
SUBSTANCE DEPENDENCE IN A SAMPLE OF EGYPTIAN ADOLESCENTS

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Introduction:

Substance use disorders (SUDs) are among the most prevalent psychiatric disorders in young people. SUDs cause much distress for youths, their families, and society (Cheng and Myers, 2005).

SUDs were the second most commonly diagnosed psychiatric disorders in youths evaluated in community settings. Second only to the disruptive behavior disorders category, it is estimated that over 5 million youths, by age 16, have met the diagnostic criteria for an SUD (Cheng and Myers, 2005).

There is a higher rate of co-morbidity in adolescents with substance use disorder. Specifically, mood and disruptive disorders have been found to be higher in adolescents with substance use disorder than in adolescents without. When compared to adult samples, rates of current co-morbidity of substance use disorder in adolescents with psychiatric disorders are the same as those in adults, except for disruptive/antisocial personality disorders (Simkin, 2005).

Stress has long been recognized as one of the most powerful triggers for drug abuse, craving, relapse and self-medicate with drugs or alcohol to relax and cope with stress (Williams, 2002).

Aim of the work:

1. Investigating the types of psychiatric symptoms and psychosocial variables that coexist with drug dependence in adolescents.
2. Assessing the impact of co-morbidity on the severity of substance dependence in adolescents.
3. Assessing the effect of stress and the type of coping style of the patients.

Subjects and method:

The sample consists of 80 males aged 12-19 years and was divided into two groups: 1-Group (A): substance dependence patients according to the ICD-10 criteria (n=40). Patients are chosen sequentially from the inpatient admitted in El-Khanka general psychiatric hospital and The Nile Sanatoriums private psychiatric hospital from the first of February 2003 till the first of February 2004 and they were diagnosed according to the ICD-10 criteria. 2-Group (B): Control subjects from the same age group with no history of substance use or any psychiatric disorders. (n=40)

Both groups were subjected to the following assessment procedures:

- Psychiatric case history;
 - Life events stresses (Shokeer, 1996).
 - Coping Processes Scale (Ibrahim, 1994).
- The patients in group (A) will be subjected to the following:
- ICD-10 symptom checklist for mental disorder (Janca et al., 1994).
 - Addiction severity Index (Maclellan et al., 1980).

Results of this study were divided into three parts concerning with comparing the socio-demographic data of both groups, the clinical profile of group A, Psychometric profile in both group.

I- As regards socio-demographic data

- A. Both groups have the same mean age and they were single.
- B. As regard education higher percentage reached the secondary and university of control group but it did not reach a significant difference.

Results:

II- As regards the clinical profile:

A-Family history in both groups

Family history	Group A		Group B		P
	NO= 40	100%	NO= 40	100%	
Addiction	24	60	3	7.5	0.000*
Psychiatric	4	10	4	10	
Both	1	2.5	0	0	
Negative	11	27.5	33	82.5	

B- The number of sibling in group A were higher than group and this difference reached a statistical significance difference.

C- More percentage of group A had heterosexual relation than group B and this reached a statistical significant difference.

D- As regard the Addiction taking history of group A it was found that:

I- The mean age of onset was 14.4

II- Frequency of age of onset.

Age of onset	Frequency	Percentage
12	1	2.5%
13	7	17.5%
14	9	22.5%
15	22	55%
16	1	2.5%

III- Frequency of different types of substance use

	Frequency	Percentage
Cannabis	28	70%
Heroin	13	25%
Tramadole	28	2.5%
Stimulant	0	0%
Sedative hypnotic	23	57.5%
Bango	25	62.5%
Codeine	4	10%
Alcohol	26	65%

IV- Most of the patients were forced to be admitted in a hospital.

V- Most patients use substance to help them to fit.

VI- Most of patients use under the effect of their friends.

VII- Most of them use alternative.

VIII- Most of patients take to suppress feeling of depression and loneliness.

IX- Most of patient had suicidal ideation.

X- Overdose were in about 32.5% of patients.

XI- Mean age of cigarette smoking was 12.7

Stressors		Group A		Group B		P
		NO= 40	100%	NO= 40	100%	
Family	Normal	17	42.5	30	75	0.003*
	Significant	23	57.5	10	25	
	Total	40	100	40	100	
Economic	Normal	35	87.5	35	87.5	1
	Significant	5	12.5	5	12.5	
	Total	40	100	40	100	
Study	Normal	33	82.5	35	75	0.531
	Significant	7	17.5	5	25	
	Total	40	100	40	100	
Social	Normal	25	62.5	32	80	0.08
	Significant	15	37.5	8	20	
	Total	40	100	40	100	

		Group A		Group B		P
		NO= 40	100%	NO= 40	100%	
Emotion	Normal	22	55	33	82.5	0.008*
	Significant	18	45	7	17.5	
	Total	40	100	40	100	
Physical	Normal	27	67.5	32	80	0.2
	Significant	13	32.5	8	20	
	Total	40	100	40	100	
Personality	Normal	36	90	38	95	0.396
	Significant	4	10	2	5	
	Total	40	100	40	100	
Total Scales	Normal	24	60	34	85	0.012*
	Significant	16	40	6	15	

b) As regard the Coping Process Scales

- Group A showed high score in the helplessness scale , denial coping scale and the mental disengagement scale when compared with the control group and this difference reached a statistical significance.

- Patients in group A showed high scores on the emotion discharge coping scale when compared the control group and this difference did not reach a statistical significance

- Also the patients in group A show low scores on the information and social support coping scale, wishful thinking coping scale , turning to religion coping scale, exercise restrain coping scale when compared with the control group and this difference reached a statistical significance.

- It is to be noted that More patients of group A showed low scores on the positive reinterpretation coping scale , the acceptance coping scale and active coping scale but did not reach a statistical significant difference .

c)- As regard the Addiction severity index:

- The medical subscale 72.5% of the patients was normal followed by 22.5% mild abnormality.

- The employment subscale (40%) of the patients showed moderate severity followed by (27.5%) mild and (22.5%) were severely impaired on this scale.

- In the drug abuse scale (70%) of the patients were severe followed by (10%) with moderate degree.

- As regards the legal problem scale about (42.5%) showed no abnormality on this scale followed by (30%) with mild degree and (25%) with moderate degree.

- The family history scale was normal in (40%) of the patient followed by (32.5%) with moderate degree and (27.5) with severe degree.

- As regards the social subscale (62.5%) of the patients were moderate degree followed by (25 %) of the patients were severe degree.

- The psychiatric subscale showed (32.5%) of the patients no problems and (32.5%) were mild degree with (20%) of the patients were moderate and (15%) severe degree.

d)- ICD-10 symptom checklist for mental disorders showed that 60% of patient had co-morbidity with psychiatric disorders and the frequency of different psychiatric disorders was as follows:

	No	Percentage
Depression	10	25%
Anxiety disorder	1	2.5%
Paranoid personality	1	2.5%
Schizoid Personality	1	2.5%
Dissocial personality	7	17.5%
Emotional labile (impulsive type)	3	7.5%
Schizophrenia	1	2.5%

Recommendation

- 1- Further study with larger sample would help to have more precise data representing the study group and it would be better if it is on national representation.
- 2- Follow up studies to be able to integrate multiple risk factors with the prognosis and management of patients.
- 3- The Importance of implicating preventive program on the school children especially those who are in risk of developing substance dependence.

4- Epidemiological research to estimate the accurate size of the problem in Egypt.

5- The importance of setting a special adolescent substance dependence treatment program and treatment setting with reference to special units in hospitals.

6- The urgency to implement a preventive and treatment programs to the working adolescents as the rate of exposure to substance intake is more even than the school children which necessitates the beginning in the needed research methodology to tackle this problems.

References:

- Cheng K and Myers KM(2005): Child and adolescent Psychiatry, Published by Williams and Wilkins, pages 89-109.
- Ibrahim LA(1994):Coping processes Scale, Faculty of Education, Monofya University, Pub. Al-Anglo Library.
- Janca A, Ustrin B, IsaacM et al., (1994): ICD-10 symptom checklist for Mental Disorders, Division on Mental Health World Health Organization-Geneva Version 1.1.
- McLellan AT, Lubrosky L, Cacciola J, Griffith J, Evans F(1985): New data from Addiction Severity Index. Reliability and validity in three centers. J. Nerv. Ment. Dis. Jul; 173(7): 412-23.

Shokeer ZM(1996): Life Event Stresses, Faculty of Education, Tanta University. Pub. Al-Anglo Library

Simkin DR(2005): Adolescent substance abuse IN Kaplan and Sadock Comprehensive Text Book of Psychiatry 8th Ed. Pub Lippincott Williams and Wilkins.

Williams JS (2002): Depression, PTSD, substance abuse increase in the wake of September 11 attack. NIDA publication Vol. 17, No 4, November 2002