Psychosocial aspects, life events, and quality of life of a sample of adolescent males with substance use

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Introduction Alcohol and other substance use are on the rise among the young across the globe. Studies indicate that substance-use behaviors generally begin during adolescence. Early initiation and regular use is often associated with negative consequences. Research on adolescents focuses increasingly on features of the family and social background in predicting substance use, such as parenting style, parental substance use, divorce, separation, child abuse, and so on.

Aim This study aimed at exploring the effect of various familial and psychosocial risk factors on the development and severity of substance use in a sample of Egyptian adolescents, the associated life events, and their reflection on the quality of life (QoL).

Patients and Methods This is a cross-sectional case–control study. It included two groups: the patient group, which included 50 male adolescents from Abbasiya Mental Health Hospital, Cairo, Egypt, from the outpatient clinic of adolescents addiction, between 12 and 19 years of age who were diagnosed as being substance abusers or substance dependents according to the DSM-IV-TR criteria, and the control group, which included 50 age-matched and sex-matched participants with no current psychiatric or neurological disorders. Tools of assessment used were as follows: Mini International Neuropsychiatric Interview for children and adolescents for clinical diagnosis of substance use disorder, the scoring system of Fahmy and EL-Sherbini for measurement of socioeconomic status, life events stresses questionnaire, and PCASEE questionnaire for QoL for assessment of health status and QoL.

Results Overall, 96.6% of the patients were living in medium-level and low-level households, mothers of cases showed more independence in their parenting style, whereas the fathers of the case group were more rejecting than the fathers of the control group, and 72.8% of cases had a positive family history of drug abuse. The most commonly abused substances were tramadol, cannabis, sedatives, hypnotics, alcohol, and heroin. The majority of the studied cases were abusing more than one drug (70%). There is a significant differences between patient and control groups regarding to all life event stressors, including family, economic, study, social, emotional, health, and personal stressors. For assessment of health status and QoL, there were statistically significant differences between patient and control groups regarding physical, cognitive, mood, social, financial, and personal problems.

Conclusion The substance use disorders are a major health problem among youth. Tramadol dependency is at the top of all substances abused in Egypt, followed by polysubstances. The findings highlight how family influences subsequent adolescent substance use and how substance use affects all domains of QoL.

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Introduction

Adolescent is defined by the WHO as a person between 10 and 19 years of age (WHO [1]. Crockett and Crouter [2] describe the period of adolescence as a turning point, a time for change in a number of life's domains. According to Crockett and Petersen [3], adolescence is a period of cognitive, biological, physiological, and psychological transition. Furthermore, they argue that adolescence is a period in which one's existing behavioral orientations have a chance of becoming enduring traits.

The transition from childhood to adolescence is characterized by important biological, cognitive, emotional, and social changes. This period is heavily marked by the onset of and progression through puberty, greater autonomy, less self-regulation, and changes in parental and peer relationships [4].

Adolescent substance use is a major public health concern [5]. Substance use in early adolescence increases the risk for substance use disorders and mental illness later in life [6]. Alcohol and other substance use are on the rise among the young across the globe. Studies indicate that substance abuse behaviors generally begin during adolescence whose consequences pose important public health problems [7].

The prevalence of substance use disorders is highest across Eastern Europe and the USA, occurring in

5–6% of the population. This means approximately one in 20 experience substance dependency. Across Western and Central Europe, the Americas, and Oceania, this prevalence typically ranges from 2 to 5%. Across Africa, the Middle East, and Asia, this prevalence is typically lower at 1–2%. When we look at sex differences in substance use disorders, we see that in every country, the prevalence is greater in men than women [8]. A 'national survey' in 2007 reported that six million (8.5%) Egyptians are addicted to drugs, that most of them were 15 and 25 years of age, and that addicts are considered criminals rather than patients in need for treatment [9].

Factors considered as being outside an individual's control can be labeled as structural risk factors or macroenvironmental factors. For example, the individuals' and their family's socioeconomic status is found to be associated with substance use, where lower status is associated with increased risk of substance use. Living in a deprived neighborhood, with high crime rate and other social problems, is also found to be related to substance use [10].

Many researchers who explore risk and protective factors related to adolescent substance use emphasize the social context, and the key aspects of this context are interactions within the family. Parents influence adolescents' development in many ways, such as providing family structure, instilling values, and regulating how time is spent. Studies have found that parental monitoring, such as establishing clear rules about drug use and providing opportunities for involvement in family decisions, has been shown to reduce teen substance use [11]. In addition, the school environment and school management are also linked to substance use, where poor school situations increase the risk of using substances such as illicit drugs [12].

Aim

This study aimed at exploring the effect of various familial and psychosocial risk factors on the development and severity of substance use in a sample of Egyptian adolescents, the associated life events, and their reflection on the quality of life (QoL).

Participants and methods

This is a cross-sectional case–control study. It included two groups: the patient group, which included 50 male adolescents from Abbasiya Mental Health Hospital, Cairo, Egypt, from the outpatient clinic of adolescents addiction, between 12 and 19 years of age who were diagnosed as being substance abusers or substance dependents according to the DSM-IV-TR criteria with Absence of intoxication or withdrawal symptoms for at least 4 weeks, and the control group, which included 50 age-matched, sex-matched, education-matched, and social standard-matched participants, with no current psychiatric or neurological disorders.

Procedures

Each interview began with the explanation of the study objectives to all participants and that their information was to be used only for scientific purposes. An informed consent was obtained from all participants in the study before conducting the interviews. All patients and control cases were subjected to the following: after obtaining oral and written consent from the individual himself or from his guardian, they were evaluated using a semi-structured interview that gathered general data and drug habits of the patients (the type of drug, the route of administration, the dose, etc.). The following tools of assessment were used: first, a Mini International Neuropsychiatric Interview for children and adolescents (MINI KID) [13] was used to diagnose psychiatric disorders; second, questionnaire for detection of drug addiction designed by General Secretariat of Mental Health and Addiction Treatment [14]. The questionnaire is formed from 82 questions in the form of five parts. The first part contains personal data in terms of sex, age, country of origin, current place of residence, and educational level, the second part includes social status and presence or absence of father and mother during the period of development, the third part is specific to smoking and experimental abuse, part IV is specific for history of abuse with all its details, and part V is specific to the opinion of the researcher; third, a scale for measuring family socioeconomic status for health research in Egypt, according to Fahmy and El Sherbini [15]; fourth, life event stresses questionnaire [16], which assesses different sources of stress that could be faced including family, economic, education, social, emotional, physical, and personality. Each one of the seven categories is assessed by 10 phrases, where each phrase has four degrees, scoring from 0 to 3. So each category has a score between 0 and 30, and the total score range from 0-210; and finally, the PCASEE questionnaire for QoL, which was developed by Beck. It is a rating scale for assessment of health status and QoL. It is formed of six groups of questions: group A to assess physical problems, group B to assess cognitive problems, group C to assess affective problems, group D to assess social dysfunction, group E to assess economic problems,

and group F to assess ego problems. Each group of questions is formed of five items. For each, a score from 0 to 5 is given, and the sum of each group is multiplied by 4 to give a percentage score, in which 100% means the best possible QoL.

Statistical methods

Data management and statistical analysis were done. Data were collected, coded, revised, and entered to the statistical package for the social sciences (IBM SPSS) SPSS software package version 20.0. (Armonk, NY: IBM Corp).. The data were presented as number and percentages for the qualitative data; mean, SD, and ranges for the quantitative data with parametric distribution; and median with interquartile range for the quantitative data with nonparametric distribution. χ^2-Test was used in the comparison between two groups with qualitative data and Fisher exact test was used instead of the χ^2-test when the expected count in any cell found less than 5. Independent *t*-test was used in the comparison between two groups with quantitative data and parametric distribution, and Mann–Whitney test was used in the comparison between two groups with quantitative data and nonparametric distribution.

Results

Table 1 shows the sociodemographic characteristics of the studied groups. There were no significant differences between the studied groups (cases and controls) regarding demographics, except for

Table 1 Sociodemographic data of the studied groups

	Groups [*N* (%)/mean (SD)]		χ^2	*P* value
	Patient group	Control group		
Age group				0.278
Early Adolescence	23 (46.00)	26 (52)	0.360	0.548
Late Adolescence	27 (54.00)	24 (48)		
Age	15.96 (1.38)	15.7 (1.66)	3.9	0.14
Order among siblings				
1	17 (34.60)	21 (42.20)		
2	13 (25.90)	16 (32.80)		
≥3	20 (39.50)	13 (26.00)		
Current living arrangement				
Family home	46 (95.00)	49 (98.70)	0.8	0.37
Others	4 (5.00)	1 (1.30)		
Socioeconomic class				
Medium and low	35 (75)	21 (21)	16.055	0.001
High	15 (25)	29 (79)		
Family history of substance use				
Negative	18 (36.00)	45 (90)	31.274	<0.001*
Positive	32 (64.00)	5 (10)		
Education level				
Illiterate	2 (4.00)	0	39.437	<0.001*
Primary	19 (38.00)	0		
Preparatory	13 (26.00)	38 (76)		
Secondary	10 (20.00)	12 (24)		
Technical	6 (12.00)	0		
School history				
School: performance				
Poor scholastic achievement	38 (76.00)	3 (6)	50.641	<0.001*
Average scholastic achievement	12 (24)	47 (94)		
Relation to teachers				
Not obeying orders	30 (60)	7 (14)	22.694	<0.001*
Obeying orders	20 (40)	43 (86)		
Relation to peers				
Bad	37 (74)	17 (34)	16.103	<0.001*
Good	13 (26)	33 (66)		
Truancy				
No	20 (40)	31 (62)	4.842	0.028*
Yes	30 (60)	19 (38)		
Total	50 (100)	50 (100)		

*P<0.05 is considered significant. *P<0.01 is considered highly significant.

socioeconomic state, family history of substance use, and school history. Figure 1 shows the prevalence of substance abuse in the studied group. A total of 35 cases used polysubstance versus 15 cases that used one substance. However, among the cases that used one substance, seven cases used only THC and four cases used only tramadol. Tramdol was the most frequently used substance, alone or combined with others. Most studied addicts were abusing more than one drug (70%).

Table 2 shows that the pattern of abuse, where 14% were irregular users, 36% regular users, and 40% addicts. Table 3 shows familial risk factors. There was a highly significant statistical difference (P=0.000) between two groups regarding absent parents (death of father, parental divorce, and separation) and parenting styles of both mothers and fathers. Table 4 shows a significant difference between two groups regarding exposure to all life event stressors, including family, economic, study, social, emotional, health, and personal stressors. Table 5 shows highly statistically significant differences between the two groups regarding all domains of QoL (physical, cognitive, mood, social, financial, and personal). Figures 2 and 3 show significant correlation between truancy and substance abuse, as 60% of the cases has history of truancy in comparison with 38% in the control group. There was no correlation between bullying and substance abuse. Figure 4 revealed that ~62% of the patients had been abused, 22% were exposed to emotional abuse, 22% were exposed to physical abuse and 4% were exposed to sexual abuse, compared with 14, 10, and 4% who were exposed to emotional, physical, and sexual abuse, respectively, in the control group. Figure 5 shows the scale of Fahmy and El-Sherbini for social classes. 25% of the participants were from low socioeconomic level and 75% were from medium and high socioeconomic levels.

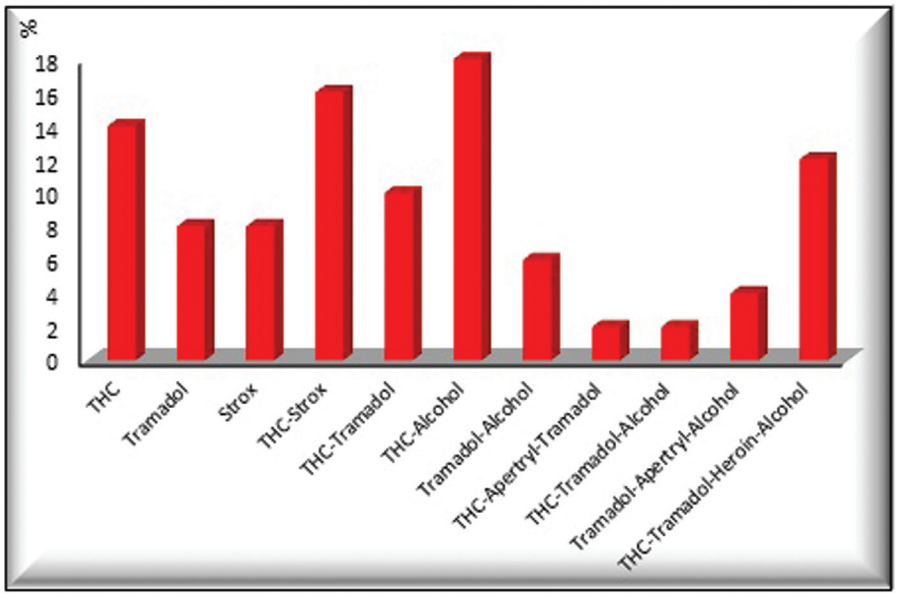
Distribution of substance use among the total sample

Type of substance	*N* (%)
THC	7 (14)
Tramadol	4 (8)
Strox	4 (8)
THC-strox	8 (16)
THC-tramadol	5 (10)
THC-alcohol	9 (18)
Tramadol-alcohol	3 (6)
THC-apetryl-tramadol	1 (2)
THC-tramadol-alcohol	1 (2)
Tramadol-apertryl-alcohol	2 (4)
THC-tramadol-heroin-alcohol	6 (12)
Total	50 (100)

Table 2 Pattern of use in the studied group

Questionnaire for drug detection	Patient group (*N*=50) [*N* (%)]
Experimental use	0
Irregular use	7 (14)
Regular use	18 (36)
Addiction	20 (40)
Not addicted	0
Unknown	5 (10)

Figure 1



The prevalence of substance abuse in the studied group.

Table 3 Familial risk factors in the studied groups

	Groups [*n* (%)]		χ^2	*P* value
	Patient group	Control group		
Parents history: absent parent among the studied groups				
No	27 (54.00)	41 (82.00)	15.149	0.004*
Father death	4 (8.00)	2 (4.00)		
Mother death	1 (2.00)	2 (4.00)		
Divorce	14 (28.00)	1 (2.00)		
Separation	4 (8.00)	4 (8.00)		
Parenting style of father				
Uninvolved	29 (58.00)	38 (76.00)	13.250	0.004*
Authoritarian	14 (28.00)	5 (10.00)		
Authoritative	0	5 (10.00)		
Permissive	7 (14.00)	2 (4.00)		
Parenting style of mother				
Uninvolved	27 (54.00)	32 (64.00)	15.409	0.001*
Authoritarian	4 (8.00)	7 (14.00)		
Authoritative	0	6 (12.00)		
Permissive	19 (38.00)	5 (10.00)		

Table 4 Comparison between two groups as regards life event stresses

Life event stresses	Patient group (*N*=50)				Control group (*N*=50)				*t*	*P* value
	Mean	SD	Minimum	Maximum	Mean	SD	Minimum	Maximum		
Family stresses	15.86	2.59	10	20	7.28	3.30	3	16	−14.464	<0.001
Economic stresses	17.28	3.92	12	30	8.66	3.97	3	18	−10.918	<0.001
Study stresses	17.04	3.37	11	26	8.24	2.45	6	15	−14.914	<0.001
Social stresses	16.04	2.83	13	24	7.46	2.86	4	15	−15.087	<0.001
Emotional stress	15.84	2.44	11	21	8.26	3.91	3	24	−11.621	<0.001
Health stresses	16.34	2.73	12	22	8.48	2.96	4	14	−13.809	<0.001
Personal stresses	15.16	2.44	11	20	7.12	3.65	3	17	−12.952	<0.001

Table 5 Comparison between two groups as regards quality of life

Quality of life	Patient group (*N*=50)				Control group (*N*=50)				*t*	*P* value
	Mean	SD	Minimum	Maximum	Mean	SD	Minimum	Maximum		
Physical problems	13.18	4.08	9	24	21.72	3.88	13	25	10.725	<0.001
Cognitive problems	14.10	3.67	9	23	20.24	3.44	11	25	8.632	<0.001
Mood problems	14.00	4.18	7	24	20.86	4.11	12	25	8.279	<0.001
Social problems	13.90	3.53	9	21	20.56	3.56	13	24	9.389	<0.001
Financial problems	11.38	4.80	3	21	18.60	3.82	11	24	8.323	<0.001
Personal problems	12.52	4.52	6	24	17.98	3.99	10	24	6.407	<0.001

Discussion

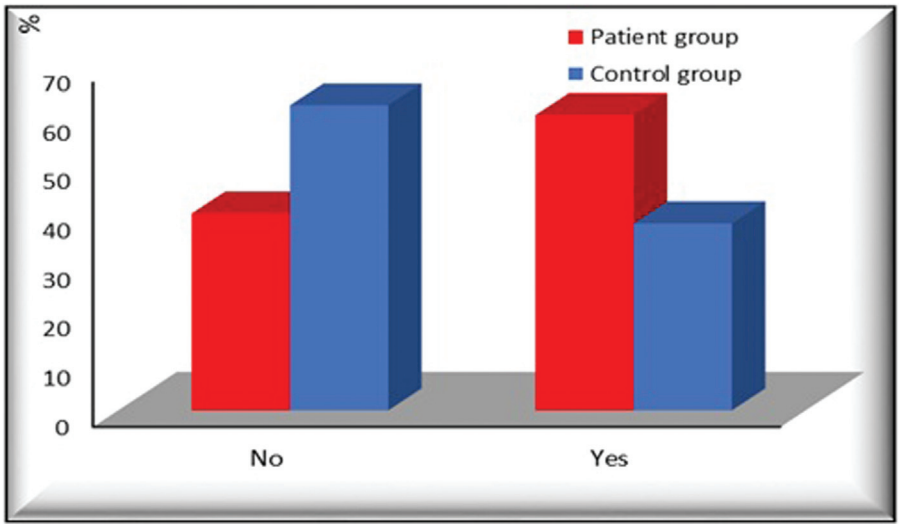
According to the World Drug Report [17], 'Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Psychoactive substance abuse can lead to dependence syndrome – a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state'. Studies indicate that substance abuse behaviors generally begin during adolescence whose consequences pose important public health problems.

Adolescent drug abuse is influenced by many factors, such as family, schools, peers, media, and community, with parental behavior as one of the most important factors. Family structure and relationship among the family members are two aspects that have significant influence on a child's behavior regarding drug abuse.

Sociodemographic characteristics

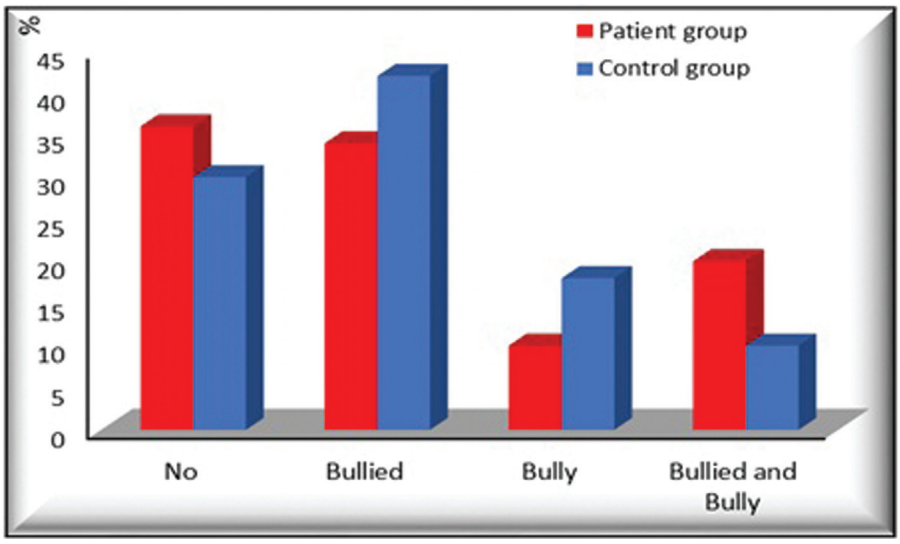
This study shows nonstatistical significant relation between the two groups regarding age, order among

Figure 2



School truancy.

Figure 3



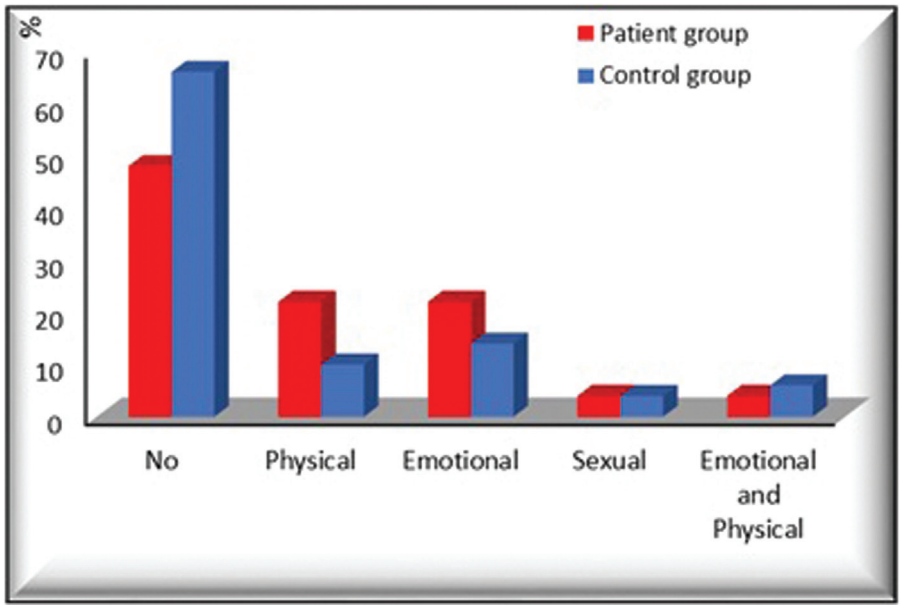
School troubles.

siblings, and current living arrangement, whereas there was a statistically significant relation regarding socioeconomic class. 25% of the participants were from low socioeconomic level and 75% were from medium and high socioeconomic levels. Mohamed *et al.* [18] reported that 43% of the participants in their study were from the middle socioeconomic level, 28% were from the high socioeconomic level, and 24% were from the low socioeconomic level. Shereen *et al.* [19] reported that 44% were from the middle socioeconomic level, 19% were from the high socioeconomic level, and 37% were from the low socioeconomic level.

Family history of drug abuse

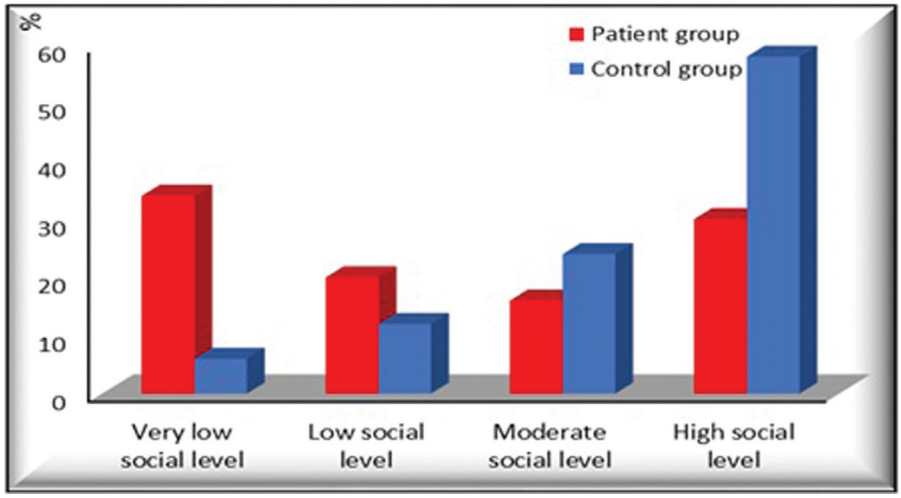
Regarding family history, more cases had positive family history of drug abuse. Overall, 72.8% of the case group had a positive family history of drug abuse. This indicates that family history of drug abuse makes adolescents more liable to substance use disorders. This is in agreement with the findings that sibling's and father's substance use has an influence on the development of adolescent substance use [20]. Given that sibling poly-drug use is also a marker of familial vulnerability for substance use, classical twin studies have demonstrated common genetic vulnerability to substance use disorders, affective disorders, and conduct disorder [21]. Shereen *et al.* [19] reported that an overall 24% of their participants reported that their fathers had used drug. This is similar to the findings of Mohamed *et al.* [18], who found that 25% of substance users had a positive family history of substance abuse. These results are consistent with

Figure 4



Child abuse.

Figure 5



Fahmy and El-Sherbini for social classes.

those of Okasha [22] as well, who reported that more than one-third of the users' fathers and almost half of their relatives were substance abusers. This indicates the effect of exposure to drug-related stimuli and the distorted models of fathers and relatives; we also detected the significant role of identification and learning in entering the dilemma of substance abuse.

Family variables

Family variables such as parenting style, family relationship, presence or absence of father, and child abuse were investigated to detect their relation with substance use during adolescence. Our findings reinforce the importance of the role of parents in the lives of their adolescents and supports previous studies that found that parents have great influence on children's behaviors including substance. The parenting behaviors in this study were reported by adolescents. Relying on adolescent perception of parenting practices is a strategy that has gained traction in teen mental health research owing to the tendency of parents' reports to be biased in favor of socially desirable responses [23]. Unexpectedly, the mothers of cases showed more independence in their parenting style, although independence is considered a positive way of parenting, and it is common for

adolescents to seek it [24]. This independence has positive outcomes for many adolescents, but for those at risk for participation in problem behaviors, greater independence could be associated with negative outcomes [25].

This can be explained from the point of view that the mothers of cases were not only consistent but also were not flexible or authoritarian. When our result are understood like that, they are in concordance with Hayes *et al.* [25] who reported that authoritarian parenting is associated with greater adolescent rebellion, which in turn is related to alcohol use. Meanwhile, the fathers of the case group were more rejecting than the fathers of the control group. This is in agreement with some studies that have found an association between rejection and regular use of alcohol [11]. Longitudinal studies have found that negative parenting (e.g. inconsistent and harsh discipline, low warmth, and monitoring) is positively associated with substance use disorders, and that positive parenting (e.g. positive reinforcement, acceptance, approval, and guidance) is negatively associated with addiction problems [26]. Some international studies have found that some parental practices (affection, rejection, and overprotection) have predictive value concerning substance use problems [27]. A recent review showed that most studies found that authoritative parenting was associated with the best outcomes regarding adolescent substance use and neglectful parenting with the worst outcomes. Results of this study revealed that the absence of father (death divorce or separation) was highly related to substance use disorders. Hemovich *et al.* [28] reported that youth from single-parent families engaged in significantly higher levels of substance use than those from dual-parent households.

It seemed plausible to assume that single parents, on average, would have less time to monitor their children consistently and intensively. Moreover, the mean family income of dual-parent families significantly exceeded that of single-parent households. Youths from single-parent families reported less adult supervision, more positive prodrug friend and peer norm perceptions, and greater self-delinquency and peer delinquency. Parenting is often viewed as a standout among the mechanisms of socializing children [29].

Child abuse

Child trauma is a devastating problem that can result in a severe emotional and physical health problem. DSM-5 defines trauma as exposure to an event that involves 'actual or threatened death, serious injury, or sexual violence.' The traumatic event can be experienced firsthand or by learning that the event occurred in a close family member or friend. Moreover, the traumatic event is experienced repeatedly, or there is extreme exposure to the details of the event [30]. There is reciprocal and complex relationship between parents and child behavior, each of them influencing the other. Some parents believe that strict discipline of children in young age using physical and verbal punishment without recognition of their psychological development is the best way for controlling and shaping proper behaviors. The relation between misbehavior and aggressive punishment is bidirectional, as misbehavior is the cause of punishment, and punishment generally increases misbehaviors.

This study revealed that ~62% of the patients had been abused, 22% were exposed to emotional abuse, 22% were exposed to physical abuse, and 4% were exposed to sexual abuse, comparing with 14, 10, and 4% were exposed to emotional, physical, and sexual abuse, respectively, in the control group. Thus, our results are in line with the results of Merel *et al.* [31], which showed that throughout adolescence, vulnerability for child abuse was associated with increased misbehaviors and cannabis use.

Education

Regarding the educational level, the control adolescents were more highly educated than the cases, as 13 (26%) of the cases were educated till preparatory school, whereas 38 (76%) of the controls were educated till the same level. Moreover, 19 (38%) of the cases were educated till the primary stage, and none of the control group was educated only till that stage, and this difference in educational level was statistically significant. Moreover, there is a significant difference between patient and control groups regarding truancy from school, as 30 (60%) of the cases experienced truancy, whereas 19 (38%) of the controls had been escape from schools.

These results are in line with the study by Gauffin *et al.* [32], which stated that the only background factor that characterized majority of the people with records of drug abuse was school failure. Moreover, Fletcher *et al.* [33] have pointed out that school failure is not only an indicator of poor educational performance but should rather be considered as a marker of several pathways that may lead to drug-related problems.

In contrast to our results, Breslau *et al.* [34] noted that the associations of alcohol and illegal drug use with

graduation are materially attenuated and are no longer significant, as in their study, they interpreted the finding that substance use disorders are not associated with additional increments of risk for failure to graduate on time beyond that associated with initiation of smoking supports the suggestion that early substance use might be a marker of a pre-existing negative educational trajectory, rather than an effect of substance use.

Bullying and substance abuse

Radliff *et al.* [35] stated that a link between involvement in bullying and substance use was evident. Youth involved in bullying were more likely than students not involved in bullying to use substances, with bully victims reporting the greatest levels of substance use. Jenna Hennessey [36] concluded that studies have found that boys who reported being bullies at age 8 years were more likely than nonbullies or victims to report illicit drug use or a greater magnitude of drug use at the age of 18 years, and also concluded that bullies were 4.8 times more likely to engage in frequent excessive drinking and 8.2 times more likely to use other substances than those not engaged in bullying.

This study found no correlation between bullying and substance abuse, and these results are in line with the study of Chris Elkins [37] which concluded that bullying can lead to physical violence, mental health problems, and other life difficulties. It is also a risk factor for substance abuse. It is difficult to find a direct link between bullying and substance abuse because both behaviors are relatively common.

Jenna Hennessey [36] concluded that studies have found that boys who reported being bullies at the age of eight years were more likely than nonbullies or victims to report illicit drug use or a greater magnitude of drug use at age 18 years, and also concluded that bullies were 4.8 times more likely to engage in frequent excessive drinking and 8.2 times more likely to use other substances than those not engaged in bullying. We could explain our results that the findings of this study are limited owing to the cross-sectional nature of the data, number of the cases is limited, and our ability to draw strong meditational conclusions is limited.

Type of substance used

The most commonly abused substances among abusers in our study were tramadol, cannabis, sedatives and hypnotics, alcohol, and heroin.

This study is consistent with that of Negm and Fouad [37], who found that tramadol, cannabis, and alcohol were the most commonly abused substances among adolescent school students in Zagazig. This is in agreement with the findings of Hatata *et al.* [38], who found that 61.9% of their participants used opiates, 18.5% used cannabis, 15.8% used sedatives, and 3.9% used alcohol.

The highest prevalence of tramadol use was supported by previous Egyptian studies such as that by Fawzi [39], who reported a prevalence of 32.1% for tramadol use among children and adolescents who were presented to the Emergency Unit of the poison Control Center of Ain Shams University Hospitals.

The results of the study by Mohamed *et al.* [18] showed that opioids were the substance of major problem in 43.73% of the substance abusers. An increasingly alarming phenomenon of tramadol abuse has been heavily demonstrated in the Egyptian community in the past 4 years [40]. Moreover, Shereen *et al.* [19] in their study reported that the most commonly abused substances among abusers were tramadol, cannabis, sedatives and hypnotics, alcohol, heroin, and anticholinergic drugs (97, 94, 38, 32, 0, and 12%, respectively).

Although the issue of drug abuse is not new to the Egyptian society, tramadol is associated with a wide range of abuse and illegal transactions, as it is easily accessible and readily provided at cheap costs despite it being a scheduled drug. The alleged usages of tramadol have contributed considerably to its popularity and massive use, especially among youth and middle-aged individuals, as a remedy for premature ejaculation and for extended orgasm and to increase sexual pleasure [40]. Students also use tramadol during their examination to give them energy and keep them awake to study [41].

Life event stressors

Throughout history, alcohol and other drugs have been used to provide relief in times of stress and frustration. Research has confirmed this association between disruptive life change events and substance use. It was hypothesized that two psychological constructs facilitate and mediate this relation between stress and substance use. Uncontrollable stress (negative life change events) was assumed to create a sense of loss of control, which in turn engendered a decreased level of meaning in life. This meaninglessness in life, experienced as distressful and uncomfortable, is then treated or medicated with various drug substances (Newcomb and Harlow, 1986).

In this study, there is a significant difference between patient and control groups regarding exposure to all life event stressors, including family, economic, study, social, emotional, health, and personal stressors. These results are in line with the study by Sinha [42], which stated that the stressors tend to be highly emotionally, distressing events that are uncontrollable and unpredictable for both children and adults. The themes range from loss, violence, and aggression to poor support, interpersonal conflict, isolation, and trauma. There is also evidence for a dose-dependent relationship between accumulated adversity and addiction risk – the greater the number of stressors an individual is exposed to, the higher the risk of developing addiction.

Quality of life

The comparisons of the results of the PCASEE questionnaire for QoL for assessment of health status and QoL here revealed statistically significant differences between patient and control groups regarding physical, cognitive, mood, social, financial, and personal problems. This in line with the study of Srivastava *et al.* [43], which stated that there is sound evidence that both higher levels of drug consumption and the severity of drug dependence correlate with poorer QoL irrespective of which instruments are used. The degree to which this relates primarily to the substance use disorder, across the QoL studies where substance was not the primary drug of abuse, the evidence again identifies poorer QoL among SUDs. Assessment of QoL in substance dependence is a valuable measure of clinical status and also helps to identify predictors of relapse.

Conclusion

Drugs were distributed as follows: 25% monosubstance users (tramadol and cannabis) and 75% polysubstance users. There were statistical significant differences between patients and controls for all items of parenting styles, with higher scores for normality among control group regarding both father and mother picture. Moreover, there were statistical significant differences between patients and controls for all items of life event stressors and for all items of QoL.

Recommendations

Intervention programs should be designed to target risk factors within the psychosocial domains. However, reducing discrimination and violence and trying to facilitate positive parent–child relationships through social policy may also be worthy targets of interventions which can result in a lessening of adolescent's drug involvement. Increase the awareness of media to overcome the misconceptions and rumors spread in society about drugs that promote the use of increasing and raise the curiosity and love of experience in the younger age group in society. Campaigns against drug abuse should focus on youth.

Limitations of the study

This study is a cross-sectional study so no causality relations could be concluded only associations.

(1) The site of the study is the adolescents' substance abuse outpatient clinic, Abbasiya Mental Hospital even if it serves both urban and rural areas, still the sample is not representative for all Egypt.
(2) Severity and type of substance abused could not be correlated to parenting style, Psychosocial factors due to the sample size which was affected by the number of drop-outs, also the number of subjects diagnosed with substance abuse and substance dependence in addition to the number of subjects abusing single substances were not enough to give statistical power to the results.
(3) Cultural factors such as the stigma and shame about Drug abuse and childhood abuse most likely underestimated the impact of these risk factors in our study.

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Conflicts of interest

There are no conflicts of interest.

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