

## Substance Non-Medical Use among Secondary School Students in Assiout City

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A sample of 1500 male secondary school students was examined during 1986 in Assiout city. Their use of 4 classes of substance was reviewed: tobacco, synthetic drugs, narcotics, and alcohol. Those who ever used drugs showed the following: age older than 18, urban background, living alone, studying in a technical college. Christian students who ever tried alcohol and narcotics were greater than their Moslem peers. Drugs ever were distributed as follows: tobacco 41%, synthetics 13%, narcotics 15%, and alcohol 23%. Only 4 subjects admitted using heroin. Among the commonest motives for seeking drugs were: festive occasions, and availability of financial resources. The media played an important part in introducing drugs to students. 6% of those who tried drugs became dependent, and 31% succeeded in abstaining for different reasons, mostly guilt and religious motives.

(Egypt.J. Psychiat.,1992,15:155-162).

### Introduction

Substance use and non-medical use are worldwide problems assuming alarming proportions in Egypt over the past five years.

The first attempts to document the extent of this problem was undertaken by Soueif et al. (1982,a,b) in the Greater Cairo study. Okasha et al. (1982) in a study of university students found a

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greater incidence of substance use among failed and among law students.

All of these studies were carried out in Cairo and its conurbia; and very little information is available regarding provincial areas. Hence this work, which aims at estimating the dimensions of the problem, any relevant associations, similarities or differences between our results and those of others, taking into consideration time lapse and geographical differences.

### Subjects and Method

A total number of 1500 male secondary students randomly selected and constituting 10% of the total student population of Assiout city's secondary schools, were examined between April and November 1986.

Their distribution was: 60% Technical college students (TC), 33% General Education (GE), and 7% Teacher colleges students (TA).

The mean age of the total sample was  $17.97 \pm 1.32$ ; 1090 were Moslems and 410 Christians.

A questionnaire modified from the one used by Soueif et al. (1982) and that used by Hawker (1978) was applied. It consisted of 95 items covering: socio-demographic data, exploration for use and abstinence, sources of information, etc.

In this worker the term 'User' refers to someone who has ever been exposed to the substance; while 'Regular User' refers to those using the substance regularly and not less than once per week.

**Results**

Users in the total sample were as follows: tobacco (41%), synthetic drugs (13%), narcotics (15%), and alcohol (23%).

Technical college students (TC) showed a significantly greater incidence of substance use when compared to the other two groups (Table1).

Detailed distribution of users according to the different drugs classes was:

**Synthetic Drugs**

TC: tranquilizers (7%), hypnotics (6%), psychostimulants (7%).

GE: tranquilizers (2%), hypnotics (3%), psychostimulants (1%).

TA: showed the same distribution as GE and will henceforth be treated as one group unless otherwise indicated.

**Narcotics**

TC: cannabis (13%), opium (4%), heroin (1%).

GE: cannabis (74%), opium (11%), heroin (0.6%).

TA: cannabis (83%) and opium (17%)

Alcohol: the most commonly used beverage in the 3 group was beer: TC (20%), GE (19%), and TE (12%).

The number of students who used

substances was significantly higher among those above 18 years. The median age for ever exploring with drugs was 14.8, 15.16, and 15.5 for the three types of education-with technical college students starting earlier.

Urban students showed a significantly higher incidence for use of all substances except tobacco which was not significant and narcotics which showed higher incidence among rural subjects: synth.Dr. (U16%, R8%); narcotics (U14%R18%); Alcohol (U 26% R15%),

Table 1  
Substance Use In The Total Sample N = 1500

	Technical		General		Teachers		Total		P
	N	%	N	%	N	%	N	%	
Cigarettes	450	50%	130	26%	30%	30%	610	41%	S**
Synthetic Drugs	164	18%	30	6%	6%	6%	200	13%	S**
Narcotics	160	18%	60	12%	8%	8%	228	15%	S**
Alcohol	220	24%	110	22%	15%	15%	345	23%	S**

Table 2  
Motives For Seeking Drugs

Hedonistic	5	4%
Personal Problems	22	16%
Peer Group Influence	13	9%
Large Financial Resources	23	17%
Ignorance of Dangers	4	3%
Poor Religious Commitment	13	9%
Poor Parenting	6	4%
Festive Reasons	24	18%
Relief of Dysphoria	6	10%
Bolstering Self - Esteem	4	4%
Improving Concentration	6	3%
Others	137	4%
Total	1380	
Not Specified		

The four cases of heroin abuse were found among the rural student's population.

Students living alone and away from their families showed a significantly higher incidence of substance use (excluding tobacco): synthetics (63%), narcotics (70%), alcohol (53%) vs 11%, 13%, and 22%.

The number of christian students who used tobacco, narcotics, and alcohol was significantly higher (54% vs 34%, 20% vs 13%, and 37% vs 16%).

Table (2) shows the different motives for seeking drugs, The commonest reason was festive occasions (18%) followed by large financial resources (17%). In contradistinction to other authors peer group influence was not the most prominent factor.

Table (3) shows that the number of activists, in the case of synthetics and narcotics, was much higher than in the case of alcohol (35%, 32%, 17%). The main initiators for all substances classes were: friends followed by relatives.

Table (4) shows the sources of hearing about substances, the mass media were the commonest source followed by peers

Table 3  
Distribution of Users According To Passivity.  
V. Activity In Initiating Drug Use

	Synthetics		Narcotics		Alcohol	
Active	69	35%	72	32%	60	17% S**
Passive	131	65%	156	68%	285	83%
Initiators	100	76%	116	74%	215	76%
Friends	21	16%	30	19%	46	16%
Relatives	5	4%	3	2%	24	8%
Parents/Sibs	5	4%	7	5%	0	0%
Others	131		156		285	
Total						

Table 4  
Sources of Hearing About Drugs

	Synthetics		Narcotics		Narcotics	
Mass Media	832	76%	851	70%	669	52%
Peers	568	52%	436	36%	559	52%
Neighbours	218	20%	146	12%	254	20%
Relatives	170	16%	134	11%	285	22%
Total	1100	73%	1213	81%	1285	86% S**

Table 5  
Distribution In Terms of Regular Use, Tolerance, and  
Withdrawal Symptoms N = 1500

	Synthetics		Narcotics		Alcohol	
I. Regular Use						
+	30	50% Nc	30	32% S**	50	33% S**
-	30	50%	63	68%	103	67%
II. Tolerance						
+	20	33% S**	25	27% S**	43	28% S**
-	40	67%	68	73%	110	72%
III. Withdrawal Symptoms						
1- Body Pains	11		9%			
2- Headache	53		43%			
3- Insomnia	20		16%			
4- Loose Bowels	14		11%			
5- Abdominal Colic	14		11%			
6- Aggressive Behaviour	8		6%			
7- Others	4		3%			
Total	124		8%			

Table (5) shows the occurrence or regular use, dependence, and withdrawal symptoms, of those who ever used synthetics 50% became regular users. The corresponding figures for narcotics an alcohol users reported the appearance of tolerance as compared to those who

Table 6  
Abstinence and Its Motives Among Users

	Synthetics			Narcotics			Alcohol		
<b>I. Incidence</b>									
Na	60	30%	S**	93	41%	S**	153	44%	S**
A	140	70%		135	59%		192	56%	
Total	200			228			345		
<b>II. Motives</b>									
Guilt	69	49%		39	29%		78	41%	
Religious	43	31%		40	30%		110	57%	
Reasons	38	27%		37	27%		74	39%	
Financial	37	26%		40	30%		54	23%	
Health	28	20%		38	28%		37	19%	
Social	140			135			192		
<b>Total</b>									

Na = Not Abstinent, A = Abstinent.

Table 7  
The Comparative Distribution of Substance Use In Two Studies

	General		Education Technical Colleges	
	Cairo*	Assiout	Cairo*	Assiout
Tobacco	18%	26%	24.5%	50%
Tranquil.	5.3%	2%	4.6%	6.6%
Hypnt.	4.7%	2.8%	4.7%	5.7%
Stim.	5.7%	2.4%	5.9%	7.2%
Narcotics	10.5%	12%	11.6%	18%
Cannab.	90.73%	70.3%	92.1%	74%
Opium	7.40%	28.1%	7.2%	24.7%
Others	2.00%	1.6%*	7.9%	1.3%*
Alcohol	43.3%	19%	33.1%	20.0%
Beer	13.9%	1.6%	7.3%	2.0%
Whiskey	13.6%	2.0%	6.3%	2.7%
Wine	6.7%	0.6%	3.5%	0.6%
Others				

Cairo (Soueif Et Al, 1982 a, b) 1977 - 1978 N1 = 5530 N2 3686 \* all cases used heroin. \*\* Assiout (Demerdash Et Al) 1986 N1 = 900 N2 = 500.

used synthetics regularly (28%, 27%, 33%). The commonest withdrawal symptom was headache.

Table (6) shows that of regular users of synthetics 70% became abstinent;

While the corresponding figures for narcotics and alcohol were: 59% and 56%.

Attempts at abstinence were successful in 25% of those who used tranquilizers, 25% who used hypnotics, and 21% of those who used psychostimulants. In the case of narcotics: cannabis 48%, opium 15% alcohol: beer 42%, wine 11%, and whisky 6%.

The motives for trying to quit show a different distribution in the drug classes. Thus, guilt was the main invoked reason in the case of synthetics, religious reasons in the case of alcohol, and both religious reasons and concern over health regarding narcotics.

Of the total sample, 83% considered synthetic drugs harmful; while 94% and 92% and 92% voiced the same opinion in relation to narcotics and alcohol respectively, of the non users those who reported that they would have tried a substance given the chance were for: synthetics 4%, narcotics 5% and alcohol 4%.

Table (7) shows a comparison between users in the Cairo and Assiout studies.

## Discussion

More TC students used substances and at a younger age. This may be attributed to: their grades being worse in the Preparatory Education would favour this type of college, and poor grades as lower achievement have been associated with initiation to drugs (Okasha et al. 1982); TC students graduate to become skilled craftsmen whom taking drugs is consid-

ered a sign of manliness and good fellowship, lastly, the kind of discipline enforced in the establishment in question is probably more lax than what is done in the other two.

The prevalence of those of younger age or those in their mid-adolescence are particularly vulnerable because of the operation of 3 factors related to drug use, to wit, a greater access to drugs, disengagement from negative prescriptions about their use as well as role strain and /or role deprivation (Winick, 1974).

The greater prevalence of cannabis and opium among rural subjects, and alcohol and synthetics among their urban peers may be attributed to the greater availability of narcotics which are illicitly cultivated in rural areas. In the total subjects, only 4 individuals admitted to the use of heroin and these were all from an urban background. Malhotra (1983) found that German youths from rural areas consumed more alcohol; while urban subjects consumed more drugs. It would seem that alcohol which is available in the countryside makes alcohol more accessible in the same way that cannabis and opium are available to our rural subjects.

The difference between Christians and Moslems may be attributed to:

1. Christian subjects came from higher income families with greater resources at their disposal.

2. The different attitude of the two religions towards alcohol would explain the difference regarding this substance only; as the others are prohibited by both religions.

Living away from parental supervision and support is apparently associated with a greater risk of drug exposure because most of the students lived in hostels or rented building which made them more exposed to the stresses of 'Big city life'

The commonest motive for seeking drugs was celebrating festive occasions (18%) which seems to indicate that drugs are a means of celebration in this particular sample. The lack of sufficient recreational facilities such as parks, clubs, gymnasias, etc, needs to be considered. The next motive was large financial resources (17%) which is a theme which re-appears in different parts of this work. It would seem that unwise and unsupervised allotment of pocket money to adolescents can act as a facilitator for experimenting with drugs. Personal problems, another frequent cause, relate to the difficulties of growing up, the lack of guidance, as well as poor communication between these students and the agencies whose role is to help them facing crises. Similar observations were made by Newcomb et al. (1983), Malhotra (1983), and Lerner and Vicary (1984).

Poor religious commitment was mentioned by 9% as a motive and was equal to peer group influence which is generally considered as the most important motive. This finding is of particular importance, as it underlines the role of religion in the study community. Furthermore, it indicates that disengagement from its injunctions which prohibit drugs is keenly felt and engenders feelings of guilt, alienation, and cognitive dissonance.

Noteworthy is the positions occupied by hedonistic motives and peer group influence. we would like to submit the following explanations:

1. The strong influence of the extended family and its value system would weaken peer group influence.

2. The strength of socio-religious taboos concerning the use of drugs would make them a means of assuaging negative feelings rather than enhancing pleasure. This can only apply to individual use because festive occasions were

among the most commonly cited motives in the sample and such occasions usually imply collective participation.

The mass media were the major source of hearing about drugs which agrees with the observations of Soueif et al. (1982,a)

According to Soueif and his colleagues (1982,a) activists in drug use are the main source from which lone drug users are derived; while social users are recruited from the passives. In their work, activists accounted for 30.82% in the case of synthetics, 5.5% in the case of narcotics, and 10.53% in the case of alcohol. Our figures are much higher: 35%, 32%, 17%. This difference may be explained by:-

1- The time lapse between the two studies.

2- The "machismo" of the Upper Egyptian adolescent who would rather assume the role of the initiator with its misplaced virile connotations.

3- Familiarity/unfamiliarity and "seniority" of a given drug

The 3 criteria of possible dependence used in this work were: regular use, tolerance, and two withdrawal symptoms at least. Combining the figures together we came to a rough estimate of about  $\pm 6\%$

The significantly higher number of those who used synthetics and tried to abstain indicates a greater awareness on the part of the subjects of their hazards. The lower figures for narcotics and alcohol points to a smaller degree of appreciation of the dangers of these two substances.

The figures for sustained successful abstinence during the 6 months that preceded the study were:-

tranquilizers (25%), hypnotics (25%) and stimulants (21%), cannabis (65%), and opium (15%). All 4 subjects who

used heroin did not attempt to abstain. The figures for alcohol were: beer (42%), wine (11%), and whisky (6%). These figures point to the difficulty in abstaining from synthetic drugs.

The commonest given reason for abstaining from synthetics and alcohol were feeling of guilt which reflects a strong condemnatory moral attitude to these two substances. Narcotics generated less guilt which could be due to the lack of an explicit injunction against these substances in the Holy Koran; although the the Prophet's sayings and the interpretations of the Ulamas clearly prohibit these mind and mood altering drugs. Awareness of potential health hazards came low in the list.

On comparing the results of Cairo and Assiout, the following facts emerge:-

1. Technical college students figured prominently among drug users in both studies.

2. Assiouti General Education Students who used drugs was higher than their Cairene peers with the exception of alcohol where the situation was reversed.

2. The number of Assiouti General Education students who ever used synthetics was smaller than their Cairo peers; while Technical college students in Assiouti used synthetics more than their Cairo counterparts.

3. Assiouti Technical College students who used alcohol was greater than those from Cairo.

#### Conclusions

1. This study points to the presence of an at risk population of students which will ever use drugs and eventually become dependent.

2. These risk factors include: an age above 18, living away from family, an

urban background, being a Technical college student, and a relatively high socio-economic status.

3. It seems that the mass media are the main source of information and the necessary steps to provide useful and safe enlightenment on drugs.

4. Religion seems to play an important role in motivating some users to quit and in generating feelings of guilt in others who do not quit, the knowledgeable incorporation of religious teaching in drug education programs should be considered seriously.

5. Alcohol figures prominently among drugs ever used and is far from being a negligible substance, as often wrongly believed.

### References

- Soucif, M.I, El Sayed, M.A., A.Z, and Han-nourah, M.A (1982a): the Extent of Nonmedical Use of Psychoactive substances Among secondary school students in Greater Cairo. *Drug & Alc. Dependence*: 9: pp 15-41.
- Soucif, M.I, others (1982,b): the Nonmedical use of psychoactive substances by Male Technical school students in Greater Cairo: An Epidemiological study, *Drug and Alc. Dependence*, 10: pp 321-331
- Okasha, A, Khalil, H,A and Kamel, M (1982): Drug Abuse among university students: a comparison Between succeeders and Failures Egypt. *J. Psychiat.* 5 : pp 59-70
- Hawker, A (1978): Adolescents and Alcohol, Appendix IV Questionnaire. Appendix (iv) i-xiii. B. Edsall & Co London.
- Newcomb, D.M, Maddahian, E, and Benti, M.P (1986): Risk Factors for Drug Use Among Adolescents: Concurrent and Longitudinal Analyses. *Amer. J. Pubi. Heal.* 76, pp: 525-531.
- Winick, C. (1974) : Sociological Aspects of Drug Dependence. A Sociological Theory of Drug Dependence Mass communication and Drug Dependence. pp: 3-13 and 68-98. CRC Press Inc, Cleveland Ohio.
- Malhotra, M.K (1983): Familial and Personal Correlates (risk factors) of Drug Consumption among German Youth. *Acta Paedopsychiatrica*, 49 (5) : pp 199-209.
- Lerner, J.V. and Vicary, J.R. (1984): Difficult Temperament and Drug Use Analyses from the New York Longitudinal study *J. Drug Educat.* 14 (1): pp 1-8.

## Abus de toxiques chez les Étudiants du secondaire dans La RÉgion D'assiout A. demerdash, A. Fathi, A.R. Ib- rahim, S. El Tohami Et S. Omran

1500 étudiants, de sex masculin, ont été examinés pendant l'année 1986 à leur éventuelle consommation de toxiques, tabac, produits de synthèses, narcotiques, et alcool.

Ceux qui avaient déjà consommé ces toxiques présentaient les caractéristiques suivantes: âge supérieur à 18 ans, origines urbaines, études menées dans des lycées techniques, vie loin de la famille.

Les étudiants chrétiens qui avaient essayé l'alcool, le tabac, et les narcotiques étaient plus nombreux que les musulmans.

Les toxiques essayés ne l'étaient pas avec la même fréquence: tabac (41%), alcool (23%), narcotiques (15%), produits de synthèse (13%).

Les motifs les plus souvent invoqués Pour cette consommation étaient: la disponibilité de ressources financières, des problèmes personnels, la convivialité d'une fête.

Les initiateurs étaient le plus souvent des amis ou des parents. 6% de ceux qui avaient déjà rencontré ces produits étaient au stade précoce de la dépendance: Usage régulier, tolérance, signes de sevrage. 31% ont réussi à s'abstenir complètement de leur usage. 31% ont réussi à s'abstenir complètement de leur usage. pour des raisons variées: sentiments de culpabilité et motifs religieux étant les plus fréquents.

## استخدام وسوء استخدام العقاقير بين طلبة المدارس الثانوية

### بمدينة أسيوط

قام الباحثون بدراسة عينة عشوائية مكونة من ١٥٠٠ طالباً في المرحلة الثانوية في مدينة أسيوط أثناء سنة ١٩٨٦ بواسطة إستبيان مخصص لهذا الغرض، وذلك لمعرفة تعرضهم أو استعمالهم للمواد التالية: الدخان، المركبات المخلقة، المخدرات والخمور. وكانت أهم سمات الذين جربوا هذه المواد ولو لمرة واحدة: زيادة أعمارهم عن ١٨ سنة، الإقامة بمفردهم، الأصول الدينية، وأنهم من طلبة الكليات الصناعية، وكان عدد الطلبة المسيحيين الذين استعملوا الدخان والخمور والمخدرات يفوق عدد أقرانهم المسلمين، وكان توزيع المواد التي جربها المفحوصون كما يلي: سجائر ٤١٪، مخلقات ١٣٪، مخدرات ١٥٪ وخمور ٢٣٪، كانت أهم بؤافع التجريب: الأعياد والمناسبات، توفر المال، والمشاكل الشخصية، وكان لوسائل الاعلام دوراً كبيراً في تعريفهم على هذه المواد. كان الأصدقاء ثم الأقارب مصدر التجريب، ظهرت بوادر الاحتمال في ٦٪ من المفحوصين من الاتقلاع للأسباب التالية: الشعور بالذنب والدافع الديني وبؤافع أخرى.