.1±2.2	6.7±3.1	-8.72	199	.000**

* Significant at 0.05.

Table (2) illustrates that mean knowledge score of secondary students is 5.1±2.2 while mean score of technical students is6.7±3.1 with statistical significant differences (P value=.000).

Table (3) Comparison between Mean Scores of Attitudes between Secondary students and technical students regarding Drug Abuse (n=400)

	Secondary	Technical	T-value	Df	P value
Total mean score of attitudes	18.9±5.4	15.7±5.4	3.82	199	.000**

* Significant at 0.05.

Table (3) illustrates that mean attitudes score of study subjects is 18.9±5.4 while technical students mean score of attitudes is 15.7±5.4 with statistical significant differences (P value=.000).

Table (4): Relation between knowledge of Secondary school students and age (n=200).

Variables	Good		satisfactory		Poor		Chi	P
	N	%	N	%				
Age								
- Less than 20 years	19	9.5	25	12.5	156	78.0	116.3	0.01
- More than 22 years	0	00.0	0	23.4	0	00.0		

Significant at (p-value <0.01)

Table (4): points a positive statistically significant relationship between knowledge score and age p value 0.01.

Table (5): Relation between attitudes of Secondary school students and age (n=200).

Variables	Positive		Negative		Chi	P
	N	%	N	%		
Age						
- Less than 20 years	125	75.0	75	25.0	224.0	0.03
- More than 22 years	0	00.0	0	00.0		

Significant at (p-value <0.01)

Table (5): points a positive statistically significant relationship between attitudes and age p value 0.03.

Table (6): Relation between knowledge of technical school students and age (n=200).

Variables	Good		satisfactory		Poor		Chi	P
	N	%	N	%				
Age								
- Less than 20 years	73	36.5	23	11.5	98	49.0	132.3	0.000
- More than 22 years	2	1.0	1	0.5	3	1.5		

Table (6): points a positive statistically significant relationship between knowledge score and age p value 0.000.

Table (7): Relation between attitudes of technical school students and age (n=200).

Variables	Positive		Negative		Chi	P
	N	%	N	%		
Age						
- Less than 20 years	74	37.0	120	60.0	218.3	0.008
- More than 22 years	2	1.0	4	2.0		

Significant at (p-value <0.01)

Table (7): points a positive statistically significant relationship between attitudes and age p value 0.008.

Table (8) Correlation between Overall Scores of Students' Knowledge and Attitudes (n=400)

Variables	Knowledge	Attitudes
Knowledge		
- r.Value		.267**
- P.Value		.000
Attitudes		
- r.Value	.267**	
- P.Value	.000	

* is significant at 0.05 .

Table (8) reveals that there is positive significant correlation between students' knowledge and attitudes.

Discussion

The prevalence of heavy drinking is associated with age and is highest between ages 18 and 24 (40%). However, this prevalence declines to 19% by the age of 50 **(Johnston et al., 2012)**. Also The Substance Abuse and Alcoholism National Institute **(Parast et al., 2018)** reported that alcohol abuse can damage vital body organs, such as the brain, and it can lead to certain disorders, such as liver disease. Abusing alcohol can also result in alcohol dependence, which can eventually impact people's health, personal and social skills, and behaviors and may lead to engagement in illegal activities.

The current study showed that all of secondary school students were in age group less than 20 years old, the majority (85% & 84% respectively) of them live in rural area and lives with their parents. Regarding educational level of father less than one third (31.5%) have high education, half (50%) were employed. Also educational level of mother more than one third (35.5%) had moderate education and three quarters (75%) were house wife.

Om Hashem M., et al

These findings were confirmed by **Panahi et al. (2016),** who stated that the average age of respondents in research study (93 %) fell below 20 years (the highly risky age group for drug use) during the adolescent span.

But this study in contrast with **Heydarabadi et al, (2014)** who found that the most participant age more than 21 years. From the investigator point of view this can be explained by higher freedom in family and society, lead to easier access to substances, and higher psychological pressure levels.

According the finding of this study the majority of sample live with their parents in the rural area. These results were approved by **Rabie et al. (2020),** who stated that majority (86%) of students live within small nuclear families and living in rural area. Also this study finding against **Hamdi et al., (2013)**, who mentioned that national and provincial data indicate the majority (80%) of students attending schools in rural parts of the country are more likely to report such drug use effects, mainly those linked to alcohol use and associated risk behaviours. From the perspective of the investigator, it could be due to the parents busy about their children and give him space from higher freedom level in family also may due to pressure from their school studying.

Regarding the sociodemographic of technical secondary students, majority (97%) were less than 20 years of age in the age group of , half (50.5%) live in urban area and majority (81%) live with their parents.

Also, the current study findings revealed that more than three quarter and the half (78%, 50 %) of students in secondary and technical school have poor knowledge levels about drug abuse. These findings were in contrast to the findings of **(Masibo et al., 2013)**, who discovered that all respondents (100%) were students of secondary school had sufficient knowledge of psychoactive drugs. The students felt that they were properly educated about the medications, their effects and, thus, the problems related to their use.. This indicated that there was lack of awareness and discussion of this subject and its dangerous and harmful effects at home environment or school society, so that they need much more information about drug abuse from governmental and nongovernmental organization to promote their health education.

The current result illustrated that three quarter and over half (75%, 62%) of secondary school and technical students respectively have negative attitudes about drug abuse. The findings of this study match with the results of other research by **(Heydarabadi et al., 2014)**, who noted that majority (90 %) of students had a moderate and a good attitude towards drugs.

The present findings indicate that there was a strong link between such awareness and attitudes of students regarding substance abuse. In order to educate students to avoid substance abuse, education and understanding of drug abuse is important. Clearly recognizing the adverse effects of drug addiction will alter behaviors and lower the impact of substance abuse contributing to actions.

These results are in line with **(Panahi et al., 2016)** who suggested in their research that providing sufficient knowledge to enhance the awareness of substance abuse by students is a crucial subject in preventing drug addiction and improving the attitude regarding using these products.

Conclusion

This study a concluded on, the majority (78%) of students in secondary have poor knowledge scores. While half (50 %) of students in technical school have poor knowledge score with mean knowledge score of study subjects is 5.9±2.3 with statistical significant differences (p value=.000). Moreover three quarters (75%) of secondary students have positive attitudes while less two thirds (62%) of technical students have negative attitudes with mean attitudes score of study subjects is 16.7±5.4 with statistical significant differences (p value=.000).

There is positive correlation between students' knowledge and attitudes, no statistical significant differences between knowledge and residence (p value=.763). Also statistical significant differences between attitudes and residence (p value=.03).

Recommendations
Policy makers
- They should provide and organize resources for students and their schools who encounter behavioural problems.
- Provide parents with information about substance addiction.

School administrators
- **Parents or caregivers should ensure that:**
  - Have access to knowledge on substance addiction, support materials and related documents
  - Build parent-teacher-student groups that report on the needs of students, lobby on behalf of students, and facilitate peer education.

Teachers
- Positively react to responsible student actions and enforce penalties if students interfere with the healthy school atmosphere and teaching and learning.

Parents / guardians
- Ensure that the candidate attends school and those changes in conduct and absences are reported to school staff.

Social media
- Disseminate awareness about the dangerous of substance abuse
- Disseminate awareness about the places where people demand treatment and management from substance abuse

Further researches
- Conduct further researches to effect educational program about substance abuse

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