



UNITED NATIONS  
*Office on Drugs and Crime*



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UNODC - Regional Office for The Middle East & North Africa  
7 Golf Street, Postal No. 11431  
Maadi, Cairo-Egypt  
Tel.: (20 2) 359 16 45 - 359 15 21 - 359 80 55  
Fax : (20 2) 359 16 56  
e-mail : [odccp-eg@odccp.org.eg](mailto:odccp-eg@odccp.org.eg)  
Website : [www.undcp.org/egypt](http://www.undcp.org/egypt)



**INSTITUTE FOR DEVELOPMENT,  
RESEARCH AND APPLIED CARE.**

P.O.Box 166227 Ashrafieh, Beirut, Lebanon  
Tel.: (961) - 1 - 583 583 Fax : (961) - 1 - 587 190  
e-mail : [idrac@idrac.org.lb](mailto:idrac@idrac.org.lb)  
Website : [www.idrac.org.lb](http://www.idrac.org.lb)



## **Substance Use and Misuse In Lebanon**

The Lebanon Rapid Situation Assessment & Responses Study

**Final Report**  
May 2003

Technical Reports on Drugs and Crime  
in North Africa and the Middle East

## Preface

### UNITED NATIONS OFFICE ON DRUGS AND CRIME

The Regional Office for the Middle East and North Africa of the United Nations Office on Drugs and Crime (UNODC) was established in Cairo in 1997. The Regional Office serves as a resource and coordination center advising Governments and other partners in the region on issues of drug control and crime prevention. It also develops and implements technical assistance programmes to address problems in the area of drug control and crime prevention.

One of the problems for drug control and crime prevention in North Africa and the Middle East is the lack of detailed information and data, which are essential for the development of strategies and assistance programmes. To address this problem the Regional Office undertakes a number of assessments by technical experts, which are published in this series of Technical Reports on Drugs and Crime in North Africa and the Middle East.

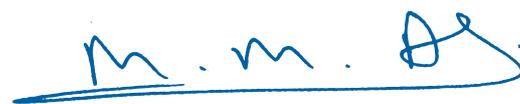
The main objective of this series is to provide a platform to share with the wider audience such as researchers, operational experts and decision-makers, the results of technical assessments in drug control and crime prevention. The series also aims at providing useful information for international and national organizations, as well as non-governmental organizations active in drug control and crime prevention.

The views expressed in these technical reports are of the authors and do not necessarily represent the official policy of the United Nations Office on Drugs and Crime. The designations and maps in the publication do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory or area or of its authorities, frontiers or boundaries.

In response to the growing threat of drug abuse and based on a strong proactive approach, the Government of Lebanon has cooperated with the United Nations Office on Drugs and Crime to carry out a study on Rapid Situation Assessment of Trends of Drug Abuse in Lebanon. The study was launched in 2001 to provide a better understanding of the nature, extent and trends of the drug abuse situation in Lebanon.

The study was conducted by the Institute for Development, Research and Applied Care (IDRAC), a Lebanese NGO specialised in Mental Health, and was implemented in cooperation with the concerned public authorities, namely the Ministries of Justice, Interior and Health, as well as private associations working in the field of drug demand reduction.

I take this occasion to thank all those who contributed to this study. I hope that the findings of the study would be helpful to counter drug abuse in the region.



Mehdi Ali  
Regional Representative for  
The Middle East and North Africa



## **INSTITUTE FOR DEVELOPMENT, RESEARCH AND APPLIED CARE**

IDRAC (Institute for Development, Research and Applied Care) is a Lebanese non-governmental non-profit organization whose members have been working in the area of mental health since 1982. IDRAC has conducted over the years several mental health research studies (epidemiological, clinical, and psychopharmacological), and have been involved in intensive academic training in the aforementioned fields.

In 1993, IDRAC participated in a Rapid Situation Assessment study to evaluate the use and pattern of drug use in Lebanon, during which IDRAC was asked to play a role in coordination, training, and analysis. Additionally, IDRAC prepared in August 1993, an expert report to the World Health Organization-Geneva entitled "Substance Abuse in Lebanon, Special Reference: Women and AIDS", which gave a brief outlook about the substance abuse treatment and rehabilitation facilities in Lebanon, their geographical setting and distribution, as well as the predisposing, enabling and protective factors related to women's substance abuse behavior in Lebanon.

On a parallel level, IDRAC has conducted with the financial assistance of the Lebanese National Council for Scientific Research (LNCSR) a substance use monitoring survey, so far in two phases (Phase I: 1991 and Phase II: 1999) for the purpose of assessing the prevalence of and factors related to substance use (illicit and licit, including alcohol and nicotine) among an at risk population-university students.

Having been a key participant in the last RSA in 1993, having worked over the years with several international, academic, and governing bodies involved in epidemiological research, and having been itself involved in major epidemiological studies on substance use, IDRAC was commissioned by the United Nations Office on Drugs and Crime to conduct another Rapid Situation Assessment Study (RSA) in Lebanon for the year 2001. We hope that research-based decisions become the standard in policy-making; thus regular and targeted careful scientific study of substance use should be the norm. It remains that private governmental and international bodies should set up regular coordination to pool resources, already very scarce in this part of the world.



Elie Karam  
Director  
IDRAC



# RSA RESEARCH TEAM

## UNODC

**Consultants:** Reychad Abdool <sup>a</sup>

## IDRAC

**Principal Investigator:** Elie G. Karam <sup>b, c, d</sup>

**Co-Investigators:** Lilian Ghandour <sup>b</sup>  
Wadih Maalouf <sup>b, e</sup>  
Kareem Yamout <sup>b</sup>

**Consultants:** John Fayyad <sup>b, c, d</sup>  
Caroline Cordahi <sup>b, c, d</sup>  
Aimee Nasser-Karam <sup>b, c, d</sup>

<sup>a</sup>: UNODC, Regional Office for the Middle East and North Africa, Cairo, Egypt

<sup>b</sup>: IDRAC, Institute for Development, Research, and Applied Care, Beirut, Lebanon

<sup>c</sup>: Department of Psychiatry and Psychology, St. George University Hospital, Beirut, Lebanon

<sup>d</sup>: Department of Psychiatry and Psychology, School of Medicine, Balamand University, Beirut, Lebanon

<sup>e</sup>: Department of Mental Health, Johns Hopkins University, Baltimore, United States of America



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Aaraj Elie, *Street Survey Component*

Aya Hadi, *Prison Survey Component*

Boustany Antoine, *Treatment Centers Component*

Chakkour Michel, *Internal Security Forces Component*

Oueidat Raymond, *Ministry of Justice*

Riachi Ralph, *Ministry of Justice*

Yazigi Mona, *Rehabilitation Centers Component*

UNODC and IDRAC wish to extend their appreciation and gratitude to all RSA participants (See Annex I), who were actively involved in various aspects of the study, and whose combined efforts helped contribute to its accomplishment.

They also like to thank the Lebanese Council for Scientific Research, members of IDRAC, and private donors for their financial contribution



Dr. Mehdi Ali, Regional Representative, UNODC, Dr. Elie Karam, Director, IDRAC, during the opening of the conference on “Substance Abuse in Lebanon: where are we?” held in Beirut in May 2002



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# Introduction to the Lebanon RSA Study



## Chapter One

1. In the realm of its cooperation with the Government of Lebanon towards reducing the abuse of illicit drugs, the United Nations Office on Drugs and Crime undertook in 2001 a Rapid Situation Assessment (RSA) Study on the Patterns and Trends of Drug Abuse in Lebanon. The study was conducted by the Institute for Development, Research and Applied Care (IDRAC), a Lebanese NGO specialized in Mental Health, and was implemented in cooperation with the concerned public authorities, namely the Ministries of Justice, Interior and Health, as well as private associations working in the field of reduction of drug abuse.

2. The RSA refers to a methodology that uses a combination of several qualitative and quantitative data collection techniques and draws on a variety of data sources with a view to arriving at an understanding of the nature, extent and trends in respect of certain health and social problems (such as drug abuse) and of structures and services that exist, or do not exist, to address those problems, and then developing ways to respond to and deal with them.

3. Despite few small-scale community and/or clinical studies have been conducted to assess the substance use situation in the country, Lebanon has a relatively meagre documentation of the substance use situation. This is mainly due to lack of nationwide systematic documentation of health records, lack of national substance use registries, and absence of proper resources (material, human, and financial) for comprehensive nation-wide surveys.

4. Despite the paucity of comprehensive data on the substance use condition in the country, the team at IDRAC has reason to suspect that the use of substances may have increased over the years, based on the results of the IDRAC University monitoring study. Generally, results point out to a probable increase (from Phase I to Phase II) in terms of ever use of both licit and illicit substances (this increase being faster among the younger generations), and a younger age of onset of substances among younger cohorts. Still, when compared to other international studies, the results show a probably lower prevalence of use of illicit substances in Lebanon.

5. The RSA, which was coordinated and conducted by IDRAC in collaboration with a number of treatment experts, Internal Security Forces (ISF) officials, and delegates from NGOs active in the field of substance use, hopes to shed more light on the current situation of substance use in Lebanon, and draw a clearer picture of the somewhat blurred image of substance use and abuse condition in the country-in terms of prevalence and pattern of substance, availability of resources (health care preventive, awareness, etc.) as well as the current status of the Lebanese law governing drugs and drug use.



# Contextual Assessment



## Chapter Two

## I. Background:

6. Lebanon has a unique geographical location; located on the eastern shores of the Mediterranean Sea, it is at the crossroads of land and sea routes that link Europe, Asia, and Africa. Lebanon is characterized by a mosaic of many religions and cultures, which have continued, over the past 6000 years, to shape the country's politics, economy, and culture.

7. Lebanon is a Republic with independent legislative, executive, and judicial sectors. It is organized into six administrative divisions or governorates (*Mouhafazat*): Beirut, Mount Lebanon, North, South, and the Bekaa. Beirut is the capital and the economical center.

8. Lebanon has a total area of 10,452 square kilometers and an estimated population of slightly more than 3 million (the last national census was conducted in 1932, while still under the French mandate, and counted 793,000 inhabitants). No national census has been carried out or published since, possibly due to political tensions, though the 1932 census was unofficially updated in 1943 and counted 1.05 million inhabitants (Tabbara, 2000). Since then, the Lebanese Ministry of Planning has made serious attempts to collect demographic data, and the survey of 1970 is viewed as the more accurate source. Later in 1996, with the direct assistance of the United Nations National Population Fund, the Lebanese Ministry of Social Affairs conducted the "Population and Housing Survey" (PHS), and the total population was estimated at 3,111,828 inhabitants (Kulczycki & Saxena, 1999). According to the PHS, Mount Lebanon (which includes the suburbs of Beirut) is the most densely populated governorate including 37% of the country's population, followed by the North (22%), South (15%), and Beka'a and Beirut (13%, each). Data also revealed an almost equal distribution of males to females in 1996 (male to female ratio=0.98) with an estimated age group distribution for the year 2000 of 31.2% aged 0-14 years (male to female ratio 1.05), 27.2% aged 15-29 (r=1.0), 18.9% aged 30-44 (r=0.89), 9.6% aged 45-59 (r=0.94), and 10.2% aged 60 or above (r=0.96) (Faour et al., 2000).

9. Lebanon has been the battleground for several internal and external wars with the external faction still active in the South at the time of the writing of this report. The Lebanon wars have

spanned over a period of almost 16 years (1975 – 1991). Since 1991, the country has gained headway in rebuilding its political, economical, and social institutions, and the government has worked hard on asserting its sovereignty.

## II. Migration:

### A. Internal:

10. Though Lebanon has been experiencing classical internal migration (from rural to urban areas) for a very long time preceding the outbreak of wars in 1975, this movement intensified during the past 25-year war period due to forced migration. The estimated number of displaced persons is 800,000 to one million (one third of the population), with an estimated 450,000 persons displaced at the end of the war, almost 20 percent of whom permanently settled in the areas to which they migrated. The areas receiving most of the displaced were Mount Lebanon (53%) and Beirut (20%). According to the UN report, 81% of the Lebanese population in 1996 was classified as "urban" (UNDP, 1998)

### B. External:

11. Lebanon has historically been considered a country of emigration, since the times of the Phoenicians who established their trading parts all over the Mediterranean basin, possibly reaching beyond Spain to the American continent. The wars caused a great increase in the outflow of migrants. The UN reports estimated that around 900,000 persons (about one third of the population) migrated during the period of 1975-1990, with the estimates going up as high as 1 million between 1975-1993 (Faour et al., 2000). This movement has had a strong impact on the demographic characteristics of the population. For one thing, there is a deficit in the male population, and specifically in the working age population. Furthermore, 47% of the economically active emigrants belong to the professional and skilled categories of the labor force, thus constituting a "major brain drain" phenomenon. Still, return migration is on the rise, with an estimated 40,000 reported to have returned between the years 1992-1993 (UNDP, 1998).

## III. Economic Overview:

12. The Lebanese economy is trying to recover, largely due to a financially sound banking system



and small-to-medium scale manufacturers, in addition to expatriate and international financial support. The economy has generally made significant growth with real GDP growing 8% in 1994 and 4% in 1997, but with a smaller growth of 1% per year in 1999 and 2000. The Lebanese pound has remained very stable during the past few years and the economy is largely dependant on the services sector. Reconstruction plans are being implemented, but the chasm between rich and poor has widened in the 1990s, with an estimated 28% of the population living below the poverty line during the year 1999 (CIA, online source).

#### IV. Education:

13. On the educational level, Lebanon has made significant progress during the past 25 years or so towards achieving basic education for all, whereby the gross rate of enrolment during 1996-1997 reached 92.5% for pre-school education, 98.4% for primary, 80.7% for intermediate, 32.2% for secondary, and 27.8% for post-secondary for the 18 years old and above age group. Great efforts have been exerted to enhance the education sector with the adoption of a new law in 1998 making basic education until the age of 12 free and compulsory. In addition, the gender gap in enrolment has closed and adult illiteracy rate has decreased from 45.2% in 1972-1973 to 14% in 1997. Education is a high priority for the government of Lebanon whereby expenditures on education have been increasing and reached a planned 690 billion Lebanese pounds in 1997 (around 460 million USD) (UN CCA report, 1998).

#### V. Employment:

14. Employment in Lebanon spans across many

fields, some of which are difficult to assess, especially employment in rural areas and the agriculture sector that is mainly based on unpaid family labor (e.g. fieldwork in family owned farms). According to the UN 1998 CCA report, the highest percent of labor force employment in 1997 was in the services sector (40.8%), followed by the trade (23.2%), the industry (15.1%), the construction (11.6%), and the agriculture (9.3%). Disregarding employment in the family labor and the informal sector (sectors that are very prevalent in remote rural areas), the estimated unemployment rate in Lebanon for the year 1997 was 8.6% [lowest in the Mount Lebanon region (7.1%) and highest in the North (10%) and Bekaa (10%)]; by gender, the rates were 9% for males and 7.2% for females and the youth's (15-24 years) share in total employment for the same year was estimated at 32.85%.

#### VI. Regional Development:

15. Disparities between regions in Lebanon are quite significant and are manifested on many levels, including education, health, employment, poverty, and access to basic needs. For example, adult illiteracy rate in 1997 reached 8.7% and 6.6% in Beirut and Mount Lebanon, respectively, compared to 16.7% and 14.8% in the North and Nabatieh, respectively. Also in 1997, average wage rates were much lower in the Bekaa and North Lebanon than they were in Beirut, and the unsatisfied basic needs index (household), an index studied by the UN as an indicator of poverty, was highest in Nabatieh (51%) and the North (43.8%), compared to Beirut (18.4%). Access to basic infrastructure and services as last reported in 1997 was highest in Beirut, whereby less than 1% of households in Beirut did not have access to water networks, compared to 9% in North Lebanon (UN CCA reports, 1998).



# Resource Assessment



## Chapter Three

16. As part of this research endeavor, IDRAC contacted and collaborated with the main rehabilitation center (at the time of initiation of the survey), several treatment centers that are known for the provision of health care services for substance use, as well as various NGOs that are active in the field of substance use (prevention, awareness, outreach services, and others).

17. Following is a brief description of each of these institutions, for the purpose of shedding light on the available resources in Lebanon that are concerned with prevention, awareness, treatment, rehabilitation, or any combination of the aforementioned.

## I. Substance Use Services: Health Care, Prevention, and Awareness

### A) Role of the Private Sector

#### 1- Treatment Centers

##### *1.1. Saint George Hospital (Information provided by Dr. Aimee Nasser Karam)*

18. Saint George Hospital is a general hospital offering several medical specialties and services through its different departments, among which is the Department of Psychiatry and Clinical Psychology.

19. The Department of Psychiatry and Clinical Psychology has been functioning as an entirely self-sufficient structure since 1979. It encompasses inpatient and outpatient services with didactic and academic components in addition to research activities.

20. The inpatient facet is a 22-bed unit admitting patients with various psychiatric disorders, including substance use disorders. After treatment, patients are followed up on an outpatient basis and treated substance users in need of rehabilitation are advised to seek the Oum el Nour rehabilitation center, where follow-ups by the St. George Psychiatry and Clinical Psychology team are often conducted. The average length of inpatient stay in this unit during the year 2001 was 7 days. All beds are self-paying except for 2 that are covered by the Lebanese Ministry of Public Health and the Ministry of Social Affairs. Patients are admitted through self-referral or brought in by their family members, through the outpatient clinics or through the Emergency Room Department.

The unit draws patients from all areas of Lebanon, the Middle East and the Gulf.

21. The didactic and academic component of the department is chiefly focused on the training of physicians and psychologists from various universities, St. George Hospital being the main training facility for the Balamand University Post-Graduate and Medical School programs; the trainees (MA/MPH, MD, PhD) in the fields of Psychiatry, Psychology, Biostatistics and Epidemiology, indeed come from different universities in Lebanon as well as the Middle East, Europe, and the United States. The department staff also very actively engage in research and epidemiological studies, which are conducted primarily through the Institute for Development, Research and Applied Care (IDRAC).

22. For more details visit IDRAC at ([www.idrac.org.lb](http://www.idrac.org.lb)) and St. George Hospital ([www.stgeorgehospital.org](http://www.stgeorgehospital.org))

##### *1.2. Cross Hospital (Information provided by Dr. Charles Baddoura)*

23. Cross-Hospital is a non-governmental short/long term psychiatric treatment center. It provides treatment for substance use disorders, but does not have a specific department for the treatment of these disorders. Substance users are admitted to wards with patients suffering from different kinds of mental disorders. Patients with substance use disorders are not admitted to treatment if they are tested positive for HIV or Hepatitis B and C.

24. The treatment program encompasses detoxification, psychopharmacological therapy, and psychological support, and lasts 7 - 14 days at the most. The patients are then followed up and provided with counseling; those who are in need of rehabilitation are provided with a recommendation to seek Oum el-Nour rehab center.

25. The hospital has not admitted patients with substance use disorders subsidized by the Ministry of Public Health since the end of the Lebanon wars (1991); nevertheless, the cost of treatment, as perceived and reported by the patients, is very affordable.

26. Other information pertaining to the level of human, material, and financial resources could not be obtained, as the information is restricted for administrative use only.



### **1.3. Lebanese Hospital (Information provided by Dr. Josyane Skaff)**

27. The Lebanese Hospital is a private, general hospital including 150-staffed beds with no specific psychiatric ward or facilities. Psychiatric patients, including patients suffering from substance use disorders, are admitted to any of the medical wards in the hospital.

28. The staff includes one full-time psychiatrist, one part-time psychiatrist, and one part-time Gestalt psychologist. There is an important turnover of nurses, but none of them have received proper psychiatric training. There is further one social worker to serve all 150 beds.

29. Being a general hospital located in a rather densely populated area of Beirut, a great part of the hospital's psychiatric work is 'liaison psychiatry' mostly done on an outpatient basis. The psychiatric services provided for drug dependence treatment include evaluation of the substance abuse disorder as well as establishment of a treatment algorithm, admission for drug detoxification, and psychiatric follow-up on an outpatient basis. The follow-up is left to the psychiatrist, the patients' goodwill, and of course the available financial means to cover the cost of treatment, the latter being, as is the case in most private hospitals in Lebanon, a major concern for the patient.

30. The absence of security measures, the lack of nursing psychiatric background, and the high cost of treatment, make the hospital's detoxification program available to only a very specific and narrow segment of the population in need of substance use treatment.

### **1.4. Serhal Hospital (Information provided by Dr. Wadih Naja)**

31. Substance use treatment at Serhal Hospital entails both an inpatient and outpatient program.

32. As part of the available inpatient program, substance users are admitted to a closed ward, comprised of 5 single-bed rooms, including cameras and screens at the nurses' desk. The average length of stay ranges between 7-10 days. The available staff includes 3 psychiatrists and 1 clinical psychologist.

33. Upon admission, a lab work-up is conducted,

followed by urine screening on the fourth day. Additionally, diagnostic tests are conducted to assess co-morbidities. The treatment regimen comprises pharmacological treatment, two daily rounds, in addition to a single session with a psychotherapist for arranging follow-up therapy upon discharge. A recommendation for admission to Oum el-Nour rehabilitation program is provided, if and when necessary. The in-patient program also entails counseling services that extend to the substance users' families.

34. During their stay, substance-using patients are allowed limited phone calls, and visits are restricted to family members only.

35. In the absence of social security coverage, or governmental aid, the majority of the patients perceive the cost of inpatient treatment as high.

36. Regarding the outpatient program, it has a very low success rate, and that is the reason why substance users are not admitted to this program unless they have been through the detoxification program available at the hospital.

37. Patients who have received outpatient treatment are followed-up upon discharge, following this regimen:

- 1- Pharmacological treatment for co morbidities
- 2- Obligation for urine screening for drugs (twice per week for an average of 6 months)
- 3- Referral for psychotherapy: CBT, psychodynamic

### **1.5. Saint Charles Hospital (Information not available at the time of the write up of the report)**

### **1.6. American University Hospital (Information not available at the time of the write up of the report)**

## **2- Non-Governmental Organizations (NGOs)**

### **2.1. Oum El-Nour (Information provided by Ms Mona El Yazigi & Oum el Nour pamphlets)**

38. Oum El-Nour is a non-profit non-governmental rehabilitation center established in 1989 mainly to help drug addicts overcome their dependence and consequently lead a normal life.



### **Reception Office**

39. Oum El-Nour includes a reception office for the purpose of defining and clarifying each case, and finding the appropriate means to help substance users deal with their situation. Its working team includes a number of specialized psychologists, social assistants, and rehabilitation counselors. At the level of the reception office, an individual file is created, directing his/her entry either to Oum El-Nour rehab center or to other specialized institutes.

### **Oum El-Nour rehab center**

40. There are 3 rehab centers (one for women and another 2 for men). The program provides recovery for the residents' physical, psychiatric, spiritual, and social well-being, without the use of substitution products. Two criteria exist for admission: 1) the patient ought to have undergone detoxification and conducted the necessary medical tests, and 2) the patient has to show a clear willingness to stop using the drug.

41. Oum El-Nour provides a loving atmosphere for the patient, and helps him conciliate with himself with God (each according to his own faith), his family, and life in general. The program allows the individual to take up responsibility, respect time and rules, and boost his self-confidence and personal feelings and development. All this is achieved through group therapy (regular meetings, confrontation groups, seminars, etc); the groups are run by counselors specialized in this line (sometimes even ex-addicts), and social assistants to address the demanding relationship between the addicts and their families. Some of the counselors are ex-addicts.

42. Other programs include:

**Follow-up programs:** The organization also includes a follow-up program for those who have completed rehab. It offers ex-residents a place to gather and exchange ideas about their former and new life experiences and helps them reintegrate into society, find a job, and lead a normal life.

**Family programs:** The effectiveness of the rehab program rests a great deal on the family, which instigated Oum El-Nour to establish a family assistance program to help them overcome their problems and suffering, and help create a mutual understanding between the drug addict and his family.

**Prevention Program:** The organization also has a prevention program extending to communities, schools and universities, for the purpose of sensitizing people to drug issues. The organization also has a research office, and a center for statistical studies.

**Visits to prisons:** Oum El-Nour also makes regular visits to prisons (both for women and men) to help the imprisoned addicts discuss their problems and enlighten them on ways to deal and overcome their addiction.

43. Regarding the cost of rehab, it is around \$750/person/month, but all patients are received free of charge for a period of 12 months. Thus, Oum el Nour faces a funding problem, manifested by the following facts:

- 30% of the expenses are covered by the Ministry of Public Health, but the payments witnessed a delay of 6-9 months during the past couple of years.
- 10% of the expenses are covered by the Ministry of Social Affairs but the payments are continuously decreasing and budgets are cutting down on a six-month basis.
- 10% of the expenses are covered by the organization's activities.
- 50% of the expenses are covered by donations which are very difficult to receive due to the prevailing economic situation in the country.

44. Moreover, and regarding the level of staffing, the latter is not perceived to be sufficient and the qualification of the staff needs to be improved, but the financial restraints are the main reasons impeding human resource development.

### **2.2. Lebanon Family Planning Association (LFPA) (Information abstracted from LFPA pamphlet)**

45. The LFPA is an NGO established in 1969 with the primary objective of raising awareness on reproductive health issues. However, since 1987, its objectives have also included the organization of educational programs and training sessions concerning drugs, which are conducted in collaboration with a combination of other NGO's working in the field of drugs. The LFPA, with a task force of 269 members, is a member of local as well as international organizations (Arab World Region Office in the International Planned Parenthood Federation, UN Volunteer Non-



Governmental Organizations, Lebanese Woman Council, and others).

46. When this program was launched in 1987, it was funded by the Arab World Region Office of the IPPF. Sheikha Suad El Sabah from Kuwait donated an amount of money to the AWRO to be used in Drug prevention awareness program, but this fund was stopped in 1997 and since then the activities are covered by LFPA's regular budget.

47. The LFPA's primary line of work in the field of substance use is prevention through the training and education of individuals (teachers and students) in schools outside Beirut, and in military camps. The main target population is the youth; nevertheless LFPA also targets mothers and teachers by discussing with them drug-related issues during different meetings and courses.

48. Over the years, the organization has conducted several specialized training courses, designed to provide information and training techniques to the participants, enabling them in turn to prepare and execute meetings themselves to specialized groups.

49. In 1995, LFPA started targeting the military institution. More than 50 army officers have been trained on the dangers of drug abuse and more than 10000 youths have been reached through lectures given to them while they were undergoing their military service at Araman and Werwar camps. Awareness meetings have also been carried out at different army training camps in the Bekaa, North Lebanon and Beirut, reaching more than 500 soldiers.

50. LFPA continues to train university students (more than 150 students have been trained), and it has established 'youth cells' in different regions of Lebanon (drug abuse and other issues of concern are discussed with the youth in their regions).

51. The training programs are effective in raising the awareness of the participants and in involving them in relevant issues. Effectiveness is measured and evaluated at the end of each training course using self-filled questionnaires.

### ***2.3. Jeunesse Anti Drogue (JAD) (Information Provided by Mr. Joseph Hawwat)***

52. JAD is an NGO committed primarily to drug awareness; it also provides medical treatment and

psychological rehabilitation to drug addicts on an outpatient basis.

53. Founded in 1980, JAD consists of 33 centers located in different regions in Lebanon, in addition to 6 other centers abroad; its workforce encompasses volunteers of different professions (physicians, nurses, social workers and students). The organization has representatives from all religious denominations in almost all universities and villages. JAD members have been granted permission from the French government to establish a center in France, and a certification for their center in Lebanon.

54. JAD has been actively involved in substance use awareness and prevention, with a yearly agenda consisting of programs that reach almost 20,000 persons each year. These activities are regularly followed by discussion sessions with the audience or participants. The activities and methods include:

- \* School and university lectures and seminars
- \* Posters, banners, and leaflets on drugs
- \* Television programs to raise awareness and prevention
- \* Leisure activities, picnics, and camps
- \* Training sessions

55. Below are some of the NGO's achievements.

- \* When the Israeli forces evacuated the Lebanese territories in the South of Lebanon, the organization, with the help of the Lebanese Red Cross, observed great numbers of local drug addicts and alerted the Ministry of Public Health to the situation.
- \* The organization lobbied against the sale of some prescription medications (eg: Dulsana) without prescription.
- \* JAD has acquired a grant from the German government to send ten of its members to undergo training in Germany.
- \* The organization has compiled a library of resources concerning substance use for public use.
- \* JAD is currently implementing different programs for the United Nations.
- \* JAD's main source of funding is donations made by the members and fund-raising activities, but the organization at present faces many financial difficulties.



#### **2.4. Jeunesse Contre la Drogue (JCD) (Information provided by Mr. Elie Rahme & Mr. Elie Lahhoud)**

56. JCD is an NGO that aims at raising public awareness on substances and AIDS, helps substance users get proper treatment and rehabilitation, provides moral and financial support to the families of addicts, and reduces crime associated with drugs.

57. Established in 1994, JCD has a general assembly of 106 members with a working force consisting of a director, a physician, a psychologist, a social assistant, and an activities' coordinator.

58. In the past five years, the organization has organized ten campings for over 400 youths, conducted many drug prevention campaigns in different parts of Lebanon, put together the "National Program for Combating Drugs in Lebanon", and helped more than 70 substance addicts quit substance use and followed up on many of them. In addition, JCD has participated in a number of national and international (France, Australia, Holland) conferences.

59. According to the president of JCD, independent private parties (individuals, banks, companies) in addition to the local governorate authorities account for 50% of the organization's funds.

60. JCD has several programs running simultaneously, and they include:

**Prevention program:** Prevention efforts are carried out through club activities (e.g. camping and field trips), social movements, and a series of seminars and conferences to raise awareness among the youth, parents, and school officials.

**Awareness program:** Since its establishment, JCD has been putting effort to raise awareness to the dangers of drug use, AIDS, and smoking through lectures and seminars in educational and cultural institution & clubs, and social activities. These messages target the youth, parents, and other concerned parties. Some of the other methods employed for awareness are brochures and pamphlets (distributed through different venues such as restaurants and snack bars), a quarterly newsletter for university students, a yearly awareness magazine, in addition to a hotline that provides information and guidance.

According to the president of JCD, the number of people reached during the past year can

not be accurately determined, but the prevention and awareness programs can be estimated to have reached over ten thousand individuals in the year 2001. The program has achieved a tangible level of success as manifested by the positive feedback received during the open discussions, as well as to the large number of people participating in the different awareness activities.

**Accueil program:** This is a center where substance users can get help from social workers and other specialists in the domain of substance use, or even through peer group discussions; assistance is also offered to the parents of substance users. The program also helps prepare substance users enter into the Oum El-Nour rehabilitation program, and provides educational services through a library of resources on drug related issues.

**Diurnal Rehabilitation Program:** It provides substance users with a full program involving collective and individual meetings with specialists in the field of substance use (psychologists, lawyers, social workers, ex-addicts), in addition to several activities within the institution.

Post-detoxification, this rehab program looks after addicts on the social, psychological and judicial levels, mainly to accompany them throughout this difficult stage and to help them acquire better understanding of the addiction problem, and change their way of life.

**Withdrawal program:** Through this program, JCD members continue helping substance users (and their parents) who have abstained from substance use or undergoing detoxification by providing them with counseling and financial aid.

**Follow-up program:** After substance users abstain from the use of substances or undergo detoxification, JCD members offer different forms of support (counseling, peer group, etc.) to help recovering addicts accommodate themselves to their new life style. In addition, this program entails outpatient care for substance users who are not in need of medical care but could benefit from the follow-up program.

**Parents' program:** This program allows the JCD staff to meet with parents at home or in the center to raise their awareness on substance use and its related problems, and help parents of addicts deal with their child. Furthermore, JCD offers social and financial support to the needy parents of substance addicts.



## 2.5. Association Justice et Miséricorde (AJEM) (Information abstracted from AJEM pamphlet)

61. AJEM is an NGO established with the recognition of the Ministry of Interior in 1998 (Decree- law no. 5/98 AD). It has no lucrative goal, and was established for the sake of helping prisoners; its aims are to: 1) enhance the life conditions of prisoners; 2) care for the prisoners' social and educational conditions; 3) aid the families of prisoners; 4) help rehabilitate prisoners and reinstate them in the society; and 5) ensure that human rights are respected for the victims and for the incarcerated.

62. A permanent group of 13 persons work inside the organization with the help of forty volunteers. Voluntarism is the major factor in the realization of many AJEM projects; therefore their recruitment and training remains a priority at AJEM.

63. AJEM provides different programs and services, which include:

**Social service:** The social service program aims at channeling the detainees' potential on a competence and relational level, help them reintegrate themselves into society, support the families and fortify human relationships inside the prison setting.

**Health service:** Through this program, AJEM offers the prisoners medical and nursing services and strives for high quality health services for the prisoners.

**Legal service:** AJEM ensures proper legal preparation and follow-up of criminal cases. Through this program, the organization also strives to ensure the enforcement and implementation of existing laws, as well as the promotion of new ones.

**Psychological service:** Psychologists and psychiatrists visit the Roumieh prison for individual or group follow up sessions.

**Art programs:** The art and educational galleries introduce the prisoners to art and allow them to express themselves with the help of professors who teach the prisoners different art skills.

**Sports program:** Through this program, AJEM conducts different group sports training sessions for the prisoners.

## 2.6. Soins Infirmiers et Développement Communautaire (SIDC) (Information provided by Mr. Elie A'raj)

64. SIDC is an NGO founded in 1987 in response to some of the primary needs of certain populations where low socio-economic standards prevailed, affecting negatively the health of the public. The association thus started as a provider of primary health care through its "Home-Based Nursing Care" approach, whose services responded to the demands of individuals from all over the country; however, the services were later limited to cover only Greater Beirut, due to the transportation difficulties imposed by the war.

65. With time, SIDC became more and more in touch with the socio-cultural and health context of the served individuals. After conducting a needs assessment survey, which uncovered health problems that could be prevented by raising awareness and by community development, SIDC launched several health programs in a developmental approach, which grew and expanded with time to take their current forms:

- \* Home Based Nursing Care Program
- \* Diabetes Program
- \* Health Education Program
- \* AIDS Program
- \* Drug Abuse Program.

66. Given the scope of this report, the description will be limited only to the drug abuse program and the other substance use related activities.

67. The Drug Abuse program emerged in 1993 when SIDC participated as the street-survey coordinator in the RSA 1993. With time the organization realized the need for a rehabilitation program that reaches addicts in their own environment and not in isolated areas (due to the difficulties met while trying to isolate the addict for long periods of time).

68. With the support of the French NGO Cimade, SIDC started in 1995 to widen its scope of work in the field of substance use, and approached it from a public policy angle that involved changing the attitude of the public and the officials towards drug users, in addition to collaborating with all the other institutions and sectors in all areas to improve the quality of care provided to the drug users. This perspective has reshaped the Drug Abuse Program whose objectives are now divided into three levels: local, national, and regional (covering Lebanon,



Syria, Jordan, Egypt, and in a further step, West-Bank Gaza). Both the national and the regional dimensions of the program are united under a project titled "Regional Observatory on Addiction and Drugs" (ROADS).

69. Over the years, SIDC has accomplished many achievements, some of which are:

- \* A community-based youth center for secondary and tertiary prevention of drug abuse and AIDS

- \* Out-reach street work for non-service-demander drug users and at-risk youth

- \* Several nation-wide awareness raising and public information activities

- \* Collaborations with governmental organizations and NGOs in order to work together towards changing law texts that could impede the treatment, rehabilitation, and re-integration of drug users

- \* A regional meeting on the drug problem (50 experts in the field from Lebanon, Syria, Jordan, and Egypt, representing the NGO and GO sectors)

- \* A regional geo-political report on the drug situation in the region.

70. In addition to the aforementioned, several substance-related activities were conducted during the year 2001, and they can be grouped as follows: Primary prevention and awareness, Secondary prevention and outreach, and finally Tertiary prevention and follow-up of drug users.

- \* Primary Prevention and awareness

Educational sessions addressing youth within their scholastic context as well as within youth movements or organizations

**Methods used:**

Educational sessions using audio-visual support, followed by open discussions

**Scope**

Definition of a drug, types of drugs, risks associated with drug use/addiction, mechanism of addiction, treatment and rehabilitation

**Catchment areas**

Beirut and its suburbs, South, and Beka'a

**Numbers reached:**

Approximately 500

**Comments:**

Funds were lacking during 2001. Nevertheless, they are low-cost activities that allow self-expression among the youths

Youth Center activities for pre-adolescents, providing a healthy alternative to the street risks

**Methods used:**

Recreational and educational environment that helps building of personality, self-esteem, and the capacity of pre-adolescents as an alternative to street amusement and as a prevention of academic failure

**Scope:**

Study hours, games, summer camps, educational sessions on drugs and other social/health issues, trips, recreational activities, personal guidance and follow-up, personalized and group (family) interventions

**Catchment area:**

Youth Center: a community based center in the Sin El-Fil area

**Numbers reached:**

Around 50 pre-adolescents and around 20 parents

**Comments:**

Children identify the center as an important part of their life, that could improve their academic performance (as reported by the parents and proven by the school records), and act as a proper substitute for other entertainment on the street

- \* Secondary prevention and outreach

Street work outreaching for at risk youths in the area of Sin el-Fil, with street intervention, in addition to recruitment to join SIDC

**Methods used:**

Discussions, needs assessment, youth center activities (recreational, awareness, educational..)

**Scope:**

Recreational activities as an alternative to the risky entertainment (such as gambling, drug experimentation, hanging out on the streets,..), group educational sessions on various issues (sexuality, HIV/AIDS/STDs, human rights, drugs, etc.), and individual guidance and counseling



**Catchment area:**

Streets of Sin el-Fil, Youth center

**Number reached:**

Approximately 50

**Comments:**

A sense of belonging and satisfaction has been expressed by the youth vis-à-vis the center. The project is only partially funded, and has the potential of developing into a self-funded structure with time through the income from the participatory fees in the various activities

- \* Tertiary prevention and follow-up of drug users

Follow up of drug users

**Number reached:**

The total number of beneficiaries is 37 substance users (2 of whom are old and the rest are new comers)

**Services provided:**

Guidance pre and post detoxification, counseling and education, assistance and guidance for housing applied interventions (with family members), and HIV/AIDS and other risks prevention

HIV/AIDS/STD prevention among IV drug users

A project is being executed by SIDC in collaboration with the National Aids Control Program (NAP) and two other NGOs aiming at HIV/AIDS/STD prevention among vulnerable groups, including IV drug users. SIDC was part of the research team that carried out a situation analysis on the vulnerable groups (94 active IV drug users), and based on the results, a prevention intervention is being planned for implementation using the outreach approach.

## **B) Coordination among the different NGOs (information provided by Mr. Elie Aaraj)**

71. Governmental and some non-governmental organizations working in the field of substance use collaborated in 1996 for the purpose of putting together their suggestions and recommendations on the new law on drugs (later passed in 1998). This cooperation among some of the different parties gave birth to the idea and the need for forming a "network" whereby all its members would join their

efforts to meet common goals regarding the substance use conditions in the country.

72. The first meeting, held in 1998, was set to discuss the possibilities and opportunities for future cooperation among the different parties. Other meetings followed, mainly to set forth the "network's" missions, goals, protocol, as well as its executive committee. However, different views existed with respect to the proposed protocol, and consequently the idea of a protocol was postponed until solid grounds were established based on experience and tangible proof of the members' joint efforts.

73. Currently, activities towards the establishment for the network are suspended. Still, IDRAC/St. George Hospital have been able to gather most, if not all, the major players in substance abuse treatment during this present RSA study, and hopefully the spirit of the "network" would be revived soon.

## **C) Role of the Ministry of Public Health**

(Information provided by Dr. Samia Ghezzawi)

74. The Lebanese Ministry of Health (MOH) has a special "Drug Bureau" which is concerned with and addresses a number of substance-related issues. Currently, this bureau is increasing its activities and widening its role (as dictated by the law on drugs).

75. Moreover, the current law on drugs dictates that a National Council on Drugs (NCD) be established, whose services and activities will include substance use treatment, prevention, awareness, assistance to substance users and their families, in addition to setting up national action plans, and detailing and organizing the country's policies towards substances and substance use. Members of the council would be officials from various national ministries, including the MOH. The role of the NCD is detailed in articles 200 and 201 of the law on drugs, in what concerns the establishment of a government treatment center for substance use disorders and the collaboration with substance use treatment centers and clinics for providing treatment to addicts. Since April 2001, the government has been actively engaged in the establishment of this council, and has gained headway in this endeavor, though the NCD is not yet completely formed and active.



76. Nevertheless, the ministry has actively participated in many drug awareness and prevention campaigns, initiated by various NGOs (under the auspices of the MOH), during which officials from the Drugs Bureau gave lectures.

77. With respect to the role of the ministry in substance use treatment, the MOH covers patients on a case-to-case basis. Though some psychiatric medications are subsidized, these do not include the medications specific for substance use treatment. On the rehabilitation level, the ministry covers the costs of rehabilitation at the Oum El Nour center for those in need, for a period of up to 1 year.

78. Other activities of the “Drug Bureau” at the MOH include the preparation of yearly reports that include the number of patients receiving treatment for substance use in various hospitals, as well as the number of people arrested in Lebanon for substance-related crimes. Demographic information is also gathered for these two populations, but utmost confidentiality is maintained. These reports are raised to the Ministry of Justice, Ministry of Health, and the Internal Security Forces and a copy of the numbers seeking treatment has been obtained through official consent from the General Director of the MOH (See Appendix B: Part-I). Information on the number of people arrested for substance-related crimes has been obtained from the Internal Security Forces' database and is also included in this report (See Appendix B: Part-II).

79. Although the “Drug Bureau” suffers from a mild lack of organization of available information, rigorous efforts are being invested in organizing the department and, according to the director, desirable results are eminent.

## II. Internal Security Forces- Central Bureau for Drug Enforcement (Information provided by Captain Jihad Abou-Mrad)

### A) Structure

80. The Central Drug Enforcement Office (DEO) is the drug enforcement branch of the Bureau for Criminal Investigations of the Judicial Police Unit. The latter itself is a branch of the General Directorate of the ISF, which operates as part of the Ministry of Interior.

81. The Central DEO primarily operates in Beirut, but also has jurisdiction over all the regions in Lebanon through its five regional branches in the South, Bekaa, North, and Ba’abda regions (the latter is currently not operational). Each branch is headed by at least one ISF lieutenant.

82. Though the law dictates the appointment of a task force of 325 individuals, the actual number is far less. This disparity is partly compensated by the manpower working in the chief offices (Bureau for Criminal Investigations, Judicial Police Unit, etc.), who are sometimes directly or indirectly involved in drug-related cases and crimes.

### B) Role

83. The ISF DEO’s primary functions are identifying and following drug leads, arresting drug offenders, searching homes and other places where drugs are suspected to exist illegally, conducting extensive investigations as well as, seizing and eradicating illegal drugs. The latter five roles (arrest, search, investigation, seizure, and eradication) are carried out by order from the appropriate public prosecution offices. Following an arrest, the DEO officers are responsible for leading offenders to the proper judicial authorities, and they often act as witnesses in drug offence court cases. The maximum period of arrest, as dictated by the law, is 48 hours, liable for a single renewal after which the suspects must be handed to the proper then will decide whether to incarcerate the offenders or set them free while awaiting the official trial.

84. Furthermore, the DEO is responsible for trailing drug trafficking into and out of Lebanon in a joint effort with other countries. When drugs are being transported into or out of Lebanon, DEO officers collaborate with officials from the exporting or importing countries to ensure that offenders are secretly tracked within the Lebanese territories and duly apprehended.

85. Finally, not to mention the many other secondary roles played in drug enforcement, the Lebanese DEO assist the Interpol in drug-related judicial authorities who offences within Lebanese jurisdiction.



# Review and Critique of the Lebanese Law on Drugs



## Chapter Four

## I. Organization of the Law

86. The Law on Drugs and Psychotropic Substances is divided into a text of 253 articles and lists of substances that concern the law. According to articles 5 and 6, the lists of substances encompass all plants and products categorized as "Drugs" and "Psychotropic Substances" by the 1961, 1971, and 1988 International Conventions, in addition to all plants and substances whose misuse is hazardous to the health. The substances are categorized into four columns according to their level of danger and level of medicinal benefit: Column one lists the plants and products that are categorized as very dangerous and that have no medical purpose (e.g. MDMA, THC, cocaine). Column two lists the plants and products that are very dangerous and have a medical purpose (e.g. codeine, sulfuric acid). Column three lists the plants and substances that are dangerous and have a medicinal purpose (e.g. butalbarbital, catheine). Column four lists the "antecedent" substances, which are products used in the production of drugs and psychotropic substances and categorized according to the 1998 Convention, in addition to other chemical products used in the production of drugs and psychotropic substances (e.g. barbital, ethyl amphetamine).

87. The text of articles is divided into four main parts: an introduction, the organizational articles, the punitive articles, and the miscellaneous articles. The introduction consists of one article (article 2) that defines different terms used throughout the text. The organizational articles (articles 3-123) govern the general classification of the different psychotropic substances and the prohibitions regarding plantation and other acts concerning plants, substances, and products listed in the four columns. Furthermore, these articles regulate the practice of medical and scientific research and teaching that deals with the substances concerned in this law; and finally, this section regulates the inspection for and seizure of violations. The punitive articles (articles 124-204) deal with the different punishments warranted for drug-related crimes, describe the drug detoxification and rehabilitation procedure and dictate the constitution and process of administration of a Drug Addiction Committee. Finally, the miscellaneous articles (articles 204-253) regulate the constitution, organization, and administration of the National Council for Drugs (NCD) and the Central Administration for Drug Prevention, and govern international cooperation for drug prevention.

## II. Synopsis of the Law

### A) Organizational Articles

88. According to article 13 of Law # 673, it is prohibited to produce, extract, prepare, reproduce, buy, possess, obtain, provide, supply, own, use, dispose of, offer, transport, give, or put up for sale any of the substances listed in Column one (very dangerous products that have no medical purpose). Regarding the substances listed in Columns two and three, their production, use, sale, etc. are subject to the independent laws (other than Law #673) applied on all medicinal substances, in addition to regulations set by the law # 673. It is worth noting that articles 80-83 strictly prohibit the sale of these substances without a medical prescription and describe the necessary contents of such a prescription. In addition, there must exist, according to article 107, a special register in the Ministry of Public Health to register the names of persons and organizations authorized to import, export, transport, and produce these substances, all under the supervision of the Ministry. According to article 114, the same provisions applied on substances listed in Columns two and three must be applied on substances listed in Column four.

### B) Punitive Articles

89. While in the organizational section of the law substances listed in Columns two and three (very dangerous products that have a medical purpose and dangerous products that have a medical purpose, respectively) are lumped together, in the punitive part, substances listed in Columns one and two are joined together and separated from the others. Such grouping indicates that these substances are equated in the regulations expressed in these articles. The severity of punishment is a factor of both, the type of substance as well as the crime committed. It can be noticed that the same criminal actions (such as illegal sale) when carried out on substances listed in Column one and two result in stricter punishment than when performed on substances in Column three or four. In addition, the law penalizes the sale and the facilitation of sale of substances with harsher punishments than for possession (e.g. article 125 punishes a dealer of a Column one substance with hard labor and a minimum fine of 25 million pounds while article 127 punishes a person possessing the same type of substance for personal use with a prison sentence between 3 months and 3 years and a fine between



2 and 5 million pounds with a possibility of acquittal). This section of the law also deals with investigations concerning illegal substances and their seizure and regulates their use and disposal.

90. The final section of the punitive part (articles 182-204) deals with treatment of drug addiction. Article 182 describes the treatment process in three steps: drug detoxification that should be provided by treatment centers authorized by the Ministry of Public Health, psychotherapy that should be provided in clinics authorized by the Ministry of Public Health, and social reintegration that should take place in institutions or provided by persons authorized by the Ministry. According to articles 183 and 192, all drug addicts have the right to present themselves to the Drug Addiction Committee for treatment. If the drug addict commits him/herself to treatment and obtains an official certificate stating that s/he is no longer addicted, his/her anonymity will be ensured and s/he will not be subjected to any penalization and the government will handle the expenses. If the addict does not commit to treatment as specified by the committee, s/he will be subjected to criminal pursuit, without losing that right to treatment. The public prosecutor may also than present the drug user to the committee for assessment upon arrest for drug use charges. Later during investigation, the accused may ask to be admitted for drug treatment, and during the court appearance, the court may unilaterally rule that a drug user be admitted to treatment. In the three aforementioned cases, the drug addict acquires the same rights as an addict admitting himself before the investigation, whereby a certificate of detoxification and rehabilitation wins him/her the right to be acquitted. On the other hand, if the accused does not accept treatment, and the court finds him/her guilty of drug use charges, a punitive sentence must be ruled, in which case articles 197 and 127 still reserve the right for the court to subject a non-recidivist criminal to a treatment program and suspend his/her sentence, pending the fulfillment of treatment procedure. Finally, after sentencing, the criminal may still ask to be treated, but in this case only the period of treatment is deducted from his/her punishment if treatment is completed.

### C) Miscellaneous Articles

91. The fourth and final part of the law is the "miscellaneous" part. The first section of this part dictates that a 'National Council for Drugs' must be formed, presided by the Prime Minister with the

vice president of the House of Ministers as the vice president of the Council. The constituent members are different ministers (including the Ministers of Public Health, Justice, and of Social Affairs) and an assigned secretary general. The council, according to article 207, has different administrative, executive, organizational, and regulatory roles. Some of these roles include: putting forth and developing the national plans and policies for drug prevention, to encourage prevention of, medical care for, and research on drugs; preparing governmental decrees concerning drugs; providing a yearly report on the supply and demand situation of drugs in the country, and proposing suggestions for prevention. The second section of the miscellaneous part dictates the constitution of a Central Administration for Drug Enforcement (CADE) within the structure of the Internal Security Forces and affiliated to the Ministry of Interior. The different roles of the CADE are described in article 211, among which are gathering information to facilitate trailing of all drug crimes, prevention and arrest of illegal drug plantation, execution and enforcement of plans and policies put forth by the NCD, in addition to other law enforcement roles concerning drugs and cooperation with international counterparts. This administration is currently functional.

### III. Special Care for Minors:

92. The Lebanese Penal law, in general, gives special care to delinquent minors (juveniles aged below 18) through a special law ratified by Decree #119/83 in 1983 and later amended by the Law #182/92 in 1992. This law dictates that special measures be applied on minors. On the one hand, the law dictates that minors who are below the age of 7 years old should not be prosecuted when committing a crime. On the other hand, minors who are older than 7 years of age should receive special care and rehabilitation measures as retribution for their criminal actions; these measures are: First, "Protection", which entails that the minor be supervised by a parent or any other capable adult under the monitoring of the juvenile court. Second, "Social Supervision", whereby the minor is placed under the supervision of a special committee for juvenile delinquents (currently non-existent), also monitored by the juvenile court. Third, "Correctional Measures", whereby the minor is placed in a special correctional institute under the administration of the special committee for juvenile delinquents (currently non-existent) and where s/he is educated and taught vocational and other rehabilitation skills.



Fourth, "Disciplining", which lasts for at least one month and up to the duration of the sentence and carried out in a "Disciplinary Facility" (currently non-existent). Finally, the "Attenuated Punishment", whereby a minor sentenced with an attenuated punishment serves his/her term in a special ward for minors within the prison for adults, and is not allowed to mix with the adults prisoners. In addition, protection, social supervision, and correctional measures may be taken towards a juvenile who is at risk of becoming delinquent, without having committed any crime.

93. Finally, the Lebanese law on drugs specifically reserves special measures for minors who are sentenced with punishment for possession with the intent of personal use; the law allows the judge in such a case to either suspend punishment or exempt the minor from serving it.

#### IV. Comments on the Law

94. The following section includes information that reflects the opinions, perceptions and remarks of key individuals on the law which were solicited during the key informant interviews or focus group discussions, that were conducted as part of this RSA study (For the detailed methodology, see Chapter Five-III)

##### A) Feedback from Legal Experts

###### 1) Public Prosecutor

95. First, and according to the interviewed public prosecutor, this new law was inspired from a "foreign" law without taking into consideration the peculiarities of Lebanon. The whole process of coming up with this law was "not complete". This law came about after an amnesty had been granted for some drug offenders, and in order to avoid uproar against the amnesty, the new law was formulated harsher than its predecessor in some of its provisions, especially those pertaining to dealers and pushers. It was not well thought out, and the loopholes have not been properly closed. According to him, laws must be offered to judicial persons for analysis and feedback, and this law is no exception. Moreover, there should be a committee specialized in judicial matters as well as drugs, to study the provided feedback and incorporate it into one comprehensive up-to-date fruitful code. Only few of the articles are applied because none of the judges have delved deep into the law, and according to the public

prosecutor, " [Judges] have been given a law that can not be applied and have been asked to apply it."

96. Second, the public prosecutor stated that this law is not based on the legal foundations of criminal law, especially not the theory of punishment, which in the Lebanese penal system entails that punishments are based on criminal intentions. The Lebanese law on drugs bases punishments on what the public prosecutor referred to as "mobile" lists of psychotropic substances that are categorized according to their harmfulness (as explained in the synopsis). The lists are "mobile" because a substance in one list may be easily placed in another list by an executive decree, which holds less power than a law, thus changing the punishment for crimes concerning that substance. Consequently, punishment for a crime, which may be specified only by law, can now be specified by an executive decree. Furthermore, and again according to the public prosecutor, basing punishment on criminal intent entails that whether one is a drug user consuming marijuana or opium or heroin, the intent to use drugs is there and thus the punishment that protects the user must encompass all these substances in the same manner. If the law imprisons substance users or places them in rehabilitation centers, it is doing so to protect them. The public prosecutor believes that society must view the drug user as someone prone to corruption because irrespective of the harmfulness of the substance s/he starts to use first, s/he will end up with more dangerous substances and thus must be protected.

97. Furthermore, and by the same token, the severity of the punishment is related to the harmfulness of the drugs, meaning that if a person takes a mildly harmful drug in conjunction with alcohol (the result of which is very harmful), the punishment is sized on the mild harmfulness of the illegal substance when taken alone, and not the effect of the combination of alcohol and drugs. According to the public prosecutor, this is not proper, and punishment must be based on "criminal intentions". The reality is that if one cannot find heroin for example and alternatively takes a certain prescription drug from a pharmacy in combination with alcohol to get the heroin effect, s/he is punished mildly for that prescription medication. To the public prosecutor, this is not right, because one's criminal intention is still aimed at drug use. Moreover, if one seeks but does not find that prescription medication at the pharmacist s/he is not punished



for attempt, as one would have been in the case of heroin. The public prosecutor therefore believes that basing punishments on changeable lists is legal heretic.

98. Third, this law is not fair in dealing with drug merchants. Sellers of drugs face a harsh punishment according to this law. But, according to the public prosecutor, the law does not properly define a drug merchant, and thus does not discriminate the “drug lord” from the “drug dealer” or even from a “facilitator”. For example, even if one does not smoke marijuana but passes a joint to someone to smoke it, s/he is considered a facilitator and becomes liable for punishment equal to that of the biggest drug lord. The public prosecutor deems this as unjust, especially that the Lebanese legal system does not allow judges enough leeway to use their discretion but rather forces them to apply this law as it is.

99. Fourth, the public prosecutor finds this law too sophisticated; most of it concerns medication companies and producers while in Lebanon there are only two such institutions. Additionally, there is one section that concerns pharmacists, which the public prosecutor believes should be independent of the law on drugs. In fact, the public prosecutor believes that both these sections should be excluded from the law on drugs so that a judge would have a legal code to refer to only in drug offence cases and not cases of medication manufacturers and pharmacists as well.

100. Fifth, the public prosecutor believes that the substance names are written in scientific and chemical terms that judges can not identify, which renders the application the law even more difficult. These substances according to him should be listed in their common names.

101. Finally, the public prosecutor believes that most of the medicines that poor people in Lebanon are using in conjunction with alcohol in order to get high are not listed in any of the Columns of the substance lists annexed to this law and therefore their use is not punishable despite their harmfulness.

102. Concerning the issue of an Addiction Committee and rehabilitation of drug addicts, the public prosecutor feels that it must be realized that an addict can escape imprisonment by entering rehabilitation. Centers that admit arrested substance users must therefore have means to insure that the

drug addict does not escape. There is no such center in Lebanon, nor is there any specialized prison. The public prosecutor further believes however that if there were an Addiction Committee, it would have been run by personal biases and connections. A system like this, he thinks, may work in an organized country with up-to-date facilities and professional capabilities, but in Lebanon it would become corrupt and abused, rendering it a harmful process.

103. In summary, the public prosecutor feels that this law has many drawbacks and there is nothing being done to change it; the problem is that in Lebanon law making independent of the judicial system.

104. The public prosecutor further believes that the government should conduct studies concerning drugs to serve as a basis for the Law, instead of “importing” one from a foreign legal system and applying it out of context. The peculiarities of our society must serve as a starting point upon which the law on drugs must be constituted. The law must consider and be tailored according to the institutions and resources available in Lebanon. In this respect, the old law, which dictates that substance users must be imprisoned, is more realistic than the current one as it does mandate regulations that are beyond the capabilities of the country. The public prosecutor feels that if the UN or the Interpol or any other foreign institution has a theory on drug use and criminality, they ought to explain it to the Lebanese legislators and allow them to decide on how to apply it in the country in a manner coherent with the society.

105. The public prosecutor believes that this current law has some important points that could have been added to the previous law to complete it without the need for a new law. The old law was just and merciful, all that can be done for drug users is to isolate them from drugs, and if proper and safe rehabilitation processes are not available, prison is fair enough. In other words, the law must be practical.

## **2) Supreme Criminal Court Judge**

106. The judge first expressed that the Lebanese Law on Drugs contains some “technical” faults and it is constructed in an impractical manner. For example, some articles are so interrelated that they become difficult to apply.



107. Second, he finds that the substances' names are too scientific and numerous to be identified. A judge sometimes finds himself unable to figure out which substance the criminal activity has fallen on, and judges are forced to consult with medical experts in order to learn the common names of the listed substances. Therefore, these substances should be additionally indicated by their common names.

108. Third, the definition of a drug dealer he believes is too broad and may encompass people who are merely "facilitators". Consequently, a person who helps a friend to obtain some drugs will become liable to the same punishment as a large-scale drug dealer, a punishment much harsher in severity than that for drug use. At this point, the judge shared with us a groundbreaking court rule that punished a petty facilitator with the punishment for use.

109. Finally, and regarding the issue of rehabilitation of drug addicts, the judge believes that the new Law's policy to consider drug addicts as sick individuals in need of treatment and rehabilitation rather than criminals deserving punishment is a commendable one. Yet, he expresses pity for the absence of the Drug Addiction Committee and the consequent hindrance to the application of proper and beneficial procedures for referral to treatment.

## **B) Feedback from Other Experts**

### **1) Officials from the Internal Security Forces**

110. According to the participants, the new law carries a heavy punishment for drug dealing, but they think it is unfortunate that it does not differentiate between "high scale" and "low scale" dealing or facilitating in terms of punishment (i.e. if a person helps a friend acquire some drugs, s/he will be liable to the same punishment as a drug dealer). Still, it must be kept in mind that the judge can still regulate the punishment within its specified range. Regarding their role in drug enforcement, the ISF participants expressed that their goal is not to imprison substance users, but rather to help them abstain from using. They expressed that they try their best to send substance users to treatment either through awareness or coercion, all under the supervision, recommendation, and order of the Public Prosecutor.

### **2) Head of the SIDC**

111. Throughout the discussion, the participant raised both positive and negative aspects of the law.

112. According to him, the positive aspects of the current law on drugs are many. First it considers the drug addict as a sick individual rather than a criminal, and thus treats him as such more than the previous law. Second, it differentiates strongly between the punishment for drug dealing and possession, making the former much more strict than the latter. Third, during treatment and/or rehabilitation of drug addicts, the law stresses patient confidentiality and dictates that the government should appoint a social worker to help the family of drug addicts in treatment by offering financial and social support. Fourth, and contrary to previous law (prior to 1998), ex-drug addicts who have undergone treatment and/or rehabilitation are not liable to prosecution for substance use.

113. Still, he believes that the new law has its drawbacks. First, it does not differentiate between a drug "facilitator" and a "dealer". A person who has facilitated access to drugs for another person is liable to the same severe punishment as a dealer, a punishment that the participant believes may be incongruent to the act. In addition, the law states that drug addicts must be reported to the Drug Addiction Committee to receive free treatment, and the physician treating them must report them to the ISF incase they do not complete the treatment program. According to the participant, requiring the physician to report a non-compliant drug addict could be discouraging and unfair to the patient, especially that he feels that drug addicts should not be arrested or imprisoned.

### **3) Representatives from Oum el Nour Rehabilitation Center**

114. Again, participants in this FGD saw some positive aspects and some negative ones concerning the current law on drugs.

115. On the positive side, the participants find that one of the improvements this new law has introduced is its sympathetic treatment towards rehabilitated drug addicts. Under the previous law on drugs (prior to 1998) an ex-drug user who had undergone rehabilitation and has readapted to a normal life would still be arrested if the ISF decided to track him based on his past substance use record.



Now, with a certificate from Oum el Nour, a recovered patient is not prosecuted for his past experience with drug use.

116. Nevertheless, the participants from Oum el Nour had some reservations about the current law on drugs. Since the law dictates that an addict be put in a “security shelter”, and not a rehabilitation center, it only gives the addict a choice between prison and an asylum, and the only asylum in Lebanon is that found in one of the prisons and it lacks proper infrastructure, human and technical resources. Thus, the addict would not get the proper handling s/he deserves.

117. In addition, the participants feel that the current law is ambiguous and consequently many of its provisions and regulations are not being applied.

118. Moreover, the law dictates that the Oum el Nour rehabilitation center report to the Justice Department the names of the drug addiction patients who do not follow through the rehabilitation program to the end. The Oum el Nour staff members do not agree with this policy, as they feel it would jeopardize patient confidentiality.

119. After highlighting what they thought are the positive and negative aspects of the new law, the participants suggested the following:

- \* The law should differentiate between drugs. For example, a person who uses hashish/marijuana must be treated differently than a regular cocaine user.

- \* Those arrested for substance related crimes ought to be provided with a lawyer by the state if they cannot afford one.
- \* Addicts should be given immediate medical attention upon arrest, rather than being unattended to for long periods, which is dangerous and unethical.

#### **4) Representatives from AJEM**

120. Similarly, participants from the AJEM institution had both positive and negative points concerning the current law on drugs.

121. To begin with, and on the positive side, the AJEM participants support the current law with respect to the fact that it regards and deals with drug addicts as sick individuals rather than criminals.

122. On the negative side, the participants’ main complaint about the current law is that it cannot be applied because it lacks the required infrastructure: low-cost treatment centers, more rehabilitation centers, and a “security shelter”. The participants also expressed their concern and disagreement towards the fact that if the ISF officers happen to arrest someone purchasing drugs for herself/himself and a friend, and not for profit-making purposes, the person may be convicted for drug dealing- a severely punished crime-even though the individual was only “facilitating” access to drugs for others. Therefore, in their view, the law plays a role in the increase in prisoners’ numbers, especially in the case of conviction for drug dealing.



# Methodology of the Lebanon RSA Study



## Chapter Five

123. The Lebanon Substance Use and Misuse RSA Study entailed the collection of data from multiple data sources, both primary and secondary, using different data collection techniques.

124. The methodology followed in this study was based on the UNODC Studies on Drugs and Crime guidelines, expert opinion from IDRAC and the United Nations, as well as other countries' experiences in conducting RSA studies.

125. A preparatory workshop (December 2000) was held during the planning phase, during which the United Nations consultant, Dr. Rey Chad Abdool, and the IDRAC team planned and discussed extensively the methodology of the RSA study, as well as the preliminary framework for the National Action Plan.

126. Another workshop was organized by the United Nations (May 2001) to join the Lebanese and the Jordanian RSA teams, for the purpose of exchanging thoughts and experiences, relating to the RSA studies conducted in each of their countries, particularly the applied methodology, plan of analysis, and framework of the NAP. The workshop was conducted in two stages: the first entailed representatives from the Jordanian RSA team visiting Lebanon, and the second entailed the representatives from the Lebanese RSA team visiting Jordan, which facilitated the exchange of information, and provided the opportunity for several onsite field visits.

127. All throughout the study period, the UNODC consultants were in regular contact with the investigators from IDRAC to offer advice and expert opinion.

## I. Secondary Data Collection (Data available prior to 2001)

128. Secondary data collection entailed the accumulation of all existing data relating to substance use in order to set grounds for the Lebanon RSA 2001 and identify any information gaps, which were then addressed, up to a certain extent, in the primary data collection phase. The review primarily involved the retrieval of all published material relating to substance use in Lebanon, using electronic servers (MEDLINE: 1982-05/2001, EXCERPTA MEDICA (EMBASE): 1989-12/2000, POPLINE (POPULATION DATABASE): 1983-06/2000) and

the “Arab Mental Health Research: Compilation CD-Rom” developed by IDRAC (22), which includes a comprehensive review of all the Arab mental health research, including that on substance use in Lebanon, from 1965-1999.

129. Furthermore, in an effort to ensure a comprehensive review of all published, as well as unpublished reports on substance use in Lebanon, the members of different associations, as well as academic institutions were contacted and asked to send any published or unpublished reports that they may have or know of. Contact was made with the 1) General director of the Lebanese Ministry of Public Health, 2) General Director of the World Health Organization in Lebanon, 3) Deans of the Medical Schools and Public Health Schools of prominent universities in Lebanon, 4) Head of the Central Administration for Statistics, 5) Members of the Lebanese Psychiatric Association, and 6) Members of the Lebanese Epidemiological Association

130. During the secondary data search, a number of reports were identified (see annex II); the latter are important to delineate and review before conducting any epidemiological survey, in order to identify and address information gaps, as well as compare past and present prevalence and patterns of use (as much as the methodology allows). Moreover, they could be beneficial for other studies in the future on the topic of substance use in Lebanon.

## II. Primary Data Collection: Quantitative Methods

131. The Lebanon Rapid Situation Assessment (RSA) Study 2001 went beyond the stage of assimilating secondary data, and included the collection of primary data from a variety of populations, using diverse methods (both qualitative and quantitative).

132. Quantitative data collection entailed the collection of primary data using surveys that covered diverse segments of the population: 1) high-school students; 2) university students; 3) substance users in treatment or in rehab; 4) arrested substance users; 5) individuals imprisoned for substance related offenses; and 6) non-institutionalized substance users (such as those in the streets)



## A) Pilot High School Survey (2001)

### Design and Sampling

133. The school survey is a cross-sectional analytical study.

134. The required sample size was calculated using the Phase II (1999) findings of substance use monitoring study on university students in Lebanon conducted by IDRAC (please see next section B). It was found that the lowest estimate for ever-use of any of the substances among the university population was about 1% (for heroin) and so the latter was used as the prevalence value ( $p$ ) to calculate the appropriate sample size using the formula:  $n = z^2 pq / d^2$  where  $p = 0.01$  (prevalence),  $z = 1.96$  (95% confidence interval), and the margin of error being 5% ( $d = 0.005$ ). The number of students we were aiming at as such was 1500.

135. Given the time restriction of the RSA methodology, only private schools were selected for the study in order to avoid the time-consuming bureaucratic logistics required by the public sector. Moreover, only medium to high socioeconomic status (SES) schools were selected given that the government schools usually cater for the lower SES students, and thus for the same aforementioned reasons, namely "time restriction", we opted to include merely the mid to high SES schools.

136. Schools were sampled from the four main cities in Lebanon: Tripoli, Sidon, Zahle and Beirut; a proportionately greater number of schools were sampled from Beirut to account for the fact that the majority of the Lebanese students are within the Greater Beirut area. All in all, 9 schools were sampled from Greater Beirut, 3 from Zahle, 3 from Sidon, and 4 from Tripoli, the second largest city in Lebanon. The main renowned schools were selected from each of the four cities, and the decision was made based on expert opinion.

137. The target population was high school students within the last two years of their scholastic education: secondary II (11<sup>th</sup> grade or Premiere that is equivalent to 6<sup>th</sup> high school) and Secondary III students (12<sup>th</sup> grade or "Terminales" that is equivalent to the freshman year in university).

138. Schools were over sampled to ensure a sample of 1500 students, since it was hypothesized a priori that the schools' participation rate may be low given that the timing of the data collection

coincided with the students' final examination period, not to mention that of the Lebanese official end of year Baccalaureate examinations. Moreover, and for the first time that year, a new curriculum for the secondary III students was implemented, a fact that was perceived by both teachers and their students as a greater load, and that tightened the students' schedules even more.

### Instrument Development and Description

139. Several foreign institutions working in the field of substance use and abuse were contacted by IDRAC and informed about the Lebanon RSA study. Among the institutions contacted are: University of Michigan, National Institute for Drug Abuse (NIDA), Pompidou Group of the Council of Europe, The European Monitoring Center for Drugs and Drug Addiction (EMCDDA), and Health Canada. The institutions were asked to send us any relevant findings relating to substance use among high school students, in addition to a copy of the instruments that they had used, particularly questionnaires relating to Ecstasy (or XTC)- the "club drug" in fashion nowadays. All the questionnaires that were sent were thoroughly reviewed and used to develop the pilot high school survey instrument.

140. Following is a brief summary of the contacts that were made:

#### *University of Michigan*

141. The University of Michigan Institute for Social Research (UMISR) in the United States has been conducting the Monitoring the Future (MTF) Study, a series of annual national surveys on American high school students (8<sup>th</sup>–12<sup>th</sup> grades), regularly since 1975. Ms. Shelly Yee was contacted, who in turn recommended a web site for downloading the questionnaires they have been using in the MTF study. All six forms of the instrument used for the 12<sup>th</sup> grade students were reviewed, and questions were abstracted to constitute the core of the questionnaire used in the RSA pilot high school survey. Ms. Yee confirmed, "All the reports [they] publish are based on data generated from the administration of [their] instruments."

#### *National Institute for Drug Abuse*

142. Mr. James D. Collivier of the NIDA was first contacted; who then recommended contacting the European Monitoring Center on Drugs and Drug



Addiction (EMCDDA) and the Pompidou Group of the Council of Europe.

### ***Pompidou Group of the Council of Europe***

143. The Pompidou Group was contacted more than once; a response was received during the final stages of the report writing.

### ***EMCDDA***

144. Mr. Richard Hartnoll of the EMCDDA was contacted; he explained that the institution entails 15 European Union States that routinely collect and analyze data on the general population, high-school students, subjects seeking treatment due to drug problems, as well as imprisoned drug users. Mr. Hartnoll later sent the questionnaire that had been used for the school surveys conducted in 30 European countries in 1999, and that helped generate the ESPAD (European School Survey Project on Alcohol and Other Drugs) Report.

### ***Health Canada***

145. Mr. Jim Anderson from Health Canada was contacted; he then sent a copy of the questionnaire used in the “Canadian Campus Survey” in addition to other questions used in a survey he had conducted on street youth in a city in Canada.

146. Ms. Lisa Mattar, from the Office of Alcohol, Drugs, and Dependence Issues- Health Canada, was also contacted; she forwarded us (IDRAC) to Ms. Christine Reissman who in turn forwarded us to Mr. Stephane Racine. Mr. Racine invited us (IDRAC) to an online web conference on the state of knowledge on Ecstasy, and additionally sent a copy of the latest questionnaire used in the 1999 Ontario Student Drug Survey.

147. Following is a brief description of the different sections and components of the instrument used in the RSA Pilot High School Survey (Appendix D).

### ***Cover letter***

148. A cover letter was included in the questionnaire that mainly highlighted to the students the aim of the research study, their freedom to participate, and ensured them both utmost confidentiality and anonymity.

### ***Sections of the questionnaire***

149. The first section entails questions on demographic characteristics (age, gender, nationality, living abroad, number of siblings), as well as cigarette use (ever use, current use, and pattern of use).

150. Later sections include sections that assess the ever use, 12 months-use, 30 day-use, daily use, and age of onset of use of various licit (alcohol, amphetamines/ stimulants, tranquilizers/barbiturates, and medicinal opiates) and illicit substances (hashish/marijuana, cocaine, ecstasy, and heroin) in addition to other questions specific to each substance. For instance, the alcohol section specifically entails questions assessing alcohol abuse based on DSM-IV criteria. Furthermore, a dummy substance “Relevin” was added to the list of substances in order to cross check on the degree of the truthfulness and validity of the students’ answers.

151. The last section of the questionnaire addresses a number of different issues, such as whether the respondent ever tried to reduce or stop the use of different substances, or ever received professional care for the use of alcohol or other drugs, or was ever exposed to drugs and/or alcohol related information, or ever bought prescription medications from a pharmacist without a medical prescription, in addition to questions relating to the respondents’ perception of the accessibility of different drugs and their attitude towards substance use. The section further assesses environmental and individual triggers for substance use in this at risk age group. These indicators were found to be significant in IDRAC’s substance use monitoring study (Phase II) and they include: family and close friends’ use of substances, parents’ strictness and attitude towards the use of substances, anti-social indicators, degree of religiosity, scholastic achievement, and others.

152. For applicability purposes, and to address and overcome possible language barriers, two versions of the questionnaire were put, an English and a French one, to cater for the primary language of study in all schools.

### ***Pilot Testing***

153. In its initial draft, the questionnaire was pilot tested on six high school students and took an



average of 25 minutes to complete. We faxed copies of this draft to almost all the school principals of the selected schools for their feedback. Some of the school directors who reviewed it urged us to make a version that would take less time to fill out, given the tight schedules of the students. It was then decided to delete some questions that would be less conclusive than others upon analyses, which resulted in the present form of the questionnaire including the aforementioned topics (Appendix D). In its longer version, the questionnaire had incorporated questions that further assess the pattern of ecstasy use, the respondent's attitude towards the harmfulness of drugs and alcohol, her/his attitude towards the use of different substances, conduct disorder, ADHD and social anxiety indicators. The shorter version of the questionnaire was pilot-tested on 5 secondary III or "Terminales" students and relevant remarks were incorporated into the final version. The average time required to fill out the questionnaire was reduced to 15 minutes.

### Data Collection

154. The school directors/principals were sent a letter explaining the objectives of the RSA study, its components, particularly the school survey, as well as the process of data collection in the schools. The letter stressed the importance of anonymity of both the school and its students, ensured utmost confidentiality of the results, and allowed the school freedom of participation while stressing on the importance of their cooperation and participation for the success of this scientific endeavor. Attached to the letter was a copy of the questionnaire; the directors were asked to review it and provide their comments before proceeding with the data collection. The school directors were given a week's time before they were contacted again for their feedback. All of their comments, constructive criticism and concerns were incorporated into the questionnaires before data collection in order to allow for higher participation rate. For instance, one school agreed to participate on a condition that the question inquiring about the 'parental use of substances be removed'. The latter question was deleted for that school only (to which the answers have been regarded as missing).

155. Eleven out of the 19 selected schools agreed to participate; one was not included in the survey because the approval was given late and thus only

10 schools were ultimately included in the survey; four of which were of religious domination (Christian brothers or sisters).

156. Of the 8 refusals, 5 were from Beirut, 2 from Sidon, and 1 from Tripoli. The directors were contacted more than once in an attempt of "refusal conversion" but none accepted. The reasons they provided were:

- The students are late in their schedules and thus cannot afford to waste 20 minutes from any of their classes (3/8 directors).
- The school is very conservative, and they do not wish to expose the students to such questions since the latter may arouse their curiosity (2/8 directors).
- The school cannot decide without the permission of a "higher authority" and the latter in this case refused to participate in the study (2/8 directors).
- The school director did not want the students to be exposed to such questions for fear that their parents may object to the fact that such a theme is being tackled within a school setting (1/8 directors).

157. An appointment that was suitable for the students' scholastic schedule was set together with the schools' directors (who agreed to participate). On the scheduled day, the co-investigators themselves went into the field to collect data. The same methodology was followed in all schools; the investigators would enter the class, distribute the questionnaires, read out loud the instruction sheet/ consent form (Appendix D) and then allow the class the necessary time (20 minutes) to fill out the questionnaire; the investigators remained in the class at all times for supervision and clarification purposes.

158. Data collection in schools started on 06-04-2001, was suspended during the Easter vacation (13-04-2001 until 24-04-2001); it resumed again on 25-04-2001 and was completed on 15-05-2001. All students sampled in the participating schools filled out the questionnaire; thus no refusal rates were noted, though some of the questionnaires were not entered and analyzed either due to suspected "Not serious/doubtful replies" (N=7), or because the students had stated ever using "Relevin"- a dummy variable included to cross-check the truthfulness in replies (N=6). All in all 1307 questionnaires were entered and analyzed.



## **Biases**

159. As in any survey, effort was made to control and minimize to a great extent any existing biases; mainly two biases need to be addressed: 1- selection bias and 2- information bias.

160. Given that the sample of participating schools is not a random sample representative of all the schools in Lebanon, selection bias therefore exists minimizing external validity or the ability to generalize the results to the total high school population. The selected schools are all of a medium to high socio-economic level, sampled from four different regions in Lebanon.

161. As for information bias, the latter is inevitably a concern in all cross-sectional studies researching sensitive topics, including substance use. To minimize information bias and avoid misclassification, several steps were taken, and they were:

- 1- The respondent was assured more than once complete confidentiality and anonymity, that the questionnaire could not be traced back to him/her, and that all the information will be used for scientific purposes only.
- 2- The respondent was allowed the freedom to participate; thus s/he was not forced to participate or provide any information unwillingly.
- 3- Only the co-investigators were allowed into the class rooms, during the time of questionnaire administration and data collection.

## **Data Processing**

162. The questionnaires were screened and edited by the research team for any inconsistencies before data entry, which occurred simultaneous to data collection. Following data entry, data editing was conducted, whereby a random sample of the entered data was checked for any inconsistencies (15% were randomly drawn using SPSS). Moreover, data cleaning was conducted to check for any logical inconsistencies or wild codes.

163. Data was entered into the computer using the FoxPro statistical software and analyzed using SPSS.

## **B) University Monitoring Study (1999)**

### **Design and Sampling**

164. The study is a monitoring study, so far conducted cross-sectionally in two phases: Phase I (1991) and Phase II (1999).

165. The same sampling strategy was used in the both phases: 25 % of the total population of two renowned private universities [University A and University F] was selected. These two institutions were selected due to their strictness and stress on students' class attendance at the time of the first phase of the study (1991), thus minimizing the potential selection bias due to the reported high absenteeism rates among substance users. The two universities differ in their educational approach, and in order to represent all faculties, the sample was drawn using the stratified cluster technique (cluster = major of study). The sample size in Phase I (1991) was 1980 students with a 93.5% response rate. In Phase II (1999), the sample size was 2328 students, with a 79% response rate. The lower response rate in Phase II was mainly due to unfortunate technical difficulties faced with the faculty of Law in University F: only 102 out of the 371 students contacted in that faculty responded (response rate=27.5%). The response rate in University F, in Phase II, excluding the faculty of Law was 80.8% and that of university A was 95.6%, with an 88.9% overall response rate.

### **Instrument Development and Description**

166. The instrument used in Phase I (1991) was inspired from the Diagnostic Interview Schedule-Version III (DIS-III), and that of Phase II (1999) from the DIS-IV. The following is a brief description of the instrument used in Phase II, the results of which have been incorporated as part of the RSA study.

### **Cover letter**

167. A cover letter was attached to the instrument, explaining the purpose and objectives of the study, and ensuring the students utmost anonymity and confidentiality; the latter was also emphasized orally to the respondents before each session by the field workers.



### **Sections of the questionnaire:**

168. The self-filled questionnaire covered the ever use and pattern of use of a number of substances, namely licit (tobacco, alcohol, tranquilizers, barbiturates, medicinal opiates, and stimulants) and illicit (cannabis, cocaine, and heroin). The main indicators used to assess the prevalence of substance use (in both Phase I and Phase II) were ever use, more than 5 times use, problem use (having at least one substance-specific related problems), substance abuse (DSM-III abuse in Phase I and DSM-IV in Phase II), and substance dependence (DSM-III in Phase I and DSM-IV in Phase II). It should be noted here that in Phase II, the question of “recurrence of symptoms of substance abuse within a 12-month period” was excluded as a result of omitting the whole section SR5 of the DIS-IV, which we thought would be too cumbersome to include in a self-filled instrument; consequently, abuse was labeled as “possible abuse” to account for this exclusion. Moreover, the DIS-IV questions inquiring about substance use withdrawal symptoms were omitted, also due to their complexity in a self-filled questionnaire

169. In both phases, in addition to the basic demographic characteristics (gender, age, religion, university affiliation, and major of study) and substance use pattern, the instruments also included questions on several factors possibly associated with substance use raised by previous studies and by the clinical experience of our research team, namely:

#### **Individual parameters (other than demographic):**

- \* Internal controls: belief in God and practice of that belief (going to the church or mosque, praying, etc...)
- \* Nationality
- \* Foreign residence: carrying out most of the studies in a country other than Lebanon, staying outside Lebanon for 3 months or more in one stretch (for any reason)
- \* Average academic achievement (using a grade scale of 20 for the University F French system and of 100 for the University A American system); “very high” in University F (16/20 and above)/ University A (90/100 and above), “high” in University F (13-15/20)/ University A (80-90/100), “average” in University F (10-12/20)/ in University A (70-80/100) and “low” in University F (9/20 or below)/ in University A (less than 70/100)

- \* Psychopathology: lifetime depression, Post Traumatic Stress Disorders (PTSD) (DSM-IV) in the University F population only
- \* Antisocial behaviour (frequency of arguments with parents, frequency of getting into fights and frequency of shoplifting, all during the last 12 months)
- \* Use of substances (alcohol, nicotine and other substances, both licit and illicit)
- \* Attitude towards substances: perceived harmfulness and attitude towards legalization of illegal substances

#### **Micro and macro environmental influences**

- \* Family’s parameters: familial control (parents’ attitude towards subjects’ experimentation and use of substances, and parental strictness towards dress, curfew and homework), and family (parent and/or sibling) use of substances (licit and/or illicit as well as presence of an excessive drinker in the family)
- \* Peer parameter: peer control (close friends’ attitude towards subject’s experimentation and use of substances), and peer use of substances (use of substances other than alcohol and excessive use of alcohol)
- \* Adversities: exposure to Lebanon wars (assessed by the War Event Questionnaire WEQ, an instrument developed and extensively used by our team. Three indicators of war exposure were used for the purpose of this study (Household Damage, Physical Injury, and Kidnapping), both exposure and degree of witnessing were scored (Risk factor analyzed in Phase II only), and “Early” death of the father or the mother (i.e. before the students reached the age of 16 years)
- \* Education relating to alcohol and/or drugs in the universities: in addition to exposure to any drug prevention campaigns from sources outside the university- namely, pamphlets, posters, radio, TV, lectures, newspapers, magazines, and others (Risk factor analyzed in Phase II only)
- \* Living arrangement of the students (with parents, with family, in college dorms, etc...)

170. Again, for applicability purposes, and in order to overcome the language barrier, two versions of the instrument were prepared: an English and a French version, in accordance to the language of study in University A and University F respectively.



## Data Collection

170. The self-filled anonymous questionnaire was distributed during exam hours and lab sessions in order to ensure maximum response rate. The validity and reliability of self-report questionnaires on substance use and misuse have been frequently highlighted in the literature.

172. The results of the Phase I (1991) survey have been published (19), but that of Phase II (1999) is in its final write-up stages. Data from the Phase II survey have been included in the RSA study as primary data to add to the picture of substance use, and help compare the situation to that among high school students. One must keep in mind that the high school students in our sample generally tend to seek enrolment in the two universities surveyed, rendering the comparison even more interesting and informative.

## Data Processing

173. Data was entered into the computer using the FoxPro statistical software and analyzed using the SPSS.

## C) Internal Security Forces Survey (2001)

### Design and Sampling

174. The ISF survey is a cross-sectional study on consecutive drug-related arrests over a period of 2 months (April 15-June 30). All those arrested for drug possession/use/ facilitation during that time period were included in the study. Large-scale drug dealers were excluded, as they were perceived by the ISF officials to be more problematic (less likely to participate).

### Instrument Development and Description

175. The questions were put by the RSA research team and were revised together with the ISF team for any feedback (Appendix D). Mr. Hartnoll of the EMCDDA was also contacted and asked to send us a copy of the questionnaire they had used to collect data on imprisoned drug users. He then informed us that there is no particular questionnaire for collecting data on this specific population but that there is a standardized table for reporting aggregate data that has already been collected through studies on various prison populations in different countries

(Appendix D); the latter was also used in the development of our ISF questionnaire. The instrument was developed mainly to assess, in addition to basic demographic characteristics, the following aspects: 1) ever use of illicit (hashish/marijuana, cocaine, hallucinogens, heroin, ecstasy) and licit (tranquilizers and barbiturates, medicinal opiates, and stimulants and amphetamines) substances use, including the pattern of use of these substances (last 12 months use, last 30 days use, more than five times use, daily use); 2) factors associated with substance use (individual, environmental, parental and peer-related indicators); 3) substance-related treatment/rehab history; 4) and legal history (previous arrests or imprisonment).

176. Based on the fact that the drug user may hesitate to answer some of the questions given that the interviewer was an ISF officer, and based on the fact that the drug user is not obliged to participate in the survey, an additional column was added aside each questions, indicating that the interviewee refused to answer that particular question (whose answers were marked as 'missing').

### Training of ISF Officers

177. Two senior researchers from IDRAC (co-investigators in the RSA study) carried out the training of four First Lieutenants (heads of departments of each branch office of the ISF DEO), which took place at the ISF-Office for Drug Control main office in Beirut. The training was in reality a "training of trainers" whereby the Lieutenants were responsible for passing on the information to a number of ISF officers who would ultimately be conducting the respective interviews. The training sessions entailed a question-by-question review; the objective of each question and the way to ask it were highlighted. Comments were welcomed and discussion was open whenever deemed necessary. Stress was made on the fact that this questionnaire is different from the usual official police interrogation sheet and that the ISF interviewers must wear the cap of research scientists rather than that of policemen in order to maintain the arrested interviewee at ease during the interview, which would improve on the validity of his/her responses. Still, the ISF interviewers were instructed not to force any replies; as aforementioned, the questionnaire contained pre-coded answers specifying the interviewee's unwillingness to respond.



## Data Collection

178. Following the extensive training, data collection began on 17-04-2001 and was completed by 30-06-2001. The IDRAC research team carried out a weekly follow-up in order to supervise the abidance of the interviewers to the points raised in the training session. Completed questionnaires were screened on a weekly basis and memos including the researchers' comments were distributed to the concerned interviewers.

179. The decision was to interview all the consecutive drug-related arrests during the specified period. All in all, 52 arrested individuals were interviewed from all four ISF branches, but these do not represent the overall number of arrests during that period.

## Data Entry

180. Data was entered into the computer using the FoxPro statistical software and analyzed using the SPSS.

## D) Hospitals/ Rehabilitation Centers Survey (2001)

### Design and Sampling

181. This study is a cross-sectional survey on consecutive substance-related hospital admissions and outpatient visits over a three months period.

### Instrument Development and Description

182. The questionnaire was developed by IDRAC, and included some other questions raised by the health professionals who had attended the FGD. The IDRAC research team then referred to the guidelines for surveys on patients entering drug use treatment used by the European Monitoring Center for Drugs and Drug Addiction. The content of the questionnaire was furthermore cross checked with that of a questionnaire developed by a network of many parties active in the field of substance use. The questionnaire was sent again to these professionals for additional comments before the final version, and adopted some of the questions included.

### Pilot Testing

183. The questionnaire was pilot-tested on five

substance users in the rehab center; modifications were then incorporated into the final version of the questionnaire, and a memo including some interviewing instructions for reference was sent back to the interviewers in both the rehab and treatment centers.

## Data collection

184. The heads of the psychiatric units of all treatment and rehab centers renowned for providing treatment for substance use were contacted. Six hospitals and the main rehabilitation center existing at the time in Lebanon- Oum El-Nour- were contacted. One of the psychiatric institutions contacted did not participate because, according to the head of the institution, the latter do not admit patients for substance use disorders despite the fact that they provide short and long term psychiatric treatment. All the other five hospitals contacted agreed to participate. Initial contact with the institutions had been made for the purpose of conducting a focus group discussion (FGD) with physicians (psychiatrists and psychologists) from each institution, who have had experience and contact with substance use and users respectively. A letter was sent to them explaining the objectives and components of the study and inviting them to attend the FGD (see Chapter 5-III). By the end of the discussion, the questionnaire and the survey were reviewed for comments.

185. With respect to the treatment centers, the psychiatrists of each institution identified residents, interns, or social workers to fill out the questionnaire on consecutive substance-related inpatient admissions. The total number of patients interviewed in all hospitals and clinics was 72.

186. As for the Oum El-Nour rehab center, data collection first took place on all those already residing in the rehab center (N=33), and continued in the "Centre d' Accueil", or the reception/admission center where the individual is screened for the need for rehabilitation before admission (N=57); seven individuals of those who sought the Accueil refused to be interviewed; a refusal form was filled out for them including only demographic information and their pattern of substance use (Appendix D). It is worth noting here that substance users at the Accueil could have been admitted later on to rehab, or not, based on whether they met the criteria for admission or not.



187. Data collection in the institutions started at different points in time during the month of April 2001 (except for the St. George team who started interviewing as of January 2001). The completed questionnaires (N=162 from the rehab, Accueil, and all treatment centers) were screened and edited on a weekly basis, and any remarks or comments were sent back as a memo to the interviewers for future reference.

### **Data Processing**

188. Data was entered into the computer using the FoxPro statistical software and analyzed using the SPSS.

## **E) Street Survey (2001)**

### **Design and Sampling**

189. The street survey followed a cross-sectional study design. Respondents were sampled using the snowball sampling technique; the selected field workers would identify and interview drug users on the streets (these are substance users who are not in treatment or under arrest at the time of the survey), who in turn would lead them to other drug users. The sampling of users took place within areas known as “hotspots” for drug dealing and drug use, both well-known and newly identified hotspots. The total number of users interviewed was 103.

### **Training**

190. SIDC (see Chapter Three-IA), a Lebanese non-governmental organization, was delegated the coordination of the street survey given its previous experience, particularly during the Lebanon 1993 Substance Use RSA. The head of the institution was contacted initially for the purpose of the FGD, and later for the planning of the street data collection process. He was responsible for identifying a team of field workers familiar with different Lebanese areas. The selected field workers were mostly social workers (Total N=6, 4 females and 2 males), in addition to one male ex-drug user.

191. The training of the field workers occurred in two phases. In the first phase, 3 out of the 7 field workers received a comprehensive and exhaustive training session on the structured questionnaire by the research team at IDRAC, in the presence of the head of the SIDC who intervened and proposed

suggestions and comments throughout the training session. The training in IDRAC entailed a question-by-question review of the street questionnaire, where the objective of each question and the way to pose the questions were highlighted; comments were collected and discussion was open whenever deemed necessary. Several points were highlighted and stressed during the interview and they included: 1) ensuring that the interviewees are at ease during the interview, 2) selecting an appropriate timing and setting for the interview to ensure the comfort of the interviewee, and 3) explaining to the interviewee the scientific aspect of the study and the absence of any judiciary facet behind it.

192. In Phase II of the training sessions, the head of the SIDC and the trained field workers in turn trained the remaining field workers on the questionnaire.

193. Furthermore, all the 7 field workers received at SIDC an extensive training on the snowball sampling technique, interviewing skills and approach, and on some ethical considerations to keep in mind.

### **Instrument Development and Description**

194. The questionnaire used for the street interviews was the same as that used for the ISF survey, excluding the question relating to the “substance for current arrest”.

### **Data Collection**

195. Data collection began mid-April 2001 and was completed by the end of June 2001. The filled questionnaires were regularly screened and edited and any remarks or comments were sent as a memo to the field workers for future reference.

196. Though initially it was planned and decided that the data collection should cover all hotspots in Lebanon (particularly those of major cities such as Tripoli, Bekaa and Sidon), only Beirut and Mount Lebanon were ultimately covered (keeping in mind that some users who were interviewed in Beirut may be residents of other areas). According to the coordinator of the survey, the reasons they were not able to cover a larger area of Lebanon are: first, one interviewer had promised to cover the Beka'a area and changed his mind later; second, he was not able to identify an interviewer to cover the North; and



third, he had identified two interviewers for Sidon but one backed out midway and another conducted a few interviews and then stopped. Also according to the coordinator, there was not enough time to find replacements for any of those who backed out after promising to help out in data collection. Nevertheless, he said, "Greater Beirut encompasses about 2/3 of Lebanese residents, and around 2/3 or a bit more of their sample is from Beirut, which may render the distribution less biased".

197. Following data collection, IDRAC and the coordinator arranged for a debriefing session with the fieldworkers in order to get their feedback and comments based on their experience in the field. Unfortunately, only 3 of the 6 interviewers made it to the meeting. The interviewers were able to provide us with some feedback on their encounter with the substance users, the obstacles faced during fieldwork, their opinions about the hotspots (or places they sought), as well as their recommendations for future street surveys. They additionally, and upon the request of the IDRAC team provided some basic data on those who had been approached but refused to fill out the questionnaires, as well as the mapping of their street work; only one interviewer provided us with this information. For a summary of the feedback we received from each interviewer as well as from the coordinator of the survey, see Appendix E.

### **Data Entry**

198. Data was entered into the computer using the FoxPro statistical software and analyzed using the SPSS.

## **F) Prison Survey (2001)**

### **Design and Sampling**

199. The prison survey is a cross-sectional study that extended from (July-September 2001), in the Roumieh prison setting.

200. Those eligible for inclusion in the study were: all those imprisoned at the time of the study for a drug-related offense (possibly in combination with a non-drug related offense), as well as those detained in prison for a drug-related offense (possibly in combination with a non-drug related offense) and are awaiting the judicial verdict.

201. All the respondents are males (given that it is a male only prison); no specific age group was selected.

### **Instrument Development and Description**

202. The questionnaire used for the prison interviews was the same as that used for the ISF and the Street survey, including additional questions specific to this survey: date of arrest, date of conviction, and duration of imprisonment. Moreover, questions relating to the last 12 month-use and 30-day use of substances were posed in reference to the timeline preceding the date of imprisonment.

### **Training**

203. A question-by-question training of trainers was conducted by one of the IDRAC co-investigators. The trained interviewer was a nurse, who in turn trained two other interviewers: another nurse and a social worker.

### **Data Collection**

204. The study took quite a while before its initiation given the logistics that had to be taken care of.

205. Several contacts were made with the responsible authorities at the Internal Security Forces, to explain the objectives and the significance of the study, and obtain their permission to carry out the survey in the prison setting.

206. After a month of contacts, permission was granted. The entry of the AJEM team into the prisons for the purpose of interviewing the convicts or detainees was facilitated.

207. After permission was granted by the Internal Security Forces for the AJEM team to enter the prison premises for interviewing purposes, enumeration of all eligible respondents was carried out. This was followed by gathering all the eligible prisoners in one place, in order to facilitate the process of explaining the study objectives and goals to them. All those who agreed to participate in the study were later interviewed separately.

208. The interviewing was conducted by 6 trained individuals from the AJEM team: 2 nurses, a social worker, and 3 volunteers (university students) who work also with AJEM. A total of 64 prisoners were interviewed.



209. Several steps to control the quality of the work were adopted:

- Several meetings were held amongst the interviewers from AJEM for coordination and evaluation of their work
- Bi-weekly follow-up meetings were held by the IDRAC research team in order to supervise the data collection process
- Completed questionnaires were screened by the IDRAC team on a bi-weekly basis and memos including the researchers' comments were distributed to the concerned interviewers.

210. Last, a debriefing session was conducted by IDRAC to allow the interviewers to provide their feedback with respect to the interviews. For a summary of the points raised, see Appendix F.

### **Data Processing**

211. Data was entered into the computer using the FoxPro statistical software and analyzed using the SPSS.

## **III. Primary Data Collection: Qualitative Methods**

212. The qualitative primary data collection entailed several focus group discussions and key informant interviews with experts who have had experience with substance use (treatment, prevention, social work, etc...).

### **A) Focus Group Discussions**

#### **Description**

213. Focus Group Discussions (FGD) are guided group interviews whereby a moderator guides the interview as the group discusses the topics/questions raised by the moderator. They are fundamentally a way of listening to people and learning from them in order to generate a rich understanding of the participants' impression, attitudes, and more importantly experiences regarding a topic of concern, in our case being substance use and misuse in Lebanon.

#### **Goals and Purposes**

214. As part of the RSA, 6 focus group discussions were held [4 FGD with experts from

treatment and rehab centers, 1 FGD with officers from the DEO of the ISF, and 1 FGD with the heads of institutions and members of a number of NGOs (see Chapter Three-IA) active in the field of substance use] in order to gain an in-depth understanding of the participants' impressions of and experiences with respect to the substance use and abuse condition in Lebanon. Data obtained helped clarify the somewhat blurred picture and add information to the current knowledge on the substance use and abuse situation in the country. Moreover, it helped us refine the structured questionnaires that were administered in the aforementioned surveys.

#### **FGD staff**

215. One moderator and 2 assistant moderators (from the IDRAC team) carried out the FGDs. On the one hand, the moderator conducted the interviews, and was concerned mainly with directing the discussion and keeping it focused on the topic. While guiding the discussion and listening to what the participants had to say, the moderator did not participate, share views, engage in discussion, or shape the outcome of the group interview. The moderator was also responsible for taking some notes, not so much to capture the total interview but rather to identify a few key ideas or future questions that need to be asked.

216. On the other hand, the assistant moderators were more of the recorders, the observers, the analysts, and the consultants. Contrary to the moderator, they took comprehensive notes (depicted the participants' non-verbals throughout the discussion), operated the tape recorder, handled environmental conditions and logistics (refreshments, lighting, seating, etc.), and responded to unexpected interruptions. At the end of the discussion, the assistant moderators also asked additional questions and probed further participants' responses.

217. Following the FGD sessions, the moderator and the 2 assistant moderators met for the transcription, analysis and discussion of the session. In order to maximize the accumulation of information and increase the validity of the analysis, the FGD was further tape-recorded as a back up to the notes taken.

#### **Project size and participants**

218. Prior to the FGD, the participants were sent



a fax explaining the objectives of both the RSA, and more specifically their role during the FGD. Each FGD consisted of around 4-6 individuals who have been in some type of contact with the drug users and abusers in their institution.

### **Interview schedule**

219. The questionnaire used moderately structured, beginning from rather general questions to more specific ones as the discussion continued. Sometimes probing was used in order to clarify vague remarks and statements; some probing techniques that have been proven useful and were used are: “would you explain further”, “can you give me an example”, “is there anything else”, “please describe what you mean”, “I don’t understand”, and others.

### **Pilot testing**

220. Field-testing the interview schedule in FGD is difficult and the true pilot test is really the actual FGD. However, in order to improve on the set questions, the latter was pilot tested with members of the research team.

### **Setting and Duration**

221. Each FGD lasted on average between 1.5 to 2 hours, which according to the literature is both the physiological and physical limit for the participants. All FGDs were conducted at the IDRAC research offices, which provided an excellent and safe environment conducive to optimal discussions and interactions.

## **B) Key Informant Interviews**

222. In addition to the FGD, 5 key informant interviews (KII) were conducted: 2 with experts working in the prevention/treatment sector (head of the SIDC institution, and head of JAD institution), 1 with the principals of two major private schools

in Lebanon, and two others with judges dealing with Criminal Law (a judge from the Supreme Criminal Court and the Public Prosecutor for the Tripoli area) considering that the law on drugs is primarily categorized under the criminal law.

223. The purpose of the KII conducted with the school principals and experts from the prevention/awareness centers was similar to that of the FGD- to gain an in-depth understanding of the participants' impressions with respect to the substance use condition in the country, based on their experience. The interview schedule used was that used in the FGD, with some modifications and/or omissions in the questions when necessary.

224. As for the KII with the 2 judges, the first interview was arranged by phone with the judge from the Supreme Criminal Court, the purpose of which was to solicit his opinion, comments, and recommendations on the new law on drugs passed in 1998 and to acquire guidance on how to conduct research on it. The second interview, held with the Public Prosecutor for the Tripoli region, was set up through the Ministry of Justice; the Minister was contacted directly, and he recommended that we meet with the Public Prosecutor for the Tripoli region who is also a criminal law judge. The purpose behind this interview was to solicit the judge's opinion with respect to the shortcomings of the Lebanese law on drugs, as well as his proposed specific amendments and recommendations to be included in the RSA National Action Plan (see Recommendations Chapter Eight). The interview schedule for each of the 2 KII with each judge was moderately structured.

225. All KIIs were conducted at IDRAC research offices, except the one carried out with the Public Prosecutor; which took place in his office in Tripoli. Each KII lasted between 1 to 2 hours; again they were all tape-recorded in order to maximize the accumulation of information and increase the validity of the analysis.



# Results of the Lebanon RSA Study



## Chapter Six

226. The following information has been abstracted from the retrieved secondary data sources on substance use (See Chapter Five-I). The main recurring themes tackled are highlighted within this section; nevertheless, readers are advised to refer to the original articles/reports for more detailed information on the methodology and results. The indicated date refers to the year the study or research was conducted.

## I. Results of Secondary Data Analysis:

### A) University students

#### 1) Prevalence of substance use

\* 1998- *Shediak-Rizkallah, MC., Afifi-Soueid, RA., Farhat, TM., et al.*

227. The prevalence of ever use as reported by freshman and sophomore students newly entered to the American University of Beirut: illegal drugs (12.0%), sedatives (10.2%), alcohol (66.5%), and marijuana (6.5%).

\* 1995- *Makki, A., and Hourii, M.*

228. The prevalence of ever use of illicit substances as reported by university students in the Lebanese American University and the Lebanese University: hashish/marijuana (2.6%), opium (0.7%), and cocaine (0.9%).

\* 1991- *Karam, E., Melhem, N., Mansour, C., et al.*

229. The prevalence of ever use of licit (non medical use) and illicit substances among university students belonging to the St Joseph University and the American University of Beirut: tranquilizers (10.2%), barbiturates (8.4%), codeine (3.2%), hashish/marijuana (2.6%) stimulants (1.8%), opium derivatives (0.9%), cocaine (0.5%) and heroin (0.4%).

\* 1972-1973- *Nassar, N. T., Melikian, L., and Der-Kerabetian, A.*

230. The lifetime rates of the non-medical use of marijuana, LSD and amphetamines were investigated among university students belonging to the AUB: tranquilizers (17%), hashish/marijuana (17%), sleeping pills (15%), amphetamines (8%), and lastly LSD (2%).

#### 2) Gender differences in substance use

231. The general trend is for males to use illicit substances and alcohol more than females, while for the latter to use licit substances similarly or often more than their male counterparts.

\* 1998- *Shediak-Rizkallah, MC., Afifi-Soueid, RA., Farhat, TM., et al.*

232. The study shows that while significantly more males reported the ever use of illegal drugs (14.7% vs. 8.8% among females) and alcohol (70.9% vs. 61.4% among females), more females (borderline significance) reported ever use of sedatives (12.1% vs. 8.3% among males).

\* 1991- *Karam, E., Melhem, N., Mansour, C., et al.*

233. It was found that males reported a significantly higher ( $p < 0.01$ ) prevalence of alcohol ever use (58.2% vs. 40.7%) and cannabis ever use (3.7% vs. 0.7%), while more females reported ever use of tranquilizers (13.3% vs. 7.6%) and barbiturates (10.6% vs. 6.3%).

\* 1972-1973- *Nassar, N. T., Melikian, L., and Der-Kerabetian, A.*

234. The study shows that more males than females reported ever use of marijuana (18% vs. 14%); while the prevalence of LSD and amphetamines ever use were similar (LSD: 2% each, and amphetamines: 8% of males and 7% of the females).

### B) High school students

#### 1) Prevalence of substance use

\* 1997- *Sibai, A., and Kanaan, N.*

235. The only study we could find on school students reported the following prevalences for ever use of substances: alcohol (41.8%), hashish/marijuana (2.4%), cocaine or other drugs (0.8%). 40.6% of the sample reported ever smoking a cigarette and 4.7% reported ever-regular smoking (defined as ever smoking one cigarette a day for at least a period of one month)



## 2) Gender differences in substance use

\* 1997- Sibai, A., and Kanaan, N.

236. A significantly higher percentage of males had ever used alcohol (47.1% vs. 37.1% of females), and hashish/marijuana (4.5% vs. 0.5%). Also, a significantly higher prevalence of males had ever smoked (46.9% vs. 35.0% of the females,  $p < 0.01$ ), with also more males having ever 'regularly' smoked (6.0% vs. 3.5% of the females).

## C) Community

### 1) Prevalence of substance use

\* 1997- Naja, W., Pelisollo, A., Haddad, R., et al.

237. The study shows that 30% of the community sample reported ever using benzodiazepines for more than 12 months, and 9.6% reported their use within the month preceding the study. The dependence rate (DSM-IV criteria except for criterion #2) reported was 50.2%

\* 1993-1994- Nuwayhed, I., Sibai, A., Adib, S., et al.

238. The Beirut Survey Results (1993-1994) shows that 34% of the males and 15% of the females were current alcohol drinkers

\* 1994- Yabroudi, P., Karam, E., Chami, A., et al.

239. The prevalence of ever alcohol drinking, defined, as ever having at least 12 drinks, was 65.4%.

### 2) Gender differences in substance use

\* 1997- Naja, W., Pelisollo, A., Haddad, R., et al.

240. The study on the use of Benzodiazepines in the community shows that a significantly higher percentage of females, compared to males, have ever used Benzodiazepines.

\* 1993-1994- Nuwayhed, I., Sibai, A., Adib, S., et al.

241. The Beirut Survey Results (1993-1994) show that females reported lower frequency and intensity in their pattern of alcohol consumption.

\* 1994- Yabroudi, P., Karam, E., Chami, A., et al.

242. Data from the community study shows that Alcohol ever users, abusers and dependents are more likely to be males than females; 74.1% of the males reported ever use of alcohol compared to 44.5% of the females, and 18% of the males diagnosed with alcohol abuse/dependence, compared to only 0.9% of the females.

## D) Treatment population

243. Substance use behaviour has also been described among substance using populations under hospitalisation or in rehabilitation.

### 1) Prevalence of substance use

244. A common finding among the different studies conducted on patients treated for substance use disorders is that heroin is the most commonly used substance; reported ever use rates in these populations are as follows:

\* (1973-1974, 1976-1977, 1979-1980, 1984-1985, 1986-1987, 1989-1990)- Baddoura, C.

245. 80.5% of the sample were heroin users. The distribution of use among heroin users was as follows: with hashish/marijuana (36.1%), with cocaine, hashish/marijuana, and alcohol (11.1%), and only heroin (25%)

\* (1973-1987)- Abdel-Malak, N.

246. 80.5% of the sample were heroin users. The distribution use among heroin users was as follows: with hashish/marijuana (36.1%), with cocaine, hashish/marijuana, and alcohol (8.3%), with pills (11.1%), and only heroin (25%)

\* (1980-1993)-Zaarour, R.

247. 71.48% of the sample were heroin users. The distribution of use among heroin users was as follows: with alcohol (9.85%), with cocaine (20.86%), with hashish/marijuana (17.18%), with



benzodiazepine (17.18%), with DF 118 (3.68%), with morphine (1.84%), and less than 1% with LSD.

\* (1994)-Ingold, F. R.

248. The entire treatment sample (N=32) were heroin users.

249. Still, in an inpatient study in 1994, Karam, E., Yabroudi P. F., and Melhem, N., who reported on all substances, found that alcohol was the most commonly ever abused substance, with almost 50% of the sample having ever abused it. 25.4% of the sample reported ever abusing heroin.

## 2) Mode of use of substances

\* (1973-1974, 1976-1977, 1979-1980, 1984-1985, 1986-1987, 1989-1990)-  
Baddoura, C.

250. 16.7% reported using drugs intravenously.

\* 1973-1987- Abdel-Malak, N

251. 16.7% reported using drugs intravenously

\* (1980-1993)-Zaarour, R.

252. 46.52% of the sample of heroin users reported injecting it; another 46.52% reported sniffing the powder, and 6.95% reported inhaling the vapor (note: only 331 patients reported the mode of use of the substance)

## 3) Gender differences in substance use

\* (1994)- Karam, E., Philippe, F., Melhem, N.

253. In an inpatient study by Karam E., Yabroudi P. F., Melhem N., it was found that female subjects were significantly more likely to have ever abused licit substances (tranquilizers, barbiturates, stimulants) than males, who in turn were more likely to have ever abused at least one illicit substance and/or alcohol.

\* (1980-1993)-Zaarour, R.

254. It was reported that heroin, cocaine, hashish/marijuana users are predominantly males (more than 95%); the differences decrease upon looking at Benzodiazepine users (63.9% of them

are males) and is completely reversed for barbiturates (85% of them are females).

## 4) Trend in the number of admissions

\* (1973-1974, 1976-1977, 1979-1980, 1984-1985, 1986-1987, 1989-1990)-  
Baddoura, C.

255. The number of patients dependent on substances and admitted to Cross Hospital (a large psychiatric hospital) between 1973 and 1990 fluctuated; 57 patients were admitted in 1973-1974, the numbers peaking during the year 1986-1987 (N=235), and then declining to 205 in 1989-1990.

\* (2000)- Oum el-Nour

256. Data from Oum-el-Nour center on the number of persons seeking the Accueil (screening center for rehabilitation) shows a gradual increase from the year 1993 (N=27) to the year 2000 (N=177)

## 5) Gender differences in admission

\* (1973-1974, 1976-1977, 1979-1980, 1984-1985, 1986-1987, 1989-1990)-  
Baddoura, C.

257. The study shows that the average male to female ratio between 1973 and 1990 was 8:2, with a low of 3:2 in 1973 and a high of 9:1 in 1986 through 1990 (data include readmissions).

\* (1993)- Karam, E. G.

258. The author reported the male to female ratio for different institutions: 9:1 for Oum el Nour rehabilitation center during the years of 1989 through 1992, 2.5:1 for the St George Hospital and 1:1 for an outpatient private participant during the period of 1988-1992.

## 6) Age of substance-using patients

\* (1973-1974, 1976-1977, 1979-1980, 1984-1985, 1986-1987, 1989-1990)-  
Baddoura, C.

259. The study found that the average age of patients for substance use disorders is approximately 30 years.



\* (1994)- Karam, E., Yabroudi, P., F., Melhem, N.

260. The reported mean age of patients with substance abuse/dependence history reported was 34.5+/-11.8 years.

### 7) Co-morbidity of substance use and psychiatric disorders:

\* (1994)- Karam, E., Yabroudi, P., F., Melhem, N.

261. This study, on inpatients with past/present history of substance abuse/dependence in St George hospital, found that 64.9% of the cases had comorbid psychiatric disorders. 44.8% exhibited comorbidity between cannabis and schizophrenia and 42.1% between cocaine and bipolar disorder. Substance using patients with no comorbid Axis I psychiatric disorders were predominantly heroin users, most of them having antisocial personality disorder.

## II. Results of Primary Data Analysis: Quantitative Results

### A) Substance use in the Academic Setting

262. Adolescence and young adulthood encompass a time when various health-related beliefs and behaviours are adopted and consolidated, and experimentation with different substances is usually initiated. Though adolescents and young adults are at higher risk of initiating substance use, they are at the same time are at the early stages of use, which makes them more amenable to change their habits and abstain from their use of substances with a number of strategies (though most are still under trial). Thus, monitoring the prevalence and patterns of use among this at risk population, as well as studying the factors associated with their use, is imperative for the proper planning of prevention and awareness programs and campaigns and consequently the proper allocation of available and future resources.

263. High school and university students constitute a unique and specific segment of this at risk population. They represent a population who is at risk of initiating substance use, and at the same time one that is at the forefront of education who is likely to become future players in opinion leadership (politics, public health, media, etc...).

From thereon springs the need to monitor and control substance use among the students- to increase the chances of a healthier and better future.

264. In this section, data on substance use and its possible risk and protective factors on from both the high school and the university students were separately analyzed and compared, for the purpose of drawing an outline of the current situation of substance use among this at risk population in Lebanon (keeping in mind that the schools and universities included in each of the surveys are all private and represent the medium to high socio-economic segment of the Lebanese population only).

### 1) Demographic characteristics

265. The two populations, high school and university students, are very comparable in their demographic characteristics except for their age distribution (university population mean age =  $20.17 \pm 1.62$  years vs.  $17.09 \pm 0.87$  years for high school respondents). It is worth noting here that the age range of the university (Univ.) students encompasses that of the high school (H.S) respondents, especially since the last year of high school according to the Lebanese Baccalaureate system is equivalent to the freshman year of university. Besides the age difference, each of the two populations are almost equally distributed by gender, with the Lebanese students predominating in both samples, and foreigners (Non-Lebanese) constituting only 9.5% of the university sample and 4.6% of the high school sample. (See Appendix A: Tables S1 & U1)

### 2) Internal controls

266. The majority of both student populations are believers in God (about 90% of each of the two student samples) with an average of 30%, of both the high school and university sample, reporting practicing their faith on a regular basis. (See Appendix A: Tables S2 & U2)

267. Students were also asked whether they felt that one's faith conflicts with the use of drugs. More than a third of each sample reported that one's faith does not conflict with the use of neither alcohol nor drugs, but also more than a third reported that one's faith conflicts with the use of both alcohol and drugs. (See Appendix A: Tables S2 & U2).



### 3) Deviant behaviour

268. The high school sample reported a higher prevalence of frequent arguments (daily or several times per week) with their parents during the 12 months preceding the study (27.1%) compared to the university respondents (15.2%) (Keeping in mind that the "preceding 12 months" correspond to different period in time). Additionally they reported a higher frequency of shoplifting at least once during the past 12 months (12.1% in high school vs. 6.6% among university sample). The prevalence of those who reported getting into a serious fight at least once during the past 12 months was also comparable, with slightly higher rates among the university students (40.3%), compared to high school students (36.4%).

269. High school students were additionally asked to report on the number of whole days they had missed from school for no valid reason (within the last 30 days preceding the survey); more than a third of the sample reported having missed at least one day for no valid reason (such as sickness, or having to study more for a test). (See Appendix A: Table S4)

### 4) Academic achievement

270. Students were also asked to report on their grades, and we found that more than 80% of each of the two populations reported having had an average grade falling within the 70<sup>th</sup>-90<sup>th</sup> percentile so far during that year. (See Appendix A: Table S4 & U4)

### 5) Use of substances

#### 5.1. Cigarettes

271. Ever-regular smoking (defined as ever-smoking daily for a period of one month or more) was more prevalent among the university population (21.9%) than the high school population (17.3%) (keeping in mind that the university population is expectedly older). University students also reported a higher prevalence of current smoking (defined as ever smoking within the last 30 days preceding the study) (university students: 12.3% of total population & 57.7% of ever smokers, and school students: 7.2% of total high school population and 42.5% of ever smokers). (See Appendix A: Table S5 & U5)

272. The mean age of onset is expectedly higher among the university students compared to the high school respondents (17.52+/-2.11 years vs. 14.75+/-1.97 years, respectively), due to the higher mean age of the university sample. As for the level of cigarette consumption, the university students reported a heavier smoking pattern during the time they had smoked most (43.4% reported smoking more than 1 pack a day during the time they smoked most compared to 12.1% of the high school sample). (See Appendix A: Table S5 & U5)

#### 5.2. Alcohol

273. About 70% of both university and high school students reported ever having had an alcoholic drink, of whom almost all reported having consumed alcohol at least once during the last 12 months (97.0% & 96.4% of university and HS ever drinkers, respectively) and a great majority having had a drink during the last 30 days (83.1% & 79.7% of university and high school ever drinkers, respectively). (See Appendix A: Table S6 & U6)

274. The mean age of onset of ever alcohol use was again expectedly lower among the high school respondents (13.26+/-2.78 years), compared to the university respondents (16.13+/-2.64 years). (See Appendix A: Table S8 & U8)

275. The percentage of HS and university students who reported ever getting drunk was almost equal, with slightly higher rates among the high school students (26.7% vs., 23.7% of the university students). The mean age of first drunkenness was 15.00+/-1.81 among high school students and 17.04+/-2.41 among university students. (See Appendix A: Table S6 & U6)

276. Alcohol abuse was also assessed among both student samples. 7.4% of the total sample of high school students (11% of the ever drinkers) and 9.1% of the total sample of the university students (12.9% of the ever drinkers) were diagnosed with DSM-IV alcohol abuse, keeping in mind the absence of the criterion relating to recurrence of the symptoms within a 12 months period in the university sample (See Appendix A: Table S6 & U6)

#### Other Substances (Illicit and Licit)

277. The substance use indicators surveyed in both the university and the HS surveys were: ever



use (defined as ever using the substance at least once), last 12-month use (using the substance at least once during the 12 months preceding the survey), last 30-day use (using the substance at least once during the 30 days preceding the survey), more than 5 time use (ever using the substance on more than 5 occasions as defined in the HS survey and for more than 5 times as defined in the university survey), and daily use for at least 2 weeks (ever using the substance on a daily basis for a period of at least 2 weeks).

278. The reported percentages are valid percent, that is, they were calculated excluding the missing replies for each of the substance use indicators in each sample. Thus, among the ever users in both samples, the percentage of last 12 months use, last 30 day use, more than five times use, and daily use for at least two weeks, ought to be interpreted and compared with caution, keeping in mind the number of missing replies on all these substance use indicators, within the population of ever users. (See Appendix A: Tables S7B-1 and U7B-1).

### 5.3. Hashish/marijuana

279. The rate of hashish/marijuana ever use is higher among the university population (8.8%, N=155) compared to the high school population (6.8%, N=88). University students also reported a higher rate of last 12-month use (5.2% vs. 4.4%), of last 30-day use (3.0% vs. 2.2%), more than five times use (4.2% vs. 2.4%), and daily use for at least 2 weeks (1.7% vs. 1.3%). (See Appendix A: Table S7-A & U7-A)

280. Within the ever users of hashish/marijuana, high school students reported a higher percentage of last 12 months use, last 30 day use, more than 5 times use, and daily use (keeping in mind though that the percent missing replies on all these substance use indicators is higher among the HS sample). (See Appendix A: Table S7-B, B1 & U7-B, B1)

### 5.4. Heroin

281. The exact same prevalence of heroin ever use (0.8% each) was found in both student populations. HS students reported a higher rate of last 12-month use (0.8% vs. 0.2% in the university sample); similarly but to a much lesser extent, the high school sample reported a higher rate of last 30-day use (0.4% vs. 0.2%), and more than five times use (0.5% vs. 0.3%). The rate of daily use for

at least two weeks though is slightly higher among the university students (0.3% vs. 0.2%). (See Appendix A: Table S7-A & U7-A)

282. All the heroin ever users in the high school population have used the substance during the past 12 months, compared to only 36.4% of the university ever users of heroin, which may reflect in reality that first use of heroin among the high school was in fact occurring within the past 12 months of the survey. Also among the ever users, more high school students reported use of heroin within the past 30 days (55.6%) compared to the university students (27.3%). Regarding the frequency of use, high school students also reported a higher percentage of more than 5-time use of heroin (85.7% vs. 50.0%), as well as its daily use for a period of at least 2 weeks (40% vs. 33.3%). (See Appendix A: Table S7-B & U7-B)

### 5.5. Cocaine

283. Cocaine ever use was higher among the high school students (1.7%, N=22) compared to the university students (1.2%, N=22). High school students also reported a higher prevalence of last 12-month use (1.2% vs. 0.7%), last 30-day use (0.7% vs. 0.4%), more than five time-use (0.8% vs. 0.6%), and daily use for at least two weeks (0.7% vs. 0.1%), compared to the university students. (See Appendix A: Table S7-A & U7-A)

284. Again, within the ever users of cocaine, high school students reported a higher percentage of last 12 months use, last 30 day use, more than 5 times use, and daily use (keeping in mind though that the percent missing replies on all these substance use indicators is higher among the HS sample). (See Appendix A: Table S7-B, B1 & U7-B, B1)

### 5.6. Use of any illicit substance (among the high school sample only)

285. 111 students (8.6% of the total HS sample, 77.1% of the ever users of at least one licit/illicit substance) reported the use of at least one illicit substance (hashish/marijuana, cocaine, heroin, or XTC). Upon studying further the combination of illicit substances used, we find that most of the illicit substance users have either used hashish/marijuana only (55.9% of the illicit ever users, 4.8% of the total sample), XTC only (11.7%, 1.0% of the total sample), or a combination of both (10.8%, 0.9% of the total sample). The remaining 21.6% (1.9% of



the total sample) used the 4 illicit substances in any combination.

286. 6.4% of the total sample, (74.8% of the users of at least one illicit substance) are mono-drug users of hashish/marijuana, or XTC, or cocaine. Among the illicit poly-drug users (2.2% of the total sample and 25% of the users of at least one illicit substance), the most commonly reported substance combinations was hashish/marijuana and XTC (42.9%); 17.9% of the illicit poly-drug users (that is 4.5% of the users of at least one illicit substance) reported the use of all 4 combinations (hashish/marijuana, cocaine, heroin, and XTC), another 4.5% reported the use of any combination of the 3 substances (hashish/marijuana, heroin, or cocaine), and the remaining 5% of the users of at least one illicit substance reported the ever use of XTC with cocaine, or cocaine and hashish/marijuana, or heroin and hashish/marijuana.

### 5.7. Tranquilizers

287. Ever use of tranquilizers (*exemplified in both samples by names of certain medications such as Librium, Valium, Lexotanyl, Ativan, Xanax...*) is much higher among the university student sample (13.1% vs. 3.3% of high school respondents). University students also reported a higher percentage of last 12-month use (6.7% vs. 2.2%), last 30-day use (3.7% vs. 1.2%), more than five-time use (5.0% vs. 1.3%), and daily use for at least two weeks (2.1% vs. 0.7%), compared to the high school students. (See Appendix A: Table S7-A & U7-A)

288. Among the ever users of tranquilizers, high school students reported a higher prevalence of last 12-month use (percent of missing replies being similar in both). Again, among the ever users, high school students reported a higher percentage of last 30-day use, more than 5 times use, and daily use for at least 2 weeks (keeping in mind though that the percent of missing replies is higher among the HS sample). (See Appendix A: Table S7-B, B1 & U7-B, B1).

### 5.8. Amphetamines/stimulants

289. The prevalence of ever use of amphetamines/stimulants (*exemplified in the HS sample by certain names such as Benzedrine, uppers, speed,...*) is higher among the university sample than the high school students (4.3% vs. 1.2%, respectively). University students also reported a

higher prevalence of last 12-month use (1.8% vs. 0.5%), last 30-day use (1.0% vs. 0.2%), more than 5-time use (2.2% vs. 0.5%), and daily use for at least two weeks (1.1% vs. 0.5%). (See Appendix A: Table S7-A & U7-A)

290. Once ever users, the high school respondents reported a higher prevalence of last 12-month use, last 30-day use, more than five time use, and daily use (keeping in mind that the number of missing replies on all aforementioned indicators is higher among the HS sample). (See Appendix A: Table S7-B, B1 & U7-B, B1).

### 5.9. Medicinal Opiates and Barbiturates (MO/Barb:

291. The prevalence of ever use of medicinal opiates/barbiturates (*medicinal opiates including codeine, morphine, Tramal, Dulsana, ...*) is higher among the university sample compared to the HS sample (5.2% vs. 1.2%, respectively). University students also reported a higher percentage of last 12-month use (2.0% vs. 0.7%), last 30-day use (1.0% vs. 0.2%), more than five-time use (3.1% vs. 0.5%), and daily use for at least two weeks (1.3% vs. 0.2%). (See Appendix A: Table S7-A & U7-A)

292. Among the ever users, high school students reported a higher prevalence of last 12-month use, more than five time use, and daily use, and somewhat similar rates of last 30-day use (keeping in mind though that the percent of missing replies is higher among the HS sample). (See Appendix A: Table S7-B, B1 & U7-B, B1).

## 6) Attitudes towards drugs

### 6.1. Perception of harmfulness

293. Almost all (95.3%) university students reported that “drugs are harmful”. This question was phrased differently, and in a more detailed manner, for the high school student population and it was found that almost 2/3 (63.2%) of the school students believe that hashish/marijuana leads to the use of harder drugs (more than 1/4 don’t know whether it does or not), about 1/3 (28.0%) believe that hashish/ marijuana is as bad as cocaine and heroin (almost half don’t know whether it is or not), and slightly more than a third (36.2%) believe that heroin is as bad as cocaine (more than 1/2 don’t



know whether it is or not). (See Appendix A: Tables S10 & U13).

## **6.2. Students' attitude towards legalization of substances**

294. Students were also asked to report on their attitude towards the legalization of substances.

295. Among the HS sample, 43.7% of the students thought that hashish/marijuana should be considered entirely legal or a minor violation (i.e. like a parking ticket), and 42.3% thought so regarding XTC. Regarding the legalization of heroin and/or cocaine, a lesser percentage of students thought that cocaine or heroin should be legal or a minor violation (24.3%). (See Appendix A: Table S10).

296. Among the university sample, students were only asked to report if they thought the substance should be legalized or not: a higher percentage of students were for the legalization of hashish/marijuana (15.6%), compared to the legalization of cocaine (6.7%) and heroin (6.7%). (See Appendix A: Table U13).

## **7) Seeking treatment for substance use**

297. Among the university students, 2.1% reported ever talking to a doctor or a health professional about a problem caused by their use of substances (excluding alcohol), of whom 19.4% reported doing so within the 12 months preceding the study. As for the HS students, 2.8% (34) of the then reported ever having received any kind of professional counseling, treatment, or therapy because of their alcohol or drug use, 44% of whom have received it sometime within the past 12 months.

## **8) Social milieu**

### **8.1. Family parameters**

#### **8.1.1. Family use of substances**

298. A higher percentage of high school students reported having at least one parent who has ever used at least one illicit substance compared to the university students (2.9% vs. 0.9%, respectively); similarly more high school students reported having at least one sibling who has ever used at least one illicit substance (3.7% vs. 1.9%, respectively). (See Appendix A: Tables S11 & U9).

299. Regarding parental use of at least one licit substance, again a higher percentage of high school students reported having at least one parent who has ever used any licit substance (18.2% vs. 11.2%), while a somewhat similar percentage of students in both samples reported having at least one sibling who has ever used any licit substance (2.5% of the university sample vs. 2.1% of the school sample). (See Appendix A: Tables S11 & U9).

#### **8.1.2. Parental attitude towards use of substances**

300. High school students were asked to report on what they thought their parents would feel if they thought that their child has ever used each of the surveyed licit and illicit substances once or twice (in their lifetime). More than 90% of the high school students reported that their parents would be very upset if they thought their child has ever used cocaine or heroin once or twice, less so for hashish/marijuana (87.2%), XTC (87.9%), amphetamines (87.9%), and least for tranquilizers (76.6%). (See Appendix A: S12).

301. As for the university students, the latter were asked to report on what they thought their parents would think if they (the students) ever tried marijuana, cocaine or heroin once or twice, as well as used tranquilizers, barbiturates, medicinal opiates, and stimulants once or twice per day. The majority of the university students perceived that their parents would be very upset if they thought that the students had ever tried an illicit substance once or twice; a lesser percentage (89.8%), though still a majority, perceived that their parents would be very upset towards the use of any licit substance once or twice per day. (See Appendix A: Table U10).

#### **8.1.3. Perceived parental strictness**

302. Both the university and high school students were asked whether they perceived their parents as "very strict", "somewhat strict", or "not strict at all" regarding dress, doing homework, and staying out late. Regarding their parents' strictness towards dress, the majority of the students in both samples perceive their parents as being either not strict at all or somewhat strict. Expectedly, more high school students, than university students, perceived their parents as very strict towards the homework being done. Last, and regarding staying out late, 15.5% of the university sample and 17.6% of the school sample perceived their parents as being very strict



towards staying out late, and more than 50% perceived their parents as somewhat upset. (See Appendix A: Tables S13 & U11)

## **8.2. Peer parameters**

### **8.2.1. Close friends' use of substances**

303. More than 1/3 of the high school sample (36.9%) reported having at least one close friend who frequently uses at least one illicit substance (XTC, heroin, hashish/marijuana, or cocaine), and more than 1/4 (27.2%) reported having at least one close friend who frequently uses at least one licit substance (amphetamines, tranquilizers, medicinal opiates and/or barbiturates). (See Appendix A: Table S11)

304. Among the university sample, students were not asked to report on their friends' frequent use of illicit or licit substances but rather about their substance use behaviour in general. More than a 1/3 of the university sample (42.0%) reported having at least one close friend who has ever used drugs other than alcohol, 16.5% reported having at least one close friend who uses drugs regularly, and almost half (46.5%) reported having at least one close friend who drinks alcohol excessively (the latter being subjectively defined). (See Appendix A: Tables U9)

### **8.2.2. Close friends' attitude towards substance use**

305. High school students were also asked to report their close friends' attitude towards them ever using each of the surveyed licit and illicit substances once or twice. The high school student sample were mainly distributed between those who perceive that their close friends would be very upset and those who perceive that their close friends will only be somewhat upset. Additionally, more students thought that their close friends would be very upset about trying heroin or cocaine once or twice (58.9% and 57.8% respectively) compared to hashish/marijuana (47.5%). Regarding the use of a licit substance once or twice, while more than 50% thought that their close friends would be very upset towards them trying amphetamines/stimulants (50.3%) or medicinal opiates/barbiturates once or twice (55.1%), 43.7% thought so towards tranquilizers use. (See Appendix A: Table S12)

306. As for the university students, the latter were

asked to report on what they thought their close friends would think about them ever trying marijuana, cocaine or heroin once or twice, as well as using tranquilizers, barbiturates, medicinal opiates, and stimulants once or twice per day. While a considerable portion (about 65%) of the university students perceive that their close friends would be generally 'very upset', still 23% of the students perceive that their close friends would be somewhat upset about them ever trying marijuana, heroin or cocaine once or twice, and 27.2% about them using tranquilizers, barbiturates, medicinal opiates, and stimulants once or twice per day. (See Appendix A: Tables U10)

### **8.3. Exposure to drug/alcohol educational material**

307. 62.8% of each of the high school and university student population has been ever exposed to a drug/alcohol prevention message outside the university (through any of the media routes). (See Appendix A: Tables S14 & U12)

308. As for exposure within the academic setting, more than 1/2 of the high school students reported being exposed to drug educational material in school (57.5%), compared to only 15% of the students within the university setting. (See Appendix A: Tables S14 & U12)

### **8.4. Perceived availability of substances**

309. This factor was only assessed among the high school sample. Different substances were perceived by the high school sample as easily to very easily available; the reported rates are as follows: tranquilizers by 44.2%, hashish/marijuana by 38.5%, XTC by 31.7%, amphetamines by 31.5%, medicinal opiates and/or barbiturates by 22.6%, cocaine by 18.5%, and heroin by 15.5%. (See Appendix A: Table S15)

310. Moreover, and again only in the high school sample, students were asked to report on their purchase of prescription medication from the pharmacist, without a prescription. 5.8% of the high school students reported ever buying any medication (amphetamines, tranquilizers, medicinal opiates, barbiturates) from a pharmacist without a doctor's prescription. Among those who did, 68.1% reported that the pharmacist did not object, 8.7% reported that the pharmacist did object and that they had to go to another, 15.9% reported that the pharmacist



did object but they told him that it was for someone in the family, and the remaining 7.1% reported other situations (such as paying him extra money, the pharmacist was a relative, etc.) It is worth noting here that almost 54.3% (N=38) of those who reported purchasing a prescription medication from the pharmacist, without a prescription, have never used any licit substance.

### 9) Factors possibly associated to substance use: substance-specific bivariate analysis

311. In an attempt to delineate the factors possibly associated to students' substance use, substance-specific bivariate analyses were conducted separately for each of the two student samples, university and high school. The two dependent variables studied were: ever use and more than five times use for each of the surveyed substances. Chi-square analysis was conducted, cross-tabulating each of the independent variables with each of the dependent variables, ever use and more than five times use of substances (analyzed among the ever users). Only significant associations (p-value <0.05) are reported in the results section; all the results (significant and non-significant) have been tabulated for more elaborate results, please refer to the tables (See Appendix A: U14-U24 & S16A-S30). Results of the bivariate analysis are presented by substance, for each of the two academic samples, high school and university separately.

312. Moreover, and only for the high school sample, a bivariate analysis was conducted for the ever use of any licit (non-medical use) or illicit substance. Again, only significant associations are presented in the results section; all the results (significant and non-significant) have been tabulated (see Appendix A: Tables S31A-S31I-ii).

313. Though the bivariate results provide information on the direction and strength of the associations, they do not allow for the control of the effect of one or more confounding variables. Thus, for more solid conclusions, it is recommendable in future studies for all potential confounders to be controlled for.

314. While ever use of each of the surveyed substances, in both samples, was significantly related to one or more of the demographic factors surveyed, none of the latter were found to be significantly related to more than five times use of each of the substance (among ever users) in the HS sample.

Furthermore, the bivariate analysis for more than five times use, among the ever users, in the university sample, was not conducted for heroin or cocaine due to the small number of more than five times users (N=5 and N=11, respectively).

315. During the interpretation of the results, particularly those of more than five times use among ever users, with each of the surveyed factors, one should keep in mind that the small number of more than five time users may be responsible for the loss of statistical significance in the associations, or even the inability to compute the statistical significance for some of the associations using chi-square test available at the time of the survey.

#### 9.1. Demographic characteristics

316. The demographic characteristics reported in this section are: 1) gender and 2) nationality (foreigners vs. Lebanese/Dual citizenship). Students' age distribution is also reported, but only for university students (given the lack of variability among HS students)..

##### 9.1.1 Alcohol

**High school sample: (ever users: 69.1%/ abusers: 7.4%)**

317. Alcohol ever use is significantly higher among the males, foreigners, and those who have ever lived abroad for more than 3 months. (See Appendix A: Table S16-C)

318. Alcohol abuse was only significantly associated with gender, and again was a predominantly male behaviour. (See Appendix A: Table S16-C)

**University sample: (ever users: 70.8%/ abusers: 9.1%)**

319. Alcohol ever use among the university sample is significantly more prevalent among the males, and those who have ever lived abroad for more than 3 months. (See Appendix A: Table U14-C).

320. Regarding alcohol abuse, a higher prevalence of alcohol possible abusers was noted among the males, among the older age groups, and those who had lived abroad for more than three months. (See Appendix A: Table U14-C)



### 9.1.2 Hashish/marijuana

**High school sample: (ever users: 6.8%)**

321. Hashish/marijuana ever use is significantly more prevalent among males, foreigners, and those who have lived abroad for a period of at least 3 months. (See Appendix A: Table S16-A)

**University sample: (ever users: 8.8%)**

322. Hashish/marijuana ever use is significantly more prevalent among males, older age groups, foreigners, and those who have lived abroad for a period of 3 months or more. (See Appendix A: Table U14-A)

323. For more than five time use, only the association with nationality remains significant whereby foreign ever alcohol users reported higher prevalence of more than five time use compared to the Lebanese ever alcohol users. (Table U21)

### 9.1.3 Cocaine

**High school sample: (ever users: 1.7%)**

324. None of the demographic variables surveyed in the HS sample were significantly related to cocaine ever use.

**University sample: (ever users: 1.2%)**

325. None of the demographic variables surveyed in the university sample were significantly related to cocaine ever use.

326. More than five time users of cocaine were too few to be analyzed.

### 9.1.4 Heroin

**High school sample: (ever users: 0.8%)**

327. Heroin ever use is significantly more prevalent among males. (See Appendix A: Table S16-A)

**University sample: (ever users: 0.8%)**

328. Heroin ever use in the university sample is significantly higher among males. Again there is a trend, though its significance could not be computed using chi-square, for younger age cohorts to have

reported a higher prevalence of heroin ever use. (See Appendix A: Table U14-A)

329. More than five time users of heroin were again too few to be analyzed.

### 9.1.5 XTC

**High school sample: (ever users: 2.8%)**

330. Ecstasy ever use in the high school population is significantly higher among males. (See Appendix A: Table S16-A)

**University sample:**

331. Ecstasy use was not assessed in the survey conducted on university students in 1999.

### 9.1.6 Tranquilizers

**High school sample: (ever users: 3.3%)**

332. Tranquilizers ever use is significantly higher among females. (See Appendix A: Table S16-B)

**University sample: (ever users: 13.1%)**

333. Female students were more likely to have ever used tranquilizers. Additionally, students who reported ever living abroad for more than 3 months also reported a significantly higher prevalence of tranquilizers ever use. (See Appendix A: Table U14-B)

### 9.1.7 Amphetamines/stimulants:

**High school sample: (ever users: 1.2%)**

334. None of the demographic factors (gender, nationality, living abroad) are significantly associated with amphetamines/stimulants ever use among the high school population. (See Appendix A: Table S16-B)

**University sample: (ever users: 4.3%)**

335. Amphetamines/stimulants ever use is significantly higher among the females and among the foreigners. (See Appendix A: Table U14-B)

336. More than five time use of amphetamines, among ever users, is significantly higher among the foreigners. (See Appendix A: Table U21)



### **9.1.8 Medicinal opiates and Barbiturates (MO/Barb)**

**High school sample: (ever users: 1.2%)**

337. Only the respondent's nationality is significantly associated with MO/Barb ever use, whereby foreigners reported higher prevalence of ever use. (See Appendix A: Table S16-B)

**University sample: (ever users: 5.2%)**

338. None of the surveyed factors were found to be significantly associated to MO/Barb ever use. (See Appendix A: Table U14-B)

### **9.2. Internal controls**

339. The internal controls surveyed are: belief in God, practice of faith, and belief that one's faith does not conflict with the use of drugs and/or alcohol.

#### **9.2.1. Alcohol**

**High school sample: (ever users: 69.1%/ abusers: 7.4%)**

340. Alcohol ever use is significantly higher among those who don't believe in God or change their belief frequently (compared to those who believed in God), and those who do not practice their faith (compared to those who do). Moreover, those who believe that one's faith does not conflict with alcohol and/or drugs reported a higher rate of alcohol ever use (compared to those who believe that alcohol/drugs use do conflict with one's faith). (See Appendix A: Table S17-C)

341. Alcohol abuse was higher among the believers who do not practice their faith, and those who believe that one's faith does not conflict with alcohol and/or drugs. There is also a trend for lower prevalence of alcohol use and abuse among believers in God, but statistical significance could not be computed. (See Appendix A: Table S17-C)

**University sample: (ever users: 70.8%/ abusers: 9.1%)**

342. A lower prevalence of alcohol ever use was found among those who reported belief in God, and among believers who practice their faith, and among those who believe their faith does conflict with the use of alcohol and/or drugs. (See Appendix A:

Table U15-C)

343. Regarding alcohol abuse, a higher prevalence of probable alcohol abusers is noted among non-believers in God and those who change their belief frequently, and those who believe that their faith does not conflict with alcohol and/or drugs. (See Appendix A: Table U15-C)

#### **9.2.2 Hashish/Marijuana**

**High school sample: (ever users: 6.8%)**

344. Hashish/marijuana ever use is significantly more prevalent among those who do not practice their faith. There is also a trend for lower prevalence of ever use of hashish/marijuana among the believers in God, but statistical significance could not be computed. (See Appendix A: Table S17-A)

**University sample: (ever users: 8.8%)**

345. Hashish/marijuana ever use is significantly more prevalent among non-believers, believers who do not practice their faith, and finally among those who do not believe that their faith conflicts with alcohol and/or drugs. (See Appendix A: Table U15-A)

346. None of the internal controls factors were associated with more than five times use of Hashish/marijuana. (Table U21)

#### **9.2.3 Cocaine**

**High school sample: (ever users: 1.7%)**

347. The only internal control factor significantly associated with ever use of cocaine in this sample is practice of faith, with those practicing their faith reporting a lower prevalence of cocaine ever use. (See Appendix A: Table S17-A)

**University sample: (ever users: 1.2%)**

348. There is no significant association between any of the internal control factors assessed and cocaine ever use, although it must be noted that there is a trend for slightly higher ever use, though its significance could not be computed, among younger age cohorts. (Table U15-A)



349. More than five time users of cocaine were too few to be analyzed.

#### **9.2.4. Heroin**

**High school sample: (ever users: 0.8%)**

350. Heroin ever use is significantly more prevalent among those who do not practice their faith (compared to those who do). (See Appendix A: Table S17-A)

**University sample: (ever users: 0.8%)**

351. There is a trend, though its significance could not be computed using chi-square, for those who do not believe in God to have reported a higher prevalence of heroin ever use. (See Appendix A: Table U15-A)

352. More than five time users of heroin were again too few to be analyzed.

#### **9.2.5. XTC**

**High school sample: (ever users: 2.8%)**

353. Ecstasy ever use in the high school population is significantly higher among believers who do not practice their faith, and among those who believe that one's faith does not conflict with alcohol and/or drugs (compared to those who believe it does). (See Appendix A: Table S17-A)

**University sample:**

354. Ecstasy use was not assessed in the survey conducted on university students in 1999.

#### **9.2.6 Tranquilizers**

**High school sample: (ever users: 3.3%)**

355. Tranquilizers ever use is significantly higher among those who believe that one's faith does not conflict with alcohol and/or drugs. (See Appendix A: Table S17-B)

**University sample: (ever users: 13.1%)**

356. Belief in God was significantly associated with a lower prevalence of tranquilizers use. (See Appendix A: Table U15-B)

357. Among the ever users, believers in God who do not practice their faith reported a higher prevalence of more than five time use. (See Appendix A: Table U21)

#### **9.2.7 Amphetamines/stimulants**

**High school sample: (ever users: 1.2%)**

358. Only practice of faith was associated with Amphetamines/stimulants ever use whereby believers in God who did practice their faith reported a lower prevalence of ever use (compared to believers who did not). (See Appendix A: Table S17-B)

**University sample: (ever users: 4.3%)**

359. None of the internal control factors were associated with Amphetamines/ stimulants ever use or more than five time use. (See Appendix A: Table U15-B, Table U21)

#### **9.2.8 Medicinal opiates and Barbiturates (MO/Barb)**

**High school sample: (ever users: 1.2%)**

360. None of the internal control factors were associated with Amphetamines/ stimulants ever use or more than five time use. (See Appendix A: Table S17-B)

**University sample: (ever users: 5.2%)**

361. None of the internal control factors were found to be significantly associated to MO/Barb ever use. (See Appendix A: Table U15-B)

#### **9.3 Deviant behavior**

362. The factors included under this category in the HS sample are: 1) absenteeism (at least once within the past 30 days, 2) engagement in at least one problematic act or problematic conduct at school (gotten into a serious fight at school or damaged school property on purpose), 3) illegal acts (performed at least once one or more of the following acts: theft, setting fire intentionally to someone's property, using a knife/gun to get something from someone, and getting arrested by the police), 4) frequent (daily or several times per week) arguments with parents.



363. As for the factors pertaining to the university sample, they include: 1) gotten into a serious fight at least once within the past 12 months preceding the study, 2) shoplifting at least once within the past 12 months preceding the study, and 3) frequent (daily or several times per week) arguments with parents also within the 12 months preceding the survey.

### 9.3.1. Alcohol

**High school sample: (ever users: 69.1%/ abusers: 7.4%)**

364. More alcohol ever users (than never users) reported absenteeism at least once within the last 30 days, engaging in illegal act (at least once within the past 12 months), and engaging in problematic conduct at school (at least once within the past 12 months). (See Appendix A: Table S18)

365. Alcohol abusers reported a higher prevalence of all surveyed indicators compared to the non-alcohol abusers. (See Appendix A: Table S18)

**University sample: (ever users: 70.8%/ abusers: 9.1%)**

366. Unlike the high school population, ever drinkers generally did not differ from never drinkers on the individual indicators assessed, except that the ever drinkers had higher reports of shoplifting at least once within the past 12 months. (See Appendix A: Table U16)

Alcohol abusers also more often reported shoplifting at least once within the past 12 months and ever getting into a fight, both within the past 12 months. (See Appendix A: Table U16)

### 9.3.2. Hashish/marijuana

**High school sample: (ever users: 6.8%)**

367. More hashish/marijuana ever users (than never users) reported absenteeism at least once within the last 30 days, engaging in illegal act (at least once within the past 12 months), and engaging in problematic conduct at school (at least once within the past 12 months). (See Appendix A: Table S18)

**University sample: (ever users: 8.8%)**

368. Hashish/marijuana ever users (compared to

never hashish/marijuana users) have significantly higher reports of shoplifting at least once within the last 12 months. (See Appendix A: Table U16).

369. Among ever users, more than five times users of hashish/marijuana (compared to 1-5 time users) reported a higher prevalence of ever stealing within the past 12 months. (See Appendix A: Table U22). Nevertheless, further analysis proved that while controlling for age of onset of hashish/marijuana use, the association no longer exists and thus age of onset of hashish/marijuana use is a potential confounder.

### 9.3.3. Cocaine

**High school sample: (ever users: 1.7%)**

370. Ever users of cocaine (compared to never users) reported a significantly higher prevalence of ever engaging in illegal conduct (within the past 12 months) and higher frequency of frequent arguments with parents (also within the past 12 months). (See Appendix A: Table S18).

**University sample: (ever users: 1.2%)**

371. Ever users of cocaine reported a significantly higher prevalence of shoplifting, during the past 12 months. (See Appendix A: Table U16)

372. More than five time users of cocaine are too few to be analyzed.

### 9.3.4. Heroin

**High school sample: (ever users: 0.8%)**

373. Heroin ever users are not significantly different from never users in any of the deviant behavior indicators surveyed; nevertheless, the lack of significance could be due to the low percentage of heroin ever users (0.8%). (See Appendix A: Table S18)

**University sample: (ever users: 0.8%)**

374. Heroin ever users are more likely to have shoplifted at least once within the 12 month preceding the survey, compared to never users. (See Appendix A: Table U16)

375. More than five time users of heroin were too few to be analyzed.



### 9.3.5. Ecstasy

**High school sample: (ever users: 2.8%)**

376. Ever users of ecstasy were more likely to have skipped a whole day of school within the last 30 days, argued frequently with their parents during the past 12 months, and engaged in illegal conduct at least once in the last 12 months. (See Appendix A: Table S18)

**University sample**

377. Ecstasy use was not assessed in the survey conducted on university students in 1999.

### 9.3.6. Tranquilizers

**High school sample: (ever users: 3.3%)**

378. Tranquilizers ever users were more likely to have ever skipped a whole day of school within the last 30 days, engaged in illegal conduct at least once within the past 12 months, and frequently argued with their parents during the past 12 months. (See Appendix A: Table S18)

**University sample: (ever users: 13.1%)**

379. Tranquilizers ever users more often reported shoplifting, getting into a physical fight, and frequently arguing with their parents, all within the past 12 months. (See Appendix A: Table U16)

380. Within the sample of ever users, none of the above-mentioned factors remained significantly associated to more than five time use. (See Appendix A: Table U22)

### 9.3.7. Amphetamines/stimulants

**High school sample: (ever users: 1.2%)**

381. Ever users more often reported arguing frequently with their parents within the past 12 months (the fact that no other significant association was noted should be considered in light of the low prevalence of ever users (1.2%). (See Appendix A: Table S18)

**University sample: (ever users: 4.3%)**

382. Ever use of amphetamines/stimulants is significantly associated with shoplifting whereby

ever users more often reported shoplifting at least once within the past 12 months, compared to the never users. (Table U16).

### 9.3.8. Medicinal opiates and Barbiturates:

**High school sample: (ever users: 1.2%)**

383. MO/Barb ever users and never users did not significantly differ in their reports on any of the above-mentioned indicators. Again the fact that no other significant association was noted should be considered in light of the low percentage of MO/Barb ever users in the high school sample. (See Appendix A: Table S18)

**University sample: (ever users: 5.2%)**

384. Ever users were more likely to report shoplifting at least once within the past 12 months. (See Appendix A: Table U16)

385. As for more than five time users, they were no longer significantly different from the 1-5 times users with respect to reports of ever stealing. (See Appendix A: Table U22)

## 9.4 Academic achievement

386. The academic achievement of high school and university students was also assessed; for the purpose of the analysis the variable was recoded as: grades below 80, and above 80.

### 9.4.1. Alcohol

**High school sample: (ever users: 69.1%/ abusers: 7.4%)**

387. More alcohol ever users (and alcohol abusers) reported academic grades below 80% compared to never alcohol users (and non abusers, respectively). (See Appendix A: Table S-18)

**University sample: (ever users: 70.8%/ abusers: 9.1%)**

388. Unlike high school students, ever alcohol drinkers (and alcohol abusers) generally did not differ from never drinkers (and non-abusers) in their academic achievement. (See Appendix A: Table U16)



#### **9.4.2. Hashish/marijuana**

**High school sample: (ever users: 6.8%)**

389. More hashish/marijuana ever users reported academic grades below 80% compared to never hashish/marijuana users. (See Appendix A: Table S-18)

**University sample: (ever users: 8.8%)**

390. Hashish/marijuana ever users as well as more than five time users did not differ in their academic achievement compared to never users. (See Appendix A: Table U16, U22)

#### **9.4.3. Cocaine**

**High school sample: (ever users: 1.7%)**

391. Cocaine ever users did not differ in their academic achievement compared to never users. (See Appendix A: Table S-18)

**University sample: (ever users: 1.2%)**

392. Cocaine ever users did not differ in their academic achievement compared to their counterparts. (See Appendix A: Table U16)

393. More than five time users of cocaine were too few to be analyzed. (See Appendix A: Table U22)

#### **9.4.4. Heroin:**

**High school sample: (ever users: 0.8%)**

394. Heroin ever users are not significantly different from never users in terms of their academic achievement; then again, the lack of significance could be due to the low percentage of heroin ever users (0.8%). (See Appendix A: Table S18)

**University sample: (ever users: 0.8%)**

395. Heroin ever users did not differ in their academic achievement compared to never users. (See Appendix A: Table U16)

396. More than five time users of heroin were too few to be analyzed. (See Appendix A: Table U22)

#### **9.4.5. Ecstasy:**

**High school sample: (ever users: 2.8%)**

397. Ever users of ecstasy were more likely to have grades below 80, compared to never users. (See Appendix A: Table S18)

**University sample:**

398. Ecstasy use was not assessed in the survey conducted on university students in 1999.

#### **9.4.6. Tranquilizers:**

**High school sample: (ever users: 3.3%)**

399. Tranquilizers ever users were more likely to report academic grades below 80%, compared to never users. (See Appendix A: Table S18)

**University sample: (ever users: 13.1%)**

400. Tranquilizer ever users did not differ in their academic achievement compared to never users. (See Appendix A: Table U16)

#### **9.4.7. Amphetamines/stimulants:**

**High school sample: (ever users: 1.2%)**

401. Amphetamine/stimulant ever users did not differ in their academic achievement compared to never users. (See Appendix A: Table S18)

**University sample: (ever users: 4.3%)**

402. Ever users of amphetamines/stimulants significantly differed from never users in terms of academic grades whereby ever users more often reported academic grades below 80%. (Table U16)

403. This significant association is maintained among more than five time users, when compared to 1-5 times users. (See Appendix A: Table U22)

#### **9.4.8. Medicinal opiates and Barbiturates:**

**High school sample: (ever users: 1.2%)**

404. MO/Barb ever users and never users did not significantly differ in their reports on their academic achievement. Again, one must bear in mind that the lack of significance could be due to the low



percentage of MO/Barb ever users in the high school sample. (See Appendix A: Table S18)

**University sample: (ever users: 5.2%)**

405. Ever users did not differ in their academic achievement (See Appendix A: Table U16), but as for more than five time users, they reported higher prevalence of academic grades below 80% (compared to 1-5 times users). (See Appendix A: Table U22)

### **9.5 Attitude towards drugs**

406. Students' attitude towards the legalization of substances was also assessed among both the high school and university student samples. Among the high school sample, the question assessed whether the school students thought that illicit substances should be entirely legal, a minor violation (like a parking ticket), or a crime. In the university sample, the question assessed whether the students were entirely for the legalization of certain illicit substances or entirely against.

#### **9.5.1. Alcohol**

**High school sample: (ever users: 69.1%/ abusers: 7.4%)**

407. Alcohol ever users were more likely in favor of considering hashish/marijuana use, XTC use, and cocaine/heroin use as either legal or as a minor violation, compared to the alcohol never users (See Appendix A: Table S23).

408. Alcohol abusers were also more likely in favor of considering hashish/marijuana use, and XTC use, but not cocaine/heroin use, as either legal or as a minor violation, compared to the never alcohol abusers (See Appendix A: Table S23).

**University sample: (ever users: 70.8%/ abusers: 9.1%)**

409. Alcohol ever users (and abusers) were more likely to be in favor of legalizing hashish/marijuana, compared to never alcohol users (and non-abusers). (See Appendix A: Table U20)

#### **9.5.2. Hashish/marijuana**

**High school sample: (ever users: 6.8%)**

410. Hashish/marijuana ever users were more likely in favor of considering hashish/marijuana and XTC as legal or a minor violation.

Hashish/marijuana ever users and never users did not differ on their attitude towards the legalization of heroin and/or cocaine. (See Appendix A: Table S23)

**University sample: (ever users: 8.8%)**

411. Hashish/marijuana ever users were more likely in favor of the legalization of hashish/marijuana (compared to the never users); still both hashish/marijuana ever users and never users did not differ on their attitude towards the legalization of heroin and/or cocaine. (See Appendix A: Table U20)

412. Hashish/marijuana more than five time users, compared to 1-5 times users, were more likely to be for the legalization of hashish/marijuana (See Appendix A: Table U26).

#### **9.5.3. Cocaine**

**High school sample: (ever users: 1.7%)**

413. Cocaine ever users, compared to the never users, were more in favor of considering hashish/marijuana, XTC, and heroin/cocaine use as legal or a minor violation. (See Appendix A: Table S23).

**University sample: (ever users: 1.2%)**

414. Cocaine ever users were more in favor of legalizing hashish/marijuana compared to never users (See Appendix A: Table U20).

415. More than five time users of cocaine were too few to be analyzed.

#### **9.5.4. Heroin**

**High school sample: (ever users: 0.8%)**

416. Heroin ever users, compared to the never users, were more in favor of legalizing (or considering as a minor violation) hashish/marijuana, XTC, and heroin/cocaine use (See Appendix A: Table S23).

**University sample: (ever users: 0.8%)**



417. Heroin ever users were more likely to be in favor of the legalization of hashish/marijuana (compared to the never users). (See Appendix A: Table U20).

418. More than five time users of heroin were too few to be analyzed.

#### **9.5.5. Ecstasy**

**High school sample: (ever users: 2.8%)**

419. XTC ever users, compared to the never users, were more in favor of considering hashish/marijuana, XTC, and heroin/cocaine use as legal or a minor violation (See Appendix A: Table S23).

**University sample:**

420. Ecstasy use was not assessed in the survey conducted on university students in 1999.

#### **9.5.6. Tranquilizers**

**High school sample: (ever users: 3.3%)**

421. Tranquilizers ever users, compared to the never users, were more in favor of the legalization (or consideration as a minor violation) of hashish/marijuana, and XTC, but not heroin/cocaine use (See Appendix A: Table S23).

**University sample: (ever users: 13.1%)**

422. Tranquilizers ever users were more likely to be in favor of legalizing hashish/marijuana, than never users (See Appendix A: Table U20)

#### **9.5.7. Amphetamine/stimulants**

**High school sample: (ever users: 1.2%)**

423. Amphetamines/stimulants ever users, compared to the never users, were more likely to be in favor of legalizing hashish/marijuana (or considering it as a minor violation) (See Appendix A: Table S23).

**University sample: (ever users: 4.3%)**

424. Amphetamines/stimulants ever users, compared to the never users, were more likely to be in favor of the legalization of hashish/marijuana

use (See Appendix A: Table U20).

#### **9.5.8. Medicinal opiates and Barbiturates**

**High school sample: (ever users: 1.2%)**

425. MO/ Barbiturates ever users, compared to the never users, were more likely to be in favor of the legalization of hashish/marijuana (or its consideration as a minor violation) (See Appendix A: Table S23).

**University sample: (ever users: 5.2%)**

426. MO/Barbiturates ever users, compared to the never users, were more likely to be in favor of legalizing hashish/marijuana and/or XTC but not heroin/cocaine (See Appendix A: Table U20).

#### **9.6 Social milieu**

427. The social milieu factors assessed within the HS sample orbit around 4 main areas (family influence, peer influence, exposure to drug/alcohol educational material, and perceived availability of substances), and they more specifically are: 1) parental ever use of at least one illicit substance; 2) Siblings' ever use of at least one illicit substance; 3) close friends' frequent use of at least one illicit substance; 4) parental ever use of at least one licit substance; 5) Siblings' ever use of at least one licit substance; 6) close friends' frequent use of at least one illicit substance; 7) exposure to drug/alcohol information through the media; 8) exposure to drug/alcohol education in school; 9) parental strictness towards dress, 10) towards curfew, 11) towards homework; 12) perceived availability of substances.

428. Among the university sample, the social milieu factors assessed orbit around 3 main areas (family influence, peer influence, and exposure to drug/alcohol educational material), and they are almost the same as those assessed in the high school sample, with some slight differences: 1) parental ever use of at least one illicit substance; 2) siblings' ever use of at least one illicit substance; 3) parental ever use of at least one licit substance; 4) siblings' ever use of at least one licit substance; 5) close friends' ever use of drugs other than alcohol; 6) close friends' regular use of drugs other than alcohol; 7) close friends' excessive drinking of alcohol; 8) exposure to drug/alcohol information through the media; 8) exposure to drug/alcohol education in



university; 9) parental strictness towards dress, 10) towards curfew, 11) towards homework; 12) parental attitude towards smoking one or more packs of cigarettes a day; 13) parental attitude towards trying hashish/marijuana once or twice; 14) parental attitude towards having five or more drinks once or twice per week; 15) parental attitude using tranquilizers, barbiturates, morphine, stimulants or codeine once or twice per day; 16) close friends' attitude towards smoking one or more packs of cigarettes a day; 17) close friends' attitude towards trying hashish/marijuana once or twice; 18) close friends' attitude towards having five or more drinks once or twice per week; 19) close friends' attitude using tranquilizers, barbiturates, morphine, stimulants or codeine once or twice per day.

### 9.6.1. Alcohol

**High school sample: (ever users: 69.1%/ abusers: 7.4%)**

429. Having at least one parent who has ever used at least one illicit substance, or at least parent who has ever used at least one licit substance, was associated with a significantly higher prevalence of alcohol ever use. Similarly, having at least one sibling who has ever used at least one illicit substance, or at least one sibling who has ever used at least one licit substance was also associated with a significantly higher prevalence of alcohol ever use. The same aforementioned association applies for close friends' use of substances, whereby having at least one close friend who frequently uses at least one illicit substance or having at least one close friend who frequently uses at least one licit substance was associated with a significantly higher prevalence of ever use of alcohol. A trend is observed relating to the perceived parental strictness towards staying out late and alcohol ever use; the more strict the parent, the less the alcohol ever use rate reported. Students who reported that their parents are “just strict enough” towards dress, reported the lowest ever alcohol use rate, compared to those who perceived their parents as being very strict or not strict at all towards dress. Moreover, and on a more socio-environmental level, exposure to drug/alcohol educational material through media or school were significantly associated with a lower prevalence of alcohol ever use. (See Appendix A: Table S19C-S21C) Students' perceived availability of substances is also associated with alcohol ever use; ever users of alcohol are more likely to perceive hashish/marijuana, cocaine and XTC as very

easy/easily available, compared to the never users. (See Appendix A: Table S22)

430. As for factors related to alcohol abuse, alcohol abusers are more prevalent among respondents who reported having at least one sibling who has ever used any illicit or used any licit substance, one friend who frequently uses an illicit substance, and whose parents are not at all strict towards curfew and homework. (See Appendix A: Table S19C-21C) Again, as in alcohol ever use, the students' perceived availability of substances is also associated with alcohol abuse; ever alcohol abusers are more likely to perceive hashish/marijuana, cocaine, heroin and XTC as very easy/easily available, compared to the never users. (See Appendix A: Table S22)

**University sample: (ever users: 70.8%/ abusers: 9.1%)**

431. Alcohol ever drinkers are significantly more prevalent among those who reported having at least one parent who has ever used one or more illicit substances, and those who reported having at least one sibling who has ever used one or more illicit substances. Close friends' substance use behaviour was also associated to the students' ever alcohol use; close friends' ever use of drugs other than alcohol, close friends' regular use of drugs other than alcohol, and close friends' excessive alcohol drinking were all related to a higher prevalence of alcohol ever use. Additionally, exposure to drug/alcohol educational material in the university was related to a lower prevalence of alcohol ever use.

432. Moreover, ever alcohol drinkers are more prevalent among the respondents whose parents are said to be not at all strict towards curfew and dress. Alcohol ever use is also more prevalent among respondents who reported that their parents would not be at all upset if they smoked one more packs of cigarettes per day, or have five or more drinks once or twice per week. Finally, a higher prevalence of ever drinkers are found among those who feel that their close friends would not be upset at all if they smoked one or more packets of cigarettes per day, or tried marijuana, cocaine, or heroin once or twice, or if they had five or more drinks once or twice a week. (See Appendix A: Table U17C-U19C)

433. Many of the factors associated with alcohol use are also associated with alcohol probable abuse. Alcohol probable abusers are more prevalent among



those who reported that at least one parent has ever used any illicit substance, and at least one sibling has ever used any illicit substance. Furthermore, probable abusers are more prevalent among those who have a close friend who has ever used drugs other than alcohol, who have a close friend who regularly uses drugs other than alcohol, and among those who have a close friend who drinks alcohol excessively. Parental strictness towards curfew was also significantly associated with alcohol probable abuse whereby those who reported that their parents are not strict at all towards curfew reported a higher prevalence of alcohol probable abuse. Students who felt that their parents would not be upset at all towards having five or more drinks a week also reported a higher prevalence of alcohol probable abuse.

434. Finally, a significantly higher prevalence of alcohol probable abusers is found among the respondents whose close friends would not be upset at all if they smoked one or two packs of cigarettes a day, tried marijuana, cocaine, or heroin once or twice, had five or more drinks once or twice a week, or used tranquilizers, barbiturates, morphine, stimulants, or codeine one or twice a day. (See Appendix A: Table U 17C-19C)

### **9.6.2. Hashish/marijuana**

**High school sample: (ever users: 6.8%)**

435. Hashish/marijuana ever use was significantly more prevalent among students who reported that at least one of their parents had ever used at least one illicit substance; the same applies for respondents who reported that at least one sibling had ever used at least one illicit or at least one licit substance, and similarly for those reporting at least one close friend who frequently uses any illicit or any licit substance. Furthermore, hashish/marijuana ever use is also significantly more prevalent among respondents whose parents are not at all strict towards curfew. (See Appendix A: Table S19A-21A) Moreover, hashish/marijuana ever users were more likely to perceive hashish/marijuana, cocaine, heroin, and XTC as easily to very easily available. (See Appendix A: Table S22)

**University sample: (ever users: 8.8%)**

436. Hashish/marijuana ever users in the university sample greatly resemble their high school counterparts in that their ever use is significantly

associated with their parental and sibling use of any illicit substance. Similarly, hashish/marijuana ever use was significantly more prevalent among students who reported having at least one close friend who has ever used drugs other than alcohol, at least one friend who regularly uses drugs other than alcohol and at least one friend who drinks alcohol excessively. (See Appendix A: Table U17A-18A)

437. All four indicators assessing close friends' attitude towards students' substance use also proved to be significantly related to the ever use of hashish/marijuana. (See Appendix A: Table U18A)

438. Students who reported that their parents are not at all strict towards curfew and would not be upset at all if they had five or more drinks once or twice per week, reported a higher prevalence of hashish/marijuana ever use. (See Appendix A: Table U17A)

439. Almost all the associations with hashish/marijuana ever use lose their significance when analyzed with more than five time use, among the ever users. Hashish/marijuana more than five times use was only significantly associated with having at least one close friend who uses drugs regularly other than alcohol and among respondents whose close friends would not be upset if they try marijuana, cocaine, or heroin drugs once or twice. (See Appendix A: Table U 23-25)

### **9.6.3. Cocaine**

**High school sample: (ever users: 1.7%)**

440. Cocaine ever users were significantly more prevalent among the respondents who reported having at least one parent and at least one sibling who has ever used at least one illicit substance; similarly those who reported having at least one close friend who frequently uses any illicit or any licit substance were more likely to have ever used cocaine. (See Appendix A: Table SS19A-21A) Moreover, cocaine ever users were also more likely to perceive cocaine, heroin, and XTC as easily to very easily available. (See Appendix A: Table S22)

**University sample: (ever users: 1.2%)**

441. Cocaine ever use is higher among students who reported having at least one sibling who has ever used at least one illicit substance, and at least one close friend who has ever used drugs other than



alcohol, at least one friend who regularly uses drugs other than alcohol and at least one close friend who drinks alcohol excessively. (See Appendix A: Table U17A-18A).

442. Close friends' attitude towards smoking one or more packs a day, as well having 5 or more drinks once or twice a week was also significantly associated with the students' cocaine ever use; the more upset the close friends are, the lower the prevalence of cocaine ever use (See Appendix A: Table U17A-18A)

443. Cocaine more than five time users were too few to be analyzed by the social milieu factors.

#### **9.6.4. Heroin**

**High school sample: (ever users: 0.8%)**

444. Heroin ever users were significantly more prevalent among those who reported that at least one of their siblings had used at least one illicit or at least one licit substance, and having at least one close friend who frequently uses at least one illicit or at least one licit substance. (See Appendix A: Table S19A-20A)

**University sample: (ever users: 0.8%)**

445. Heroin users are significantly more prevalent among those who reported having at least one sibling who has ever used one or more illicit substances, and having at least one close friend who has ever used drugs other than alcohol, and at least one friend who regularly uses drugs other than alcohol. (See Appendix A: Table U17A-18A)

446. Heroin more than five time users were too few to be analyzed by the social milieu factors.

#### **9.6.5. Ecstasy**

**High school sample: (ever users: 2.8%)**

447. XTC ever users are significantly more prevalent among those who reported having at least one parent who has ever used one or more illicit substances; the same applies for respondents with at least one sibling who had ever used one or more illicit or licit substances, and for those reporting having at least one close friend who frequently uses at least one illicit or at least one licit substance. (Table S19A-20A) Moreover, XTC ever users were

more likely to perceive hashish/marijuana, cocaine, heroin, and XTC as easily to very easily available (compared to never XTC users). (See Appendix A: Table S22)

**University sample:**

448. Ecstasy use was not assessed in survey conducted on university students in 1999.

#### **9.6.6. Tranquilizers**

**High school sample: (ever users: 3.3%)**

449. Students who have at least one close friend who frequently uses either one or more illicit or one or more licit substances reported a higher prevalence of tranquilizers ever use. In addition, students whose parents had ever used at least one licit substance also had a higher prevalence of tranquilizers ever use. (See Appendix A: Table S19B-20B)

**University sample: (ever users: 13.1%)**

450. Tranquilizers ever users are significantly more prevalent among students who reported having at least one parent who has ever used one or more illicit or licit substances, and having at least one sibling who had ever used one or more illicit or one or more licit substances. Close friends' substance use is also related to the ever use of tranquilizers among the students (respondents); those who reported having at least one close friend who has ever used drugs other than alcohol, who reported having at least one friend who regularly uses drugs other than alcohol and at least one friend who drinks alcohol excessively. (See Appendix A: Table U17B-18B).

451. Ever users are more prevalent among the students who reported that their parents would not be upset at all if they smoke one or more packets of cigarettes per day. (See Appendix A: Table U17B).

452. Close friends' attitude towards use of illicit substances once or twice as well as the use of tranquilizers, barbiturates once or twice a day was also associated with ever use of tranquilizers; students who reported that their close friends would be "upset" were less likely to have ever used tranquilizers. (See Appendix A: Table U18B)

453. More than five time users (among the ever users) of tranquilizers are significantly higher among those whose parents and whose close friends would



not be upset to find out that they smoke one or more packs of cigarettes per day, and among those whose close friends would not be upset if they try marijuana, cocaine, or heroin once or twice or if they use tranquilizers, barbiturates, morphine, stimulants, or codeine once or twice per day. (See Appendix A: Table U23-24)

#### **9.6.7. Amphetamines/stimulants**

##### ***High school sample: (ever users: 1.2%)***

454. Amphetamines/stimulants ever users among high school students is not significantly associated with any of the assessed social milieu factors, with the exception of higher reports of ever use among students with at least one friend who frequently uses licit substances. (See Appendix A: Table S20B)

##### ***University sample: (ever users: 4.3%)***

455. Amphetamines/stimulants users are significantly more prevalent among those who reported having at least one parent who has ever used one or more illicit substances, and are also more prevalent among those who have at least one sibling who had ever used either one or more illicit or one or more licit substance. Close friends' use is also associated with amphetamine/stimulants ever use in this sample; students who have at least one close friend who has ever used drugs other than alcohol, at least one friend who regularly uses drugs other than alcohol, and at least one friend who drinks alcohol excessively, reported a higher prevalence of amphetamine ever use. (See Appendix A: Table U17B-18B)

456. None of the surveyed factors are significant when associated with more than five time use, among ever users. (See Appendix A: Table U23-25)

#### **9.6.8. Medicinal opiates and Barbiturates**

##### ***High school sample: (ever users: 1.2%)***

457. Students who have at least one of their parents as ever users of one or more illicit or one or more licit substances and at least one of their close friends as ever users of one or more illicit substances reported a significantly higher prevalence of medicinal opiates and barbiturates ever use. (See Appendix A: Table S19B-20B).

458. Moreover, MO/Barbiturates ever users were

more likely to perceive hashish/marijuana as easily to very easily available. (See Appendix A: Table S22)

##### ***University sample: (ever users: 5.2%)***

459. Students who reported having at least one parent who had ever used one or more licit substances or a sibling who had used one or more illicit or one or more licit substances, at least one close friend who has ever used drugs other than alcohol, at least one friend who regularly uses drugs other than alcohol and at least one friend who drinks alcohol excessively were more likely to have ever used MO/barbiturates. (See Appendix A: Table U17B-18B).

460. Close friends attitude towards trying marijuana, heroin, or cocaine once or twice or having 5 or more drinks once or twice per week, or using tranquilizers, morphine, barbiturates, stimulants or codeine once or twice per day is significantly associated with a higher risk of ever using MO/barbiturates. (See Appendix A: Table U18B)

461. None of the factors surveyed are significantly associated with more than five time use among ever users. (See appendix A: Table U 23-25)

#### **10) Factors associated with ever trying any licit or illicit substance (excluding alcohol and nicotine) among the HS sample**

462. All the factors surveyed in the study were also studied with the ever use of any licit or illicit substance (excluding alcohol and nicotine) among the HS sample, keeping in mind that the students' use of at least one illicit substance is significantly associated with their use of at least one licit substance.

463. 11.0% (N=144) of the HS sample (mean age: 17.09 +/- 0.87) reported the use of at least one licit or illicit substance, excluding alcohol and nicotine; 87 students (61% of the ever illicit or licit users, 6.7% of the total sample) reported the use of at least one licit and one illicit substance, 32 students (22.3% of the ever illicit or licit users, 2.5% of the total sample) reported the ever use of at least one licit substance but not illicit, and 23 students (16.0% of the ever illicit or licit users, 1.8% of the total sample) reported the use of at least one illicit substance but not licit It should be noted here that



1 student reported on the use of at least one illicit but did not on the use of at least licit, and another student vice versa.

### **10.1. Demographic characteristics**

464. A higher prevalence of ever use of any licit or illicit substance is reported among males, and those who have lived abroad for more than 3 months (period not necessarily consecutive). (See Appendix A: Table S31A)

### **10.2. Internal controls**

465. A higher prevalence of ever use of any licit or illicit substance is reported among non-believers in God, believers who do not practice their faith, and those who feel that one's faith does not conflict with the use of either drugs or alcohol. (See Appendix A: Table S31B)

### **10.3. Alcohol drinking and cigarette smoking**

466. Students who reported ever smoking daily for a period of at least one month, who have ever used alcohol, and who have been diagnosed with DSM-IV defined alcohol abuse were more likely to have ever used at least one illicit or licit substance. (See Appendix A: Table S31C)

### **10.4. Attitude towards drugs**

467. Students who reported that hashish/marijuana does not lead to the use of harder drugs were more likely to have ever used at least one illicit/licit substance compared to those who think it does, or don't know if it does. A similar trend was found among students who think that hashish/marijuana is not as harmful as cocaine and heroin, and among those who think that cocaine is not as harmful as heroin. (See Appendix A: Table S31D-i)

468. Furthermore, ever users of at least one illicit/licit substance are more likely to be in favor of considering hashish/marijuana use, and XTC use as a minor violation or entirely legal; users and non-users however did not differ on their views towards legalization of heroin/cocaine (See Appendix A: Table S31D-ii).

### **10.5. Deviant behaviour**

469. Ever users of at least one illicit/licit substance

are more likely to have grades below 80, more likely to have skipped at least one whole day of school for no valid reason within the past 30 days preceding the survey, are more likely to report on at least one illegal conduct, and are more likely to have had a problematic conduct at school within the past 12 months preceding the study. (See Appendix A: Table S31E).

### **10.6. Family parameters: Family control and family use of substances**

470. Parental use and sibling ever use of at least one illicit substance as well as at least one licit substance is significantly associated with a higher risk of ever using at least one illicit or licit substance among the students.

471. Parental attitude towards the use of substances is also a differentiating factor for ever use of at least one licit or illicit substance among the students; students who perceived their parents as being very strict towards staying out late, reported the lowest percent of ever use of at least one licit/illicit substance. (See Appendix A: Table S31F).

### **10.7. Peer parameters: Peer control and peer use of substances**

472. At least one close friends' frequent use of at least one illicit, as well as licit, substance is associated with a significantly higher rate of ever use of at least one licit/illicit substance among the students.

473. Close friends' attitude towards the use of substances is also a differentiating factor for ever use of at least one licit or illicit substance, except for close friends' attitude towards the use of MO/Barbiturates. (See Appendix A: Table S31G).

### **10.8. Education about drugs**

474. Education about drugs and/or alcohol was not significantly associated with the students' ever use of any licit or illicit substance. (See Appendix A: Table S31H).

### **10.9. Availability of substances**

475. Ever users of at least one illicit/licit substance were more likely to perceive substances as easily to very easily available compared to the never users. (See Appendix A: Table S31I-i)



## B) Drug use among the substance using populations surveyed Treatment / Rehabilitation, ISF, Street, and Prison samples)

476. The Lebanon RSA 2001 study also made leeway for the assessment of the pattern of substance use among substance using populations encountered over almost the same period in three different settings: 1- whilst seeking treatment (in rehab, in hospitals, in Accueil), 2- under arrest, 3- in prison, and 4- in the streets (meaning neither arrested, nor in prison, nor in treatment during the data collection period). Given that they are substance users, it would be more meaningful at this level to describe the pattern of substance use (substances most commonly used, poly-substance use, IV use, etc.) rather than to dwell on the prevalence of ever use per se. Moreover, risk factor analysis seemed fruitless at this level (given the lack of a non-substance using comparison group for a majority of the substances in all 3 surveys). Still, these substance using populations have provided a unique opportunity to draw a general profile of substance users with respect to treatment, arrest history, as well as some of their individual as well as social-environmental factors relevant to their substance use.

### 1) Profile of the substance users

#### 1.1. General profile

477. All six samples (street, treatment-all 3 settings-, prison, and ISF) are predominantly males (82.5%-96.4%, except for the prison sample (100%) given that it is a male-only prison), the bulk being between the ages of 20-40 years (65.0%-76.3%), with an average of about 6% (0-9.1%) below the age of 20 years old; this may possibly indicate that young adults are still in the abuse phase, and have not reached still the addiction stage, or it may be that less people from this age group seek treatment because their parents may try to help out at this stage before admitting them to treatment. (See Appendix A: Table C1)

478. The majority of each of the samples are Lebanese, and more than a third of all samples have lived abroad for a period of at least 3 months (not necessarily consecutive). (See Appendix A: Table C1)

479. The illiteracy rate was low (0-7%), except in the ISF and prison samples, where illiteracy rates

ran up to 15% and 11%, respectively. In fact more than half of the ISF and prison samples have had an elementary or less education, compared to a third or more of the treatment sample who have had university level education (more than half of the hospital sample). This in fact may point out to the different pool from which the arrests are being made. (See Appendix A: Table C1)

480. The large majority (3/4 or more) of all 5 samples, excluding the Accueil, are employed; almost 3/4 of the Accueil are unemployed, representing a different population. One possible reason why they may be different than those in rehab is that the latter may be working while enrolled in the program, and consequently may have considered themselves as employed. (See Appendix A: Table C1)

481. Almost 2/3 of all samples are single, less so among the prison (45.3%) and more so among those in rehab (81.8%) possibly because it is more convenient for them to be in rehab- as it is less likely to disrupt their family structure. (See Appendix A: Table C1)

482. The living arrangement is typically Lebanese; the majority of all samples reported living with their families (parents and/or spouse). (See Appendix A: Table C1)

483. The majority are believers in God (61.8%-96.1%), lowest reported by the street sample; however less than 25% of all samples reported practicing their faith regularly, except for the prison sample whereby almost 40% reported practicing their faith on a regular basis. (See Appendix A: Table C1)

#### 1.2. Problem behaviours

484. Substance users in the street and rehab samples seem more alike with respect to their anti-social behaviors compared to those in the ISF, prison, Accueil and hospital. While on average 40% of the substance users in the street and rehab sample reported fighting daily or several times per week with their family members during the past 12 months, a lower percentage of those in hospitals (25.4%), Accueil (19.3%), and prison (17.2%) reported so, the lowest being reported by the ISF sample (10.9%). Similarly, a higher percentage of frequent fights with other than family members were reported by the respondents in the street sample (61.8%), and



rehab (45.5%), compared to those in the hospitals (24.2%), prison (15.6%), ISF (10.2%) and Accueil (8.8%). The prevalence of ever shoplifting was highest among the rehab (87.9%), followed by the street (45.6%), Accueil (32.7%), prison (30.2%), hospital (13.6%), and last by the ISF (4.4%). (See Appendix A: Table C-9)

485. The fact that the majority of the ISF sample did not admit to any of the anti-social behaviours must be considered in light of the extent of veracity of the answers obtained since people under arrest might want to reflect a better image, especially if they are being interviewed by ISF officers (this may still hold true for those in Accueil who are being screened for admission to rehab). However, street users may have to worry less about their image because they are being interviewed by non-official social workers/friends, and as for those in rehab, they have already submitted themselves to long term treatment and may have built a better trust relationship with the interviewers. Thus, it may either be that the populations are really different in terms of the anti-social indicators (for reasons that need further investigation) or that it is a matter of under-reporting in some samples more than others.

### **1.3. Risky behaviours**

486. More than 25% of all 6 samples reported ever using substances intravenously (about 50% of the rehab, Accueil, and ISF sample). One third or more of the ever users of IV reported sharing needles (almost 2/3 of the street sample), except for the prison sample whereby 8.7% reported ever having done so. (See Appendix A: Table C-8)

487. A sizeable majority (67.6%-90.9%) of each of the 6 samples reported having sex at least once under the influence of drugs, and except for the ISF sample (29.2%), more than 40% of all samples did so without the use of any protection (highest among the street: 75.9%). (See Appendix A: Table C8)

### **1.4. Mental health screening indicators**

488. Two childhood indicators were screened for among the 6 samples: Conduct Disorder indicators and Attention Deficit/Hyperactivity Disorder (ADHD) indicators.

489. It is very important to note at this point that these questions only screen for these 2 disorders and thus do not result in a diagnosis. Moreover, the

answers may not necessarily be accurate given that the study is not designed to address such issues; nevertheless, they were still included for the known comorbidity between them and substance use.

490. For both disorders, the rehab population reported a higher prevalence than the Accueil for each of the 6 indicators included, and the latter in turn reported a higher prevalence than those in the hospital setting; thus it seems that those in rehab score the highest on these indicators, compared to the other two treatment populations. (See Appendix A: Table C13-C)

491. Regarding the responses of those in the street sample, the percentages fall somewhere between the rehab and the Accueil data. (See Appendix A: Table C13-B)

492. The ISF sample reported the lowest rates in comparison to the street or the treatment samples, which again highlights the different pool of users that are being arrested (and the fact that again those under arrest may tend to show a better image than their true selves). (See Appendix A: Table C13-A)

493. As for the prison sample, the prevalence of the two disorders as per the screening questions was higher than that reported by the treatment and the ISF, but lower than that reported by the street. (See Appendix A: Table C13-D)

494. In general, the street population reported the highest rates for the CD and ADD screening questions, followed by the prison, then treatment, and last by the ISF.

495. Another 3 questions were also included to screen for “worry and anxiety” (for most of the respondents' life). Again, the street sample reported elevated rates and it would be probably worthwhile to investigate the true prevalence of the full diagnosis in this population. Again, though lower than the street population, the rates are also high in the treatment (particularly rehab) and the prison sample. The ISF generally reported the lowest rates, still, more than 1/3 screened positive to each of the 3 indicators. (See Appendix A: Table C13A, 13B, 13C, 13D)

### **1.5. Perceived availability of substances**

496. Arrested substance users were the least to report that the access to substances was very easy.



Generally, and as per all 6 samples, the most frequently reported substances to be easily available were hashish/marijuana, followed by tranquilizers and/or heroin; Cocaine ranked second in the prison sample, followed by tranquilizer and heroin. Hallucinogens, stimulants, and XTC were not perceived to be easily available to the respondents (although those in rehab reported comparatively higher percentages than the others). Upon looking at the substances of use, it was found that those in rehab also reported the highest percentage of stimulant, hallucinogen, MO, and XTC use, which may render the question of perceived availability of substances in this case redundant. (See Appendix A: Table C12)

## **2) Social Environmental profile**

### ***2.1. Use of any illicit substance: family and friends***

497. The great majority of the samples (more than 75%, except for the ISF) have reported that at least one friend of theirs has ever used at least one illicit substance and a much lesser percentage reported having at least one family member who has ever done so. Again those under arrest (or in prison) were more reluctant (as expected) to give out such information; none of those in the ISF reported having any family member who has ever used any illicit substance, and only 1.6% of the prison sample reported so. On the other hand, more than a 1/3 of the substance users in the street sample reported having one or more of their family members (parents or siblings) who has ever used at least one illicit substance (again pointing to a population different than those in other 5 settings). (See Appendix A: Table C12)

### ***2.2. Social network***

498. Almost two thirds or more of each of the 6 samples reported little or no ability to depend on their friends when in trouble, except for the hospital sample whereby the percentage was slightly more than half (53.6%). Though to a lower extent, still almost a third or more felt they had little or no ability to depend on their family members when in trouble (lowest rate being reported by the hospital sample, 31.4%, and highest by the street, 65.7%). (See Appendix A: Table C12)

499. Regarding the respondents' ability to confide in their family and/or friends, more than 50% of

each of the samples did not feel they would open up to and confide in their friends and more than one third felt so towards their family (highest among those in the street sample, 74.3%, followed by those in rehab, 67.7%). We need to keep in mind that in both the street and the rehab samples, family pressure was the most commonly reported reason for being referred to treatment (among those ever treated in the street and those in current treatment in the rehab); this may point to possible discourse or fractures within the family. (See Appendix A: Table C 12)

## **3) Age of onset of substance use**

500. The general trend observed here in all 6 samples is that people seem to start experimenting with alcohol first, with a tendency for hashish/marijuana to be second.

501. Looking further into the ages of onset of illicit substance use, no general trend was observed, but it is fair to say that people start to experiment with illicit substances most commonly during their young adulthood: 18-23 seems to be the mean age of onset of all substances surveyed with a wide variability: starting as early as 12 for alcohol, 13 for heroin, 14 for hashish/marijuana and tranquilizers/ barbiturates, 15 for cocaine and medicinal opiates, 16 for hallucinogens, stimulants and XTC, the new comer. (See Appendix A: Table C7)

## **4) Substance use indicators**

### ***4.1. Ever use***

502. While looking at these numbers, one has to keep in mind that these 6 samples represent “biased” populations (substance using populations) who are either seeking/or in treatment, or arrested for substance use, or in prison for substance-related offenses, or approached for their substance use (street users) behaviour. Thus, it would not be wise to comment on the percentages per se without attending to the characteristics of the sample.

503. Although all the substance-using samples seem generally alike, some differences stand out (See Appendix A: Table C2):

- 1- The ISF sample reported a lower prevalence of XTC ever use and a somewhat lower percentage of stimulant/amphetamines as well as tranquilizers/barbiturates ever use.



- 2- The street sample showed comparatively higher rates of ever use of MO.
- 3- The treatment sample (rehab more specifically) reported relatively high percentage of stimulants/amphetamines and hallucinogens ever use
- 4- The hospital and the prison samples reported a comparatively lower prevalence of heroin ever use.

504. Other general findings include:

- 1- The majority of the samples have at least once tried hashish/marijuana (lowest reported among the hospital sample, 73.6%), heroin (except for the hospital and the prison samples, 58.3% and 59.4% respectively), and cocaine (to a lesser extent among the ISF, 56.0%, and hospital sample, 61.1%).
- 2- Less than 25% have ever used stimulants / amphetamines except for the rehab populations (46.9%), and less than 1/3 have ever used hallucinogens (again except for the rehab, 69.7%).
- 3- XTC use, though reported by less than 1/3 of all 6 samples, is still worth highlighting given that it is a new fad.

#### 4.2. Last 12-month use

505. Reporting on 12-months' use of substances is fraught with some limitations because of the percent of missing replies. Moreover, one should keep in mind that the last 12 month use reports among the prison sample refer to the period before imprisonment and thus cannot be compared with that of the remaining samples. (See Appendix A: Table C-3A)

506. Across all 5 remaining samples, stimulants/amphetamines and hallucinogens use is quite low during the last 12 months preceding the survey, except among those who are in rehab (as in the case of ever use); this may be indicative of the poly-drug use nature of those admitted into rehab centers. (See Appendix A: Table C3-A)

507. Among the ISF sample, there are no reports of XTC use within the 12 months preceding the study and relatively the reports of stimulants/amphetamines as well as tranquilizer/barbiturates use within the last 12 months was lowest among the ISF sample. (See Appendix A: Table C3-A)

508. Furthermore, it was found that each of the treatment (all 3 samples) and the street sample are poly-substance users (have used more than one substance at least once within the past 12 months). (See Appendix A: Table C3-A)

509. An impressive finding is that about a third to a half of the substance users in the ISF, Accueil, and rehab sample have not had 12 drinks or more during the preceding year. (See Appendix A: Table C3-A)

#### 4.3. Last 30-day use

510. Again, last 30 day use reports among the prison sample refer to the period before imprisonment and thus cannot be compared with that of the remaining samples. (See Appendix A: Table C4-A)

511. Last 30-day use of MO and tranquilizers/barbiturates is high among the street sample (contrary to the ISF, Accueil, and Hospital samples where heroin remains the most frequently reported substance used within the last 30 days- indicating again that the street sample is distinctly different). (See Appendix A: Table C4-A)

#### 4.4. Daily use for at least two weeks

512. The most commonly reported substances to have ever been used on a daily basis for at least two weeks were hashish/marijuana, heroin, or tranquilizers. Hallucinogen, XTC, and stimulants/amphetamines use on a daily basis is not common among the samples, though XTC daily use is comparatively high among the rehab population. (See Appendix A: Table C5)

The street sample has sort of a different profile than the treatment sample (all 3 groups) surveyed. They have less of an intention to stop using substances, as they are less likely to have stopped using the substance within the last 30 days- except for cocaine where half of them have stopped, as well as XTC and stimulants/amphetamines whereby less than 30% have reported still using the substance within the past 30 days.



Less than half of the rehab sample had stopped use within the last 12 months, but the great majority had stopped within the past 30 days (as expected given that they were residing in rehab at the time of the survey).

More than 2/3 of the ever users of all substances (except for tranquilizers: 60% and hallucinogens: 36%) in the hospital sample reported still using the substance within the 12 months preceding the survey, and 50% or more reported still using it within the preceding 30 days.

## **4.5. Abuse/Dependence**

### **4.5.1 Alcohol abuse and/or dependence**

#### **4.5.1. (i) Alcohol Abuse**

513. It seems that the ISF and the street sample are completely distinct given that 99% of the street sample were diagnosed with alcohol abuse (DSM-IV defined), and 0% of those arrested. One has to keep in mind that 13.5% of the ISF sample did not respond to any of the alcohol abuse questions when only one criterion fulfilled out of the five present is sufficient for diagnosis of abuse; nevertheless, this does not make up totally for the differences observed. (See Appendix A: Table C6)

514. At least 45% of the 3 treatment samples are alcohol abusers (52.2% of those not admitted to treatment facilities for alcohol related disorders were alcohol abusers). (See Appendix A: Table C6)

515. As for the prison sample, the prevalence of DSM-IV defined ever alcohol abuse was found to be 33.3%. (See Appendix A: Table C6)

#### **4.5.1. (ii) Alcohol Dependence**

516. As for alcohol dependence, the percentages in each of the street and treatment samples is considerably lower, which may indicate that though the majority of these 2 samples are alcohol abusers, a sizeable majority do not satisfy DSM-IV criteria for alcohol dependence. A notable percentage of the street and the prison samples are alcohol dependent (32% and 34.4%, respectively). (See Appendix A: Table C6)

## **4.5.2 Drug abuse/dependence**

### **4.5.2. (i) Street sample**

517. The street respondents filled out an abuse/dependence section for their primary drug of use (the drug they reported to have used most within the last 12 months and could not seem to stop its use). Interestingly, not all the substance users (but still the majority) turned out to be abusers of or dependent on (as defined by DSM-IV criteria) their “primary” drug. Out of the 102 street users who filled out an abuse/dependence section on their primary substance, 89.2% were abusing the substance and 80.6% were dependent on it.

518. Of those who were found to be dependent on their primary drug (N=79), 58.2% reported never receiving any treatment for their substance use- and among those who have been treated (N=33), only 9% reported receiving treatment within the past year and a half (2000-2001), and another 75.8% (N=25) during the year 1996 or before.

519. Among those who turned out to be abusing their primary drug (N=91), 59.3% reported never receiving any treatment, and among those who had received treatment, again 78.4% (N=29) had done so during 1996 or before.

### **4.5.2. (ii) Prison sample**

520. The respondents in the prison sample filled out an abuse/dependence section for each drug they had ever used for 10 times or more. The prevalence of DSM-IV defined abuse and dependence on any substance, illicit or licit, was 62.9% and 65.1% respectively.

## **5) Substance use Treatment**

### **5.1. Treatment sample**

#### **5.1.1 Reason for admission**

521. The two most commonly reported reasons for current admission to treatment are personal willingness (66.2%) and family pressure (47.2%). Other much less frequently reported reasons for admission are “escape from the law enforcement” (8.5%), “peer pressure” (5.6%), and “referral by the law enforcement forces” (2.1%). Only two persons (1.4%) reported overdose as being their reason for admission to current treatment. (See Appendix A: Table C11)



### **5.1.2. Substance of current and previous admission**

522. Looking across the three treatment samples, the majority of each of them was in for heroin and/or cocaine. This does not necessarily mean that heroin and cocaine are the most frequently used substances but rather the substances most frequently responsible for seeking treatment. Also noted was that hospitals cater much more for tranquilizers and alcohol than do the rehabilitation centers; this is also true for the Accueil. Thus there seems to be a tendency of less availability in rehabilitation for individuals primarily addicted to tranquilizers/barbiturates, though demand seems to be there. Users seeking the Accueil or rehab are more likely to be doing so for heroin, while admission for cocaine use is more evident in hospitals (and rehab) rather than the Accueil. (See Appendix A: Table C11)

523. A point worth noting here is that though the percentage of those seeking the Accueil for heroin is similar to that in rehab, this does not seem to be the case for cocaine. Two explanations are proposed at this point for the discrepancy in the percentages. First, those admitted to rehab are only a subset of those seen in the Accueil who have passed a selection process before their admission. Second, it is likely that the definition of “substance of current treatment” may have been understood differently at the level of rehab and Accueil. Data from the Accueil shows that heroin was the most common substance of admission, and while heroin remained the most frequently reported substance of admission in rehab as well, it can be noted that the percentages for all other illicit substances increased, which may possibly mean that as people pass over from the Accueil to the rehab they might be reporting on *all* the substances they are using at the time and not necessarily the one which they sought help for primarily. Keeping in mind that each person may have reported more than one substance for current treatment, it can be seen that those in the Accueil have more or less reported only one substance (as evidenced by the sum of all percentages almost equaling 100%), while there were more frequent reports of more than one substance of admission among the rehab population. This should be interpreted in light of the fact that those admitted to rehab are chosen or accepted to enter because they were using more than one substance (see first proposed explanation)

524. Upon looking at the substance of previous admission among those treated before, it was found that almost 96% of those who are admitted at present

for heroin had been previously admitted for heroin as well. The same is true for alcohol, whereby people seem to be fighting with the same addiction in previous admissions. The numbers among those currently admitted for tranquilizers and/or barbiturates are too small to comment on.

### **5.1.3. Mode of previous treatment**

525. The main mode of previous treatment, among those who were previously treated, in all current treatment modalities, is inpatient treatment. Additionally, almost a quarter of those currently in the Accueil or rehab have been in rehab before. (See Appendix A: Table T4)

### **5.1.4. Compliance with previous treatment**

526. Highest non-compliance rate was found among those who had been last receiving outpatient treatment, but because of the small numbers, further comments are not advisable. Around a third of all patients were non-compliant to their previous treatment. The most common reasons reported for non-compliance are: ‘to resume use’ and ‘disliking the treatment center’ (cost was never reported as a reason). (See Appendix A: Table T4)

### **5.1.5. Interval between last and current treatment**

527. The great majority (75%) of the people who are presently admitted to or seeking treatment had their previous admission a year or less before. As expected, the majority relapsed within the same year or after one year, as risk for relapse decreases with time (it is greatest during the first two years). (See Appendix A: Table T4)

### **5.1.6. Profile of those in treatment for the first time (compared to those who have ever been treated before)**

528. There seems to be no difference with respect to age, gender, or marital status between those who have been ever treated before and those being treated for the first time (among the treatment sample). Though living with family predominates in both samples, almost a quarter of those being treated for the first time compared to only 6.3% of those ever treated before are living alone ( $p < 0.05$ ). Moreover, those who are in treatment for the first time are more likely to be employed (significant  $p < 0.05$ ). (See Appendix A: Table T1)



529. Only 5% did not seek treatment before because of embarrassment and 3.6% because of cost; the major reason remains not perceiving the need to, but whether they really do not need to or do can not be ascertained. (See Appendix A: Table TC-11)

530. Heroin and cocaine seem to be the most commonly reported substances of admission, with fewer numbers reported for other substances; no significance was found between the two groups in terms of the substance of their admission. (See Appendix A: Table T2)

### **5.1.7. Profile of substance users per substance of admission**

531. Looking at the demographic profile of substance users (by their substance of admission), no sex or age differences were detected (although this could not be proven whether significant or not at the time of the survey for some substances), except for heroin whereby those admitted for heroin were more likely to belong to the younger age groups. (See Appendix A: Table T-5).

532. Although not significant, there seems to be a higher tendency for those admitted (for each of the substances alone) to have a university degree compared to those not admitted. (See Appendix A: Table T-5)

533. Interestingly, those admitted for heroin or for hashish/marijuana were more likely to be single, while those admitted for alcohol primarily were more likely to be married. (See Appendix A: Table T-5)

534. Occupational status was not a differentiating factor for the substance of admission, except in the case of cocaine, whereby those who were admitted for cocaine were more likely to be students or employed. (See Appendix A: Table T-5)

## **5.2. Street, ISF, and Prison samples**

### **5.2.1 Ever previous treatment**

535. Almost two thirds of the substance users in the 3 samples (street, ISF, prison) have never received treatment for their substance use; the most frequently reported reason for never seeking treatment being "not perceiving the need to" (though again the validity of that cannot be ascertained). (See Appendix A: Table C11)

536. The treatment setting for those who have ever been treated for substance use in each of the samples differed. While most of the ISF and prison samples had last received treatment in an inpatient setting, most of the street sample had been in rehab. Though treated in a different setting, all 3 samples have mostly been in treatment before 1999, pointing to the heterogeneity between the three groups and the treatment group (only 1 respondent from each of the ISF and street sample has received substance use treatment in the year 2001, and none of the prison sample). (See Appendix A: Table C11)

### **5.2.2 Reason(s) for admission**

537. While personal decision played an important role in making the substance users in the ISF and prison samples seek treatment, family pressure in the street sample played a much more important one, again pointing to the distinctness of this sample of substance users. ISF referral was uncommon, and only a minority of the street sample (2.8%) and none of the ISF and prison samples reported seeking treatment to 'run away from the ISF'. An important point not to be neglected at this level, and which ought to be addressed in any substance use campaign, is the role played by 'peer pressure' as a reason for seeking treatment among the street sample (though none of the respondents in the ISF and prison sample reported peer pressure as a reason). (See Appendix A: Table C11)

### **5.2.3 Substance of admission**

538. Irrespective of the mode of last treatment, the majority of the 3 samples had sought treatment for the use of heroin (alone or in combination with another substance), followed by cocaine, alcohol, and tranquilizers. (See Appendix A: Table C11)

### **5.2.4 Treatment compliance**

539. More than a third of each of the 3 samples (prison, ISF, street) was non-complaint to the last treatment they had received, with more than 75% of the street sample (86.1%) reporting so (again highlighting the uniqueness of the street sample). (See Appendix A: Table C11)

540. Reported reasons for non-compliance were variable, the most commonly reported ones for each of the 3 samples are: cost (ISF), 'disliking the center' (street), and to resume use (prison); nevertheless, the numbers are too small to draw definite conclusions. (See Appendix A: Table C11)



## 6. Law enforcement indicators

### 6.1. ISF sample

541. The most common reason for arrest was drug use (88.6%), whether alone or in conjunction with another offence. 13% of the ISF sample was arrested for drug dealing, which in the context of this study includes only the small-scale facilitators. (See Appendix A: Table C10)

542. Among drug-related reasons, the single most common substance of arrest is heroin followed by hashish/marijuana then cocaine (keeping in mind that each of these substances may have been reported alone or in combination with another substance). (See Appendix A: Table C10)

543. Half of the people arrested by the ISF are "repetitive" (55.1%, N=27 were arrested before for drug or non-drug related reasons) and half of the previous arrests occurred two or more years before. The most frequently reported reason for previous arrest is drug use (85.7%, N=18), followed by drug dealing (9.6%, N=2) (bearing in mind that each respondent may report more than one reason for arrest). The most commonly reported outcome of previous arrest is imprisonment, irrespective of the reason of arrest. (See Appendix A: Table C10)

544. Upon analyzing subgroups of ISF respondents by whether they had ever been previously arrested or not, the following results are noted: N signifies the number of respondents who belong to the corresponding category and who do not have missing responses on their history of arrest or the variable under study.

- \* Males and females were equally likely to have been arrested before, with higher prevalence reported among the older age categories compared to the younger (though statistical significance could not be established)
- \* Those who were previously arrested did not significantly differ from those who were arrested for the first time in terms of occupational and marital status, nationality, living arrangement, or ever living abroad.
- \* Looking at education level, though significance was not determined, there is a trend that as education level increases, prevalence of previous arrests decreases with a prevalence of 75.0% among illiterate

respondents, 60.0% among respondents with only an elementary level education, 58.3% among those with a secondary level education, and 22.2% among the respondents with a university level education.

- \* Upon analyzing the respondents by whether they had previously been treated for substance use disorders or not, it was found that those who had been treated before were more likely (though not significantly) to have been previously arrested (81.3%) compared to 45.2% of those never treated
- \* Whether the arrested individual was previously arrested or not was not related to the frequency of arguments with his/her parents within the 12 months preceding the survey (among those who reported arguing frequently 60% were previously arrested compared to 57.9% among those who reported non-frequent/no arguments). Additionally, those who have never gotten into a fight reported similar rates of previous arrests compared to those who have (50.0%).

### 6.2. Treatment, Street, and Prison samples

#### 6.2.1 Ever arrest

545. Except for the rehab sample (23.1%), more than one third of the Accueil, hospital, and street sample, and 2/3 of the prison sample have been previously arrested; 2/3 or more of each of the samples have been arrested for drug-related reasons. (See Appendix A: Table C10)

546. Though there were some recent arrests reported (5 individuals from the street and 19 from the Treatment sample were arrested in 2001), a considerable portion of the arrests (65% of the street and prison and 70.3% of the treatment) took place during the year 2000 and before. (See Appendix A: Table C10)

#### 6.2.2 Reason and substance of arrest

547. Among the drug-related arrests, drug use (alone or in combination with another drug related offense) was the most common reported reason for arrest. A lesser than expected (according to the impression given by the ISF officials during the FGD) percent of the substance users in all samples were arrested for drug facilitation (3.6%- 13.3%). (See Appendix A: Table C10)



548. The two most commonly reported substances of arrest are heroin followed by hashish/marijuana and/or cocaine. (See Appendix A: Table C10)

### 6.2.3 Outcome of previous arrest

549. Among drug related previous arrests, the most common outcome for those in the prison, street, Accueil, and rehab samples was imprisonment; as for hospitals, though a considerable portion (30.8%) were imprisoned, the majority were released without paying a fine, which may be explained differently (either they constitute a different population, or are innocent, or have contacts, etc...). (See Appendix A: Table C10)

550. The interesting thing is that very few to none (10% or less) of the arrested ever users (majority being arrested for drug use) were sent to rehab for treatment, a point that needs to be addressed, though this trend might be changing (based on the feedback of ISF officials during the FGD - see next page). (See Appendix A: Table C10).

## III. Results of Primary Data Analysis: Qualitative Results

551. As previously mentioned, Focus Group Discussions (FGD) and Key Informant Interviews (KII) were conducted with professionals and experts in the field of substance use. The results of these discussion sessions are presented in this section: treatment/rehab pertains to the feedback of participants in the FGD or KII sessions who work in the field of substance use treatment or rehabilitation, ISF to that provided by the ISF officials, Street to that provided by the street component coordinator, and finally, NGO to that provided by the different professionals working in different NGOs. The results are further compared to the findings obtained from the RSA study.

552. For each theme, the results (or impressions)

of the FGD or KII are presented in a Box,

followed by the RSA survey results (or data), the title of which is underlined. (For more information on the applied methodology, see Chapter 5).

### A) Profile of substance using populations (A comparative analysis)

## 1) Demographic information

### 1.1 Age

The impression of the majority of the participants (ISF, treatment, NGOs, and street) is that the age group composition of the substance users is young and getting younger (compared to the past).

553. Using RSA data, one cannot compare age of substance users across the previous years. Yet our data shows the current (at the time of the study) age distribution of the different substance using populations.

#### *ISF Data:*

554. Data on the age distribution of the population arrested for substance related crimes during the data collection period shows that 30% of those arrested are below the age of 25 years, with 7.5% below the age of 20 years (See Appendix A: Table C-1)

#### *Treatment/Rehab Data:*

555. Data on the age distribution of substance users in treatment or rehab at the time of the study shows that though a sizeable proportion are below the age of 25 (40.2%), they are still not the majority. (See Appendix A: Table C-1)

#### *Street Data:*

556. The age distribution of the population of respondents in the street sample shows that 18.6% of the sample is below the age of 25 years, with 3.9% below the age of 20 years (again the majority being above 25 years old). (See Appendix A: Table C-1)

The treatment/rehab participants had the impression that alcoholics are generally, aged between 35 and 45 years.

#### *Treatment/Rehab Data:*

557. All those admitted for alcohol (N=21) were 30 years or older with a mean age of 47.05 +/- 8.59 years old.



## 1.2 Gender

**ISF:** The ISF participants reported that those arrested for substance related crimes were mostly males

**Treatment/Rehab:** The general impression from the substance use treatment/rehab experts is that substance users admitted to treatment/rehab are more often males than females, but females are on the rise (the gender gap is narrowing), and more females are admitted to treatment for licit drug (medications) use.

**Street:** The participant noted that the substance users encountered through his work are mostly males with the male to female ratio being around 3:1, except in the case of MDMA “ecstasy”, whereby the gender differences are narrower.

**NGO:** The participants believe that among the substance users, males generally outnumber females, but again the gender gap is narrowing.

### **ISF Data:**

558. In concordance to the FGD report, our data show that the percentage of males among the arrestees sample was 94.1% (N=48).

### **Treatment/Rehab Data:**

559. Data from the RSA respondents shows that in fact males predominate in the treatment/rehab setting, with males constituting 86.91% (N=139) of the treatment/rehab sample. With respect to more females being admitted for licit drugs, data shows a trend (though not significant at the 0.05 level) for more females (19.0%) to be admitted to treatment for tranquilizers/barbiturates use than males (7.9%).

### **Street Data:**

560. Data shows that the great majority of respondents from the street sample were males: 82.5% (N=85). Furthermore, and in concordance with the impression reported, males (36.9%) and females (22.2%) did not significantly differ in the reports of XTC ever use.

## 1.3 Educational level

There was a general consensus among all participants (of all FGD and KII) that the substance users they encounter are more likely to be highly educated. The ISF participants agreed that those arrested for substance-related crimes are either high school or university students, the majority of the physicians (treatment/rehab) reported that substance users under treatment/rehab are also either high school or university students, and finally, the key informant working with the street population of substance users felt that his encounters in the field are generally with university students.

561. RSA data describes the respondents' highest level of education attained by the time of the survey, and does not necessarily portray current enrolment in either high school or university setting. Therefore, the association between age (at time of study) and education (highest level attained) was explored, which would give the closest picture to whether those who reported HS or university education are currently students or not.

### **ISF Data:**

562. It was noted that as the respondents' educational level increased, their mean age decreased significantly, to the extent that it seems the sample is dichotomized into a young university-level educated group and an older less educated one. Though it cannot be ascertained, it seems that those who have reported university-level education may have probably been at the time of the study enrolled in university- or have recently graduated (mean age: 22.25±/-2.96, range 19-28). More specifically, the mean age of the respondents among the illiterate is (39.67 ± 13.19, N=6), elementary (38.35 ± 14.04, N=17), secondary (31.56 ± 5.88, N=9, range 23-41 years), and university (22.25 ± 2.96, N=8, range: 19-28 years). Thus, there was a significant relationship between age of the respondents and their educational attainment, whereby those who have reported a university or secondary education were quite young at the time of the study.



### **Treatment/Rehab Data:**

563. The same analysis was followed for the treatment sample. It was found that the mean age of those who reported university-level education was 25.68+/-7.15, with 50% of them being less than 20 years old (thus, were most likely university students at the time). The mean age distribution by level of education is as follows ( $p<0.05$ ): Illiterate ( $45.00 \pm 7.81$ ), elementary ( $37.27 \pm 11.77$ ), secondary ( $29.38 \pm 10.13$ ), and university ( $25.68 \pm 7.15$ , range: 18-55 yrs. but the 50<sup>th</sup> percentile is below 20).

### **Street Data:**

564. Data from this population shows that those who reported university-level education were significantly younger than those with a lower level of education, though older than university-level respondents in the other samples (ISF and treatment). The mean age distribution by level of education ( $p<0.05$ ): illiterate (none), elementary ( $36.21 \pm 6.79$ ), Secondary ( $32.37 \pm 7.81$ ), university ( $30.31 \pm 8.62$ , range 19-44, 50<sup>th</sup> percentile 28 and below).

The treatment/rehab participants reported that patients seeking alcohol use disorders are not necessarily highly educated or university students.

### **Treatment/Rehab Data:**

565. It was noted that the reported educational level and admission for alcohol were significantly correlated; those with a higher education level were less likely to have been admitted for alcohol, compared to those with lower education levels (see below):

Education	N	%	OR
Illiterate	3	60.0	1.00
Elementary	7	16.7	0.13*
Secondary	5	11.6	0.09*
University	6	8.3	0.06*

OR: Odds Ratio    \*: statistically significant ( $p<0.05$ )

### **1.4 Distribution of substance users**

ISF: Substance users are arrested in all four branches of the Drug Enforcement Office, and thus almost from all over Lebanon.

Treatment/Rehab: Among the Treatment/Rehab FGD participants, there was a general agreement that substance users come to the centers/hospitals from all areas in Lebanon.

Street: Substance users encountered reside in all areas of Lebanon.

NGO: All the participants believe that substance use is a nation wide phenomenon and is not restricted to certain areas in Lebanon

### **ISF Data:**

566. The distribution of respondents from the ISF survey is as follows: Beirut: 61.5% (N=32), Beka'a: 19.2% (N=10), Tripoli: 11.5% (N=6), Sidon: 7.7% (N=4)

### **Treatment/Rehab Data:**

567. Keeping in mind that the rehabilitation center and the hospitals are all located within the vicinity of greater Beirut, the following residential distribution was reported by the treatment/rehab sample: Beirut: 47.7% (N=74), Mount Lebanon: 36.1% (N=56), Tripoli: 6.5% (N=10), South: 5.2% (N=8), and the Beka'a: 4.5% (N=7).

### **Street Data:**

568. Even though the street interviewers were not able to access some areas in Lebanon to seek substance users, it is still worth showing the distribution of the respondents' areas of residence. Our data show that the areas of residence of the substance users interviewed through street work were distributed as follows: Mount Lebanon: 44.1% (N=45), Beirut: 36.3% (N=37), Tripoli: 14.7% (N=15), South: 3.9% (N=4), and the Beka'a: 1.0% (N=1).

### **1.5 Socio-Economic status**

ISF: No Comment (the topic was either not discussed or the participants did not have a comment on it)



Treatment/Rehab: On the one hand, most participants thought that substance users do not belong to a specific socio-economic group; they belong to all walks of life. The participants added, however, that the substance type is a factor of their socio-economic status; in other words, that the latter determines what type of substance they use. On the other hand, substance users who seek treatment are usually of middle to high economic status considering that treatment is often costly and not everyone can afford it.

Street: The participant believes that persons of different socio-economic levels use different drugs. As an example, the participant noted that members of the low socio-economic status use low-grade cocaine and crack cocaine, while members of the medium to higher socio-economic status are able to afford and use synthetic substances such as ecstasy.

NGO: Again, the impression of this group of participants was that types of substances used vary by socio-economic status so that people of different status use different substances.

## 2) Drug related information

### 2.1 Commonly seen drugs

ISF: The ISF participants reported that individuals arrested for substance related offenses most commonly use heroin, hashish/marijuana, and cocaine. Furthermore, the participants noted that medicinal pills use is on the rise and so is Benzhexol use in prisons. On the other hand, ecstasy use was perceived as uncommon.

Treatment/Rehab: Ecstasy and medicinal opiates are on the rise.

Street: The participant reported on the newly emerging drugs and the drugs that are on the rise. Accordingly, codeine and other medications use are on the rise, and additionally, the young population is increasingly inhaling thinner.

NGO: Most participants in this FGD have noticed an increase in the use of prescription drugs such as medicinal opiates and Benzhexol (especially in the prison setting) without prescription. Many reported that XTC use is also increasing. Furthermore, some of the participants noted that alcohol use has reached an alarming rate, making it as problematic as other drugs.

### ISF Data:

569. Data shows that the arrested individuals had most commonly used (excluding alcohol) heroin, hashish/marijuana, and cocaine, (respectively) within the last 12 months and last 30 days preceding the arrest. None of the respondents reported using XTC during the past 12 months preceding the survey. (See Appendix A: Table C3A & C4A).

570. On another note, and considering that the participants' impression is likely to have been affected by the substances most commonly involved in drug-use-related arrests, the "substance of current arrest" was looked into and it was found that among the 39 respondents who were arrested for substance use, more than 2/3 (68%, N=17) were arrested for heroin, followed by hashish/marijuana (24%, N=6), then cocaine (8%, N=2) and legal medications (8%, N=2). This should be interpreted in light of the fact that each person may have reported more than one substance of arrest and that 14 persons did not report on their substance of arrest.

### Treatment/Rehab Data:

571. Comparing XTC and medicinal opiates use across different time periods falls beyond the scope of the RSA study; however, for an elaborate picture of current use, see Appendix A: Tables C2, C3A & C4A.

### Street Data:

572. Again, it cannot be ascertained whether the use of certain substances is changing or not based on the RSA cross-sectional data. For detailed results on the pattern of use of substances, lifetime use, last 12 month-use, and last 30 day-use, see Appendix A: Tables C2, C3A & C4A.

### 2.2 Age of onset

Impression: All the participants from all FGD and KII sessions generally agree that the age of onset of substance use has been declining and is quite low.



### RSA Data:

573. Again, given the cross-sectional design of the RSA study, it can not be ascertained (using RSA data) whether the age of onset of substance use is in fact declining or not. Nevertheless, it was found that the age of the respondent at the time of the survey and his/her age at time of experimentation with each substance was positively correlated (statistically significant for some substances, while not so with others). This means that “older” substance users reported older ages of onset of substance use, and had the trend not changed, then older and younger substance users ought to have reported similar ages of onset of substances.

574. Below is a tabulation of the results obtained for Pearson correlation coefficient (r) reported for each population by order of strength of the association. The symbol “\*” corresponds to a significant association of p-value<0.01.

Population	Substance	N	Pearson-r
ISF <sup>+</sup>			
	Hashish/marijuana	18	0.731*
	Heroin	20	0.676*
	Tranq/Barb	8	0.635
	Cocaine	10	0.517
	Hallucinogens	3	0.824
Treatment/rehab			
	Medicinal Opiates	72	0.899*
	Tranq./Barb	127	0.725*
	Heroin	114	0.698*
	Hallucinogens	60	0.542*
	Cocaine	123	0.499*
	Ecstasy	61	0.396*
	Hashish/marijuana	136	0.378*
	Stim./Amph		0.337
Street			
	XTC	34	0.978*
	Medicinal Opiates	71	0.783*
	Stim./Amph	17	0.695*
	Hallucinogens	20	0.598*
	Cocaine	91	0.496*
	Heroin	74	0.387*
	Tranq./Barb	89	0.101
	Hashish/marijuana	97	0.017

<sup>+</sup> : Correlation was not computed for XTC and Amphetamines/stimulants because at least one of the variables was a constant.

### 2.3 Interval between onset of use and addiction

#### ISF: Not discussed

Treatment/Rehab: The general impression, though consensus was not reached on this point, was that the duration between onset of use and addiction is much shorter than it used to be in the past.

NGO: Participants from various NGOs have noticed throughout their work that it has recently been taking less time for substance users to reach the state of dependence.

#### Treatment/Rehab Data:

575. Again, given the cross-sectional nature of the RSA survey, it can not be ascertained whether it is taking people less time to move from being occasional users to addicts; it is important to note at this point though that it may be that “time to addiction” is not decreasing, but rather that people are seeking treatment earlier nowadays, which is quite positive. The mean interval time between onset of use and the age at first treatment (per substance of admission) at the time of the survey (only among those who were in treatment for the first time at the time of the survey) was as follows:

Interval between onset of use and first treatment among first time admission for:	
Substance	Mean +/- SD (yrs)
Heroin (N = 29)	5.93 +/- 5.99
Cocaine (8)	9.75 +/- 10.46
Alcohol (N=8)	27.75 +/- 12.73
Alcohol and are Alcohol abusers (N=7)*	31.00 +/- 9.50
Alcohol and are Alcohol dependant (N=3)	33.33 +/- 7.37

\* Note: One of the respondents who were admitted to treatment for alcohol use did not fulfill the criteria for neither alcohol abuse nor dependence. The respondent is a male who started drinking alcohol at the age of 50 and entered treatment for alcohol use at the age of 55 years (which accounts for the discrepancy between the interval among those generally admitted for alcohol (27.75+/-1.73) and those admitted for alcohol use and abuse (31.00+/-9.50).



## 2.4 Poly-substance use

All of the participants in the NGO FGD, the Street Key Informant, as well as the majority of the participants from the Treatment/rehab FGDs felt that substance users are in general poly-substance users (with a tendency for younger substance users to be more so- as reported by the participants in the Treatment/Rehab FGD) The ISF participants had no comment with respect to this point.

576. In an attempt to investigate this in the RSA surveys, we looked at the use of more than one substance among the substance users within the 12 months period preceding the study. The results show the following:

### *ISF Data:*

577. 80.8% (N=70) of the ISF sample could not be conclusively categorized into mono-, poly-, or never drug users because they had too many missing replies. Of the respondents who had sufficient responses for this categorization (18.2%, N=10), 70.7% were poly-drug users.

578. 88.9% (N=144) of the Treatment/Rehab sample are poly-drug users.

### *Street Data:*

579. 89.1% (N=90) of the respondents from the street sample reported using 2 or more substances (excluding alcohol and nicotine) at least once during the past 12 months.

## 2.5 IV use

The participants, in general, had conflicting views with respect to the extent of IV use among substance users..

ISF: The ISF officials perceive that IV use in Lebanon is relatively high.

Treatment/Rehab: All the participants perceive IV use among substance users as low.

Street: The participant stated that the majority of substance users fear the use of IV.

NGO: No consensus was reached among the participants with respect to percentage of IV use; some feel that it is low, while others believe it is high.

### *ISF Data:*

580. The data shows that 43.8% (N=21) of the ISF sample had ever used IV, among which 33.3% (N=7) reported ever sharing the needles. Further analysis shows that 69% (N=20) of heroin ever users had ever used IV.

### *Treatment/Rehab Data:*

581. Data shows that more than 1/3 (39.4%, N=63) of the substance users admitted to treatment have ever used IV, almost 1/3 of which have ever shared needles. Among the heroin users, 55% (N=60) have ever used IV.

### *Street Data:*

582. Street data shows the lowest prevalence of IV use (26.7% N=27) compared to the other surveys, but the highest prevalence of needle sharing (60.3%, N=17). Again, upon looking at IV use among heroin ever users, it was found that more than 1/3 of them (35.1%) had ever used IV.

## 2.6 Availability of substances

ISF: Participants believe that drugs in Lebanon are easily available

Treatment/Rehab: The majority of the participants feel that drugs in Lebanon are easily available.

Street: The perception noted here is that substances were more available in the past than they are now.

NGO: According to most of the participants, substances are becoming increasingly available, especially to university students.

583. The RSA surveys incorporated questions assessing the respondents' perception of the availability of substances.

### *ISF Data:*

584. The following results show the percentages of substance users under arrest who reported perceiving the accessibility to a certain substance as "very easy": hashish/marijuana (31.8%), tranquilizers/ barbiturates (23.5%), heroin (30.0%),



cocaine (5.0%), medicinal opiates (23.5%), XTC (5.9%), amphetamines/stimulants (6.7%), and hallucinogens (12.5%). (See Appendix A: Table C12)

#### **Treatment/Rehab Data:**

585. The following results show the percentages of substance users in treatment (Accueil, rehab, or hospital) who reported perceiving the accessibility to a certain substance as “very easy”: hashish/marijuana (71.4%), tranquilizers/barbiturates (62.5%), heroin (53.9%), cocaine (52.3%), Medicinal Opiates (44.6%), XTC (21.8%), amphetamines/stimulants (19.3%), and hallucinogens (16.8%). (See Appendix A: Table C12)

#### **Street Data:**

586. The following results show the percentages of substance users from the street sample who reported perceiving the accessibility to a certain substance as “very easy”: hashish/marijuana (80.6%), tranquilizers/barbiturates (68.0%), heroin (61.2%), cocaine (48.5%), Medicinal Opiates (55.9%), XTC (8.9%), amphetamines/stimulants (8.8%), and hallucinogens (4.9%). (See Appendix A: Table C12)

### **2.7 Substance combinations**

Some participants were asked about what they thought the most common combination of substances among poly-substance users.

ISF: No comment.

Treatment/Rehab: The participants reported that mixing of alcohol with drugs is common, something that was not so common in the past.

Street: The participant reported having noticed medicinal opiates being generally very commonly present in substance combinations (especially Dulsana and beer).

NGO: No comment.

### **2.8 Substance price and purity**

All participants seemed to agree that there is an increased availability in Lebanon of cheaper, less pure substances, especially the availability of impure and cheap heroin.

### **2.9 Users’ substance-related knowledge**

All the participants agree that the substance users they encounter are generally quite knowledgeable about substances, especially with the introduction of the Internet and the availability of media sources, though the risk of sometimes the information being inaccurate remains.

## **3) Factors of association**

587. FGD participants were asked about their impression regarding the factors (social, individual, environmental, etc.) that they feel are possibly associated with substance use. The factors that were mentioned spontaneously, or were stressed, or gained the consensus of all the participants in one FGD session are presented as “primary”, while those that were mentioned but not stressed, or not marked as important, or did not win the consensus of the participants are noted as “secondary”. Given the cross-sectional nature of the study, and the fact that our target population in this case is a substance using one (lack of a comparison group), one cannot ascertain the presence of an association between each of the factors surveyed and substance use. For a general profile of the respondents with respect to their social milieu and individual factors (i.e. religious belief, foreign residence, etc.) See Appendix A: Table C-1.

ISF: According to the ISF officials, the primary factors associated with substance use are peer pressure and disrupted family atmosphere while the secondary ones include shoplifting, prostitution and gambling



Treatment/Rehab: There was a general consensus among the treatment/ rehabilitation experts that primary factors include peer pressure, social conformity, lack of motivation, and lack of "satisfaction". In addition, there was a consensus among the rehabilitation experts that diminished spiritual beliefs and concerns for social norms played a strong role in substance use. All agreed that the Lebanese war is not associated with substance use.

Street: The primary factors mentioned were peer pressure and social conformity; prostitution was also mentioned as a secondary factor.

NGO: The primary factors associated with substance use reported by the participants were disrupted family atmosphere, diminished spiritual beliefs and ethics, and diminished family values. As secondary factors of association, personal and emotional problems, lack of motivation and life stressors, and lack of guidance at school were mentioned. The issue of the Lebanese war being associated with substance use was highly disputable among this group of participants.

#### 4) Hashish/marijuana: a gateway drug?

588. Whether hashish/marijuana use leads to the use of harder drugs or not is a controversial issue in the literature. To study the presence of a causal relationship, many factors beyond the scope and cross-sectional structure of this RSA study must be analyzed. Thus, a conclusion regarding this issue could not be reached.

Based on FGD and KII, different opinions were given.

ISF: The ISF officials had no comment with respect to this issue

Treatment/Rehab: No consensus was reached among the treatment/rehab professionals on whether hashish/ marijuana use necessarily leads to the use of harder drugs, or not.

Street: The street coordinator believes that hashish/marijuana use does not lead to the use of harder drugs.

NGO: Most of the participants believe that hashish/marijuana is a substance that leads to the use of "harder" drugs.

## 5) Treatment Information

### 5.1 Most common substance of admission

ISF: No comment

Treatment/Rehab: All the treatment/rehab professionals agree that the substance most commonly responsible for admission to treatment or rehabilitation is heroin, and that alcohol is common among the older population.

Street: The participant reported that the most common substance of admission to substance use treatment is heroin

### RSA Data:

589. According to RSA data, the most commonly reported substance of admission to treatment (alone or with another substance) in all substance using samples is heroin. (See Appendix A: Table C-11).

### 5.2 Reasons for seeking treatment

ISF: No comment

Treatment/Rehab: The majority of the participants agree that family pressure plays nowadays an important role in the substance users' decision to seek treatment; people come less out of personal determination. Additionally, participants working in the rehab center perceive coercion by friends and ISF to be also common.

Street: The participant reported that substance users are seeking treatment less often because of personal conviction and willingness and more due to pressure and coercion

### Treatment/Rehab Data:

590. RSA data shows that personal willingness and family pressure are the two most commonly reported reasons for admission to treatment or rehab, keeping in mind that more than one reason may have been reported. (See Appendix A: Table C11)



### **Street Data:**

591. The most frequently reported reason for seeking treatment is family pressure (66.7%), followed by peer pressure (27.8%), then personal determination (19.4%), and finally referral by the ISF and running from ISF (2.8%, each).

### **5.3 Reasons for NOT seeking treatment**

ISF: No comment

Treatment/Rehab: The participants mentioned some reasons that most commonly prevent substance users from seeking treatment, and they are: embarrassment, not needing treatment, cost, and fear of being reported to the ISF.

Street: The participant reported that the reason why substance users do not seek treatment is most often either because they “do not perceive the need for treatment” or because they are afraid that their peers will perceive them as traitors and alienate them (i.e. social/group conformity).

### **Treatment/Rehab Data:**

592. Upon asking those seeking treatment for the first time why they had not sought treatment previously, more than half reported that they “did not need to” (55.0%, N=30); the second most commonly reported reason for not previously seeking treatment was “did not know of any treatment centers”, which was reported by 22.0% (N=12) of first time treatment seekers (keeping in mind that each respondent may have reported more than one reason).

### **Street Data:**

593. The most frequently reported reason for not seeking treatment among this substance using population is in fact the perception that they “did not need to” (43.5%, N=27), followed by “did not trust the treatment center” (25.8%, N=16). (See Appendix A: Table C-11)

### **5.4 Treatment compliance**

#### **5.4.1 Compliance rates:**

ISF: No comment

Treatment/Rehab: Professionals working in the rehab center expressed that compliance to their rehabilitation regimens is quite low; about 30% leave the program before its completion (compliance rate = 70%)

### **Treatment/Rehab Data:**

594. Among those who reported being previously treated, 35.6% (N=32) were non-compliant to treatment. More specifically, the following compliance rates were reported based on the previous mode of treatment: 34.8% of those who had been in an inpatient setting, 50% for those who had received treatment on an outpatient basis, and 33.3% among those who had been in rehab. (See Appendix A: Table T4)

595. Upon further analysis by gender and age, no gender differences were found (65% of males and 55.6% of females were non-compliant) and no age differences either (mean age of those who were non-compliant: 28.47 +/- 8.67 and compliant: 30.64 +/- 10.65).

#### **5.4.2 Reasons for non-compliance:**

ISF: No comment

Treatment/Rehab: The participants working in the rehab center believe that substance users under rehabilitation quit the regimen mainly because of the fear of change, or because they had entered rehabilitation through coercion and not by their free will, or because they feel that the time spent, though not complete, was sufficient.

Street: No Comment

NGO: No Comment

### **Treatment/Rehab Data:**

596. Data specific to the substance using population in treatment shows that respondents who had not do so complied to previous treatment mostly did so because they either wanted to resume substance use (50.0% of outpatients, 40.0% of rehab,



and 36.4% of hospitals) or they were dissatisfied with either the treatment center or the treatment itself; one should keep in mind that due to the small numbers, no solid conclusions can be made (See Appendix A: Table T4)

597. It is worth noting that the percent compliance did not significantly vary by the reason for admission to treatment/rehab; among those who entered into previous treatment out of their own personal decision and will, 74.5% (N=35) reported non-compliance, and among those who were coerced in some form (family pressure, peer pressure, runaway from ISF, referral by ISF or any combination of the aforementioned) 54.1% (N=20) reported non-compliance, and finally among those who reported both coercion and personal willingness as a reason for their previous treatment, 50.0% (N=3) reported non-compliance.

#### 5.4.3 Treatment success rates:

ISF: The question was not posed.

Treatment/Rehab: The participants from the rehabilitation center have observed that success rates reach up to 60-70% for patients who complete the rehabilitation regimen.

Street: The question was not posed.

NGO: While many of the participants were not sure of the success rates of substance use treatment and rehabilitation, one participant perceived it to be no more than 15%.

#### 5.5 Numbers seeking treatment

ISF: The question was not posed.

Treatment/Rehab: The majority of participants noted that more and more people are seeking treatment for substance use. This observation was especially stressed by the rehabilitation staff who claim that if the rate of patients admitted to rehabilitation does not decrease until the end of the year, they will have received by the end of the year 2001 as many patients in one year as in the previous eleven years combined.

Street: The participant believes that there is an increase in the rate of substance users admitted to treatment and rehabilitation.

NGO: Again, the participants who are in contact with substance users admitted to or seeking treatment reported that they have noticed an increase in users seeking treatment.

#### 5.6 Factors affecting treatment

ISF: The question was not posed.

Treatment/Rehab: According to the participants, many factors play a role in affecting the course and effectiveness of treatment. The main factors that were recurrently mentioned were the complex etiology of substance use, the reason substance users seek treatment (whether under coercion or not), the users' environment (family and friends), and their involvement in the treatment process.

Street: The question was not posed.

NGO: The question was not posed.

#### RSA Data:

598. RSA data show that non-compliance rates did not differ between those who were coerced into treatment and those who entered willingly (refer to "reason for non-compliance"). Data on the other two mentioned reasons (complex etiology and user's environment) were not assessed.

#### 6) Issues related to the Law

##### 6.1 Referral to treatment/rehab centers

As reported by many of the participants, a new law on drugs was passed in 1998 that considers a drug addict as a sick person rather than a criminal. Ever since, there has reportedly been a trend among the ISF officials and judicial sector to try and get drug addicts treated rather than punished. The ISF officials reported (during the FGD) their efforts on their part made to not punish drug users, but rather to help them get treatment by trying to refer them to treatment or rehabilitation centers.



599. The RSA data highlight the substance users' history of arrests, and the outcome of the arrests, from which one can build an idea of how many are being referred to treatment/rehab centers.

- \* Among the ISF sample, 55.1% (N=27) were previously arrested (81% of which for drug use), none were referred to any treatment/rehab center.
- \* Among the Street sample, 35.9% (N=37) were ever arrested, 31.4% (N=11) for drug use; none were referred to any treatment/rehab center. (9 were imprisoned, 1 released, 1 awaiting trial)
- \* Among the Treatment/rehab sample, 46.2% (N=30) of those who were arrested were arrested for drug use (5 before 1998, and 25 after 1998). 40% (N=2) of those arrested before 1998 were referred to a treatment/rehab center, while 4.2% (N=1) of those arrested after 1998 were referred to a treatment/rehab center (15 were imprisoned, 14 paid a fine, 5 were released, 1 paid a fine and sentence was suspended, and 1 paid a fine and was imprisoned)

## 6.2 Definition of a 'drug dealer'

Concern has been expressed by the participants during the FGD sessions regarding the scope of the definition of a drug dealer. As deduced from the current Law on drugs, drug dealing encompasses a wide range of acts, including facilitation, pushing, and wide-scale selling. Consequently, a person who merely helps a friend in acquiring some illicit drug is liable to the same punishment as a large scale "drug lord". The main concern here is that too many persons will be labeled as drug "dealers" and become liable for "harsh" punishments.

600. Data from the RSA study, and more specifically that relating to Arrest History, tackled the reasons for arrest, and accordingly:

- \* 13.6% (N=6/44) of the currently arrested in the ISF sample are arrested for drug dealing
- \* 62.9% (N=17/27) of the ISF sample were previously arrested for drug related reasons (8 prior to 1998 and 9 after 1998); of those arrested prior to 1998, 25% (N=2) were accused of drug dealing, and of those

arrested after 1998 none were accused of dealing.

- \* 67.6% (N=25/37) of the Street sample were previously arrested for drug related reasons (10 prior to 1998 and 15 after 1998). Of those arrested prior to 1998, 20% (N=2) were arrested for drug dealing. Of those arrested after 1998 7.7% (N=1) were accused of dealing.
- \* 70.8% (N=46/65) of the Treatment sample were previously arrested for drug related reasons (7 prior to 1998 and 39 after 1998). Of those arrested prior to 1998, none were arrested for drug dealing. Of those arrested after 1998, 12.8% (N=5) were accused of dealing.

## 6.3 Reporting of non-compliant substance users

According to the ISF officials during the FGD, the current Law on drugs gives a substance user under substance use treatment / rehabilitation immunity against prosecution. However, treatment/rehab centers that cater for substance use are all private and reluctant to report patients to the ISF (a duty dictated in article 189 of the Lebanese Law on Drugs). Consequently, ISF officials have expressed their concern that substance users may enter treatment/ rehab centers to avoid being arrested then leave the center before the regimen is complete, thus escaping both prosecution and treatment.

601. RSA data on the reasons for seeking treatment among those previously treated shows that:

- \* Among the ISF sample (N=17), none of the respondents reported having done so to escape from the ISF
- \* Among the Street sample, 2.8% (N=1/36) did so to escape prosecution and did not complete the treatment.
- \* Among the Treatment/rehab sample, 11% (N=12/109) of the currently admitted substance users went into treatment/rehab to run from the ISF. Of those previously admitted to treatment, 6.4% (N=6) reported doing so to run from the ISF. Of these, 2 did not comply with the treatment, while 4 of them reported completing the treatment.



## B) High school principals: KII

### 1) Measures taken for awareness and prevention of substance use in schools

602. The two principals have different ways for reaching out to students and discussing with them different issues, including substance use. One school has a resident counselor for the students to visit (at their leisure) for advice, guidance, or just a chat. The other school has a program whereby a physician makes one-hour weekly visits to classes and discusses social or other issues with the students; topics are either raised by the students themselves or the physician. In this program, the discussions are interactive whereby the students are sometimes responsible for preparing material pertinent to the topic of discussion. In all cases the discussions are confidential and unless detrimental to the student's well being, the counselor does not report the information to the administration.

603. In both high schools, organizations concerned with substance use related issues are sometimes invited to conduct prevention and awareness seminars and discussion sessions.

### 2) Drug-related information

#### 2.1 Incidents of drug use

604. Both participants feel that drug use among high school students is not very high, but that it has increased during the past years, before which they think drug use was more restricted to militiamen. One participant claims to have only heard of two incidents of drug use among the high school students (in her school) in the past three years.

#### 2.2 Incidents of alcohol use

605. Both participants believe that alcohol use is more prevalent than it was 10 years earlier. They generally attribute alcohol use to the students' reluctance to go out and pay for dinner and their preference to spend less by choosing to only drink alcohol; the accessibility of alcohol at "pubs" for under-aged adolescents, and the Lebanese society's permissive attitude towards alcohol use does not help the situation either (according to them).

### 3) Factors of association

606. Upon asking the two participants what they thought some of the factors that could prevent substance use among high school students were, they both agreed upon "forbidding students from leaving the high school premises during the day". Such a ban protects students from drug pushers; one principal explained that this ban was initiated after the school administration was notified that drug dealers roam around high school campuses in order to push students into buying substances from them.

607. Another school regulation that one of the principals believes could possibly help curb the substance use situation in high schools is the ban on cigarette smoking on campus; both schools do not allow their students to smoke on campus.

608. One of the participants further added that substance use, especially drug abuse, is mainly related to emotional and family problems; s/he recounts an instance whereby a substance-using student was under the care of a physician for personality disorder problems.

609. Another factor possibly associated to substance use (as per one of the participants) is "returning to Lebanon after a long period of living abroad". S/he believes that returning expatriate students may be at a higher risk of using substances because they may be more "open minded" or may be due to an identity crises present among the returning students who had been away from their families for a long time, and who do not feel in touch with family beliefs.

### 4) Staying out late

610. Both participants expressed concern about their students' habits of going out more often than students their age did in their past; this is especially worrisome in the weekends when high school students are intentionally "seduced" with offers of cheap drinks and free cigarettes.



# Discussion



# Chapter Seven

## I. Drug Use in the Academic Sector

611. "One of the worst aspects of the drug problem is that it affects primarily those who are most vulnerable, such as the youth" (UNDCP, 1998). Adolescence and young adulthood is a period of transition, a time when young people face the developmental task of differentiating themselves from parents and family and struggling for independence as they search for identity. It is a crucial period, during which they become susceptible to the allure of drugs, and may begin experimentation with substances, including illicit, as part of their innate curiosity and attempts to quench their thirst for new experiences (UNDCP, 1998).

### A) Most commonly used substances in the academic sector

612. In concordance with international literature (Johnston LD et al, 2000; Yang et al., 1998; Odgers et al., 1997; Kandel et al., 1996;), the 3 most commonly used substances among our sample of high school students (in the order of prevalence of ever use) are alcohol, nicotine, and cannabis (hashish/marijuana), hashish/marijuana being the most commonly used illicit drug among this young segment of the population.

#### 1. Alcohol

613. Alcohol, the most frequently used substance in the Lebanese high school (HS) and university sample, warrants close attention, as its use within this young at risk population is a less socially stigmatized phenomenon in Lebanon, compared to the use of other substances. About half of the HS and the university sample were alcohol users at the time of the survey (80% of the ever alcohol users in both samples), a portion comparable to that observed among the Western counterparts (Kandel, 1996 and Johnston LD et al, 2000), as well as Far Eastern ones (Yang et al., 1996). More importantly, and keeping in mind the students respective mean ages, 11.0% of the alcohol ever users in our HS and 12.9% of the university sample were diagnosed with DSM-IV defined alcohol abuse (keeping in mind that the recurrence within a 12 months period criterion was omitted in the university sample).

614. Alcohol was not only the most commonly used drug, but also the first substance students reported experimenting with (mean age of onset of first use: 13.26 yrs  $\pm$  2.78 and 16.13 yrs  $\pm$  2.64, in

high-school samples and university sample, respectively). Though it is true that many drinkers at this stage may reduce their consumption as they grow older in order to conform with the expectations and obligations of adulthood, still there is some evidence that the age at initiation of alcohol use is associated with a greater risk of abusive consumption, and the development of serious problems, including alcohol disorders (DeWit et al., 2000; NIH-NIAAA, 1998, Rhodes et al., 1997), not to mention the increased likelihood, according to some, of experimenting with a variety of illicit substances, including problematic forms of drug use (Rhodes, 1997). In concordance with the literature (DeWit et al., 2000) the HS data shows that age of onset of alcohol use, particularly between the ages of 11-14 years, is significantly related to alcohol abuse among these HS students (8.6% of abuse among students who started alcohol use below the age of 10, 14.2% of abuse among those who started between 11-14 yrs, and again 8.7% of abuse among those 15 yrs of age and above). The fact that the highest prevalence of abuse was not observed among the earliest starters was also in conformity with what was reported by DeWit et al., that the "risk profile for the earliest starters did not differ significantly from the profile observed for late starters".

615. The dynamics of the association between age and alcohol use related problems are still correlational rather than causal and the truth of the matter may be that age itself may be a confounder, the interplay of individual and social factors that are bringing about substance use earlier than would normatively be the case. Nevertheless, and from a public health perspective, this finding must not be overlooked, especially if delaying the early use of alcohol may possibly negate the occurrence of later problems, and thereby reduce individual suffering and avert social, economic, and health related costs.

Early age of onset of alcohol ever use is linked to later alcohol problems, but it might be the epiphenomenon of a prior problem and not a direct cause-to-effect issue.

616. The fact that so many high school students are alcohol users may be a two-fold problem given the possible risk of them moving on to the use of harder substances. Despite the controversy, there are some who believe that alcohol is a gateway drug for the use of other substances, the stages being four: first alcohol (beer or wine), then nicotine, then cannabis, and then finally other illicit substances



(Weinberg et al., 1998; Bukstein et al., 2000; and Chen K et al., 1995). Others, on the other hand, suggest that the gateway theory may in fact be reflecting norms prevailing among youths at a specific time and place, and that linkages between the stages are far from being causal (Golub, 2001).

## 2. Nicotine

617. Experimentation with alcohol was followed by ever regular use of cigarettes (second lowest age of onset), and is also the second most common substance to have ever been used (after alcohol). It is worth noting here that HS students, compared to the university students, reported a lower consumption of cigarettes per day (during the times they smoked most), thus exhibiting a possibly lighter pattern of smoking than students in the university population. This may be possibly due to the fact that university students are no longer under direct parental supervision, and are entering an environment where the use of "legal" substances, namely alcohol and nicotine, are more normative (Prendergast ML, 1994); in other words, they have more opportunity to purchase, and obviously more time to smoke, and lastly may be deeper into their dependence. Compared to the results of the US Monitoring the Future Study, both samples reported relatively lower prevalence of current regular smoking (US MTF: 20.6%).

## 3. Hashish/marijuana

618. Hashish/marijuana was the third most commonly used substance among the HS population, and the first most frequently used illicit drug, in concordance with international data from the US MTF and the ESPAD surveys (EMCCDA, 2000 and Johnston LD et al., 2000). Hashish/marijuana ever use is relatively high among the high school students in Lebanon (8.6%) compared to the ever use of other illicit (as well as licit substances), but lower than those reported by their Western counterparts (US MTF-2000: 58% of the 12<sup>th</sup> graders, and UK ESPAD-1998: 25%), a finding that also held true for the last 12 months and last 30 days prevalence. The prevalence (ever use, last 12 months, or last 30 days use) of illicit drug use among such a young population is significant and informative per se, but it is also important to learn about and monitor the frequency of use of substances, to distinguish one-time users from occasional ones. According to the RSA data, more than 50% of the ever users in the HS and university samples have

used hashish/marijuana for more than five times, and about 20% of the hashish/ marijuana ever users in both samples reported daily use of the substance for a period of at least two weeks.

619. While hashish/marijuana was the third most commonly used substance among the HS sample, tranquilizer ever use (13.1%) was more prevalent than hashish/marijuana (8.8%) in the university sample. Additionally, lifetime rates of tranquilizer use among the HS sample not that far off from those reported by the US sample (3.3% compared to 8.9%, respectively). Tranquilizer use among this young population "for no medical purpose and no doctors' prescription" calls for further exploration and questions on tranquilizer use in epidemiological survey really determine level of abuse as witnessed by researchers.

## 4. Heroin and Cocaine

620. Cocaine ever use is much lower than that reported by students in the US, whereby 8.6% of the 12<sup>th</sup> graders (8.4% university students) in the MTF study have reported cocaine ever use compared to 1.7% of the HS sample and 1.2% of the university sample in Lebanon. Despite the seemingly lower prevalence among students in Lebanon, a few other findings that could be potentially serious ought to be kept in mind: HS students, compared to the university students, reported a higher prevalence of cocaine ever use, last 12-month use, last 30-day use, more than five time-use, and daily use for at least two weeks. Despite the differences in methodologies applied and the extent of veracity in the students' replies, which may impede conclusive comparisons, these findings still ought to be carefully considered in light of the fact that a younger student population seems to be reporting a more frequent use of cocaine.

621. Similarly, heroin use among this young and at risk population demands careful investigation and monitoring, especially heroin ever use in our samples (both university and HS) is 'only' 3 times lower than that found in high school students samples in the US (0.8% RSA vs. 2.4% MTF, a gap that is relatively low compared to other drugs), and comparable to that reported in some European countries (Belgium, France, Spain and the UK: 0.7%-0.8%).

622. Again, a point worth highlighting is that HS students and university students reported the same



prevalence of heroin ever use (0.8% each). This raises concern given the young composition of the HS sample, as well the problematic nature of the drug and its ill-health effects. In fact, and according to the EMCDDA report (this applies in almost every EU state), heroin remains the illegal drug that is associated with the most serious health consequences (addiction, treatment demands, drug-related diseases and deaths), as well as the most serious social problems (i.e. drug-related crime), despite the fact that heroin users constitute only a small number of the total population. Indeed, RSA treatment data revealed that heroin was the most commonly reported substance of admission to treatment-with more admissions among the younger age categories (69.2% among those less than 20 years, 63.8% between 20-29, and 36.4% among those aged 30 and above), as well as the primary substance involved in drug-related arrests.

## 5. XTC: the new club drug

623. The rate of XTC use, a club drug that is relatively new in the Lebanese market, is lower than that reported by the Western counterparts (i.e. 11% of the US MTF HS population has ever used XTC compared to 2.8% of the RSA HS sample). Despite the lower prevalence, XTC use among the HS students in Lebanon is higher than the rate of use of other illicit substances-a finding that could serve the purpose of an early warning sign. It must not be forgotten that XTC is still a relatively new drug with controversial short and long-term physical and mental health consequences; some studies have associated XTC use with concentration and memory problems, health effects that are of particular concern, especially for individuals who are still studying (whether in school or university). Thus, the use of this drug must be carefully monitored, especially that it has been also shown in this RSA study that high school students are likely to take XTC with alcohol and/or hashish/marijuana, two very commonly used substances.

## B) Key Conclusions for the academic sector

### 1. Mean age of onset and prevalence of substance use

624. The mean age of onset of use of most substances in both academic populations is rather low. The fact that the university sample, as expected because of its older age, reported an older age of onset for all substances still could indicate that some

of the high school students who have not used any substance may still initiate use in the university.

625. Moreover, heroin and alcohol use are equally prevalent among both the high school and the university students (with cocaine use being higher among the former), bearing in mind that heroin and cocaine, in most cases, account for the majority of the admissions to treatment/rehabilitation.

626. The above-mentioned two findings, warrant special attention, given that they could point in the direction of a possible future increase in the prevalence rates of heroin, alcohol, and cocaine ever use during university years.

### 2. Pattern of substance use

627. High school and university students have somewhat similar prevalence of illicit (hashish/marijuana, cocaine, heroin) ever use, but the university students reported higher prevalence of ever use of licit (amphetamines/stimulants, tranquilizers, medicinal opiates (MO) and barbiturates) substances.

628. Among the ever users, high school students had higher reports of more than five times use and daily use for a period of at least two weeks, of all licit and illicit drugs, except for heroin, whereby daily use for a period of at least two weeks was higher among the university population. This finding must be observed in light of the fact that there were more missing replies among the high school sample for more than 5 time use [ high school: (30.0%-60.2%) vs. university: (4.5%-33.3%) ] and daily use for at least two weeks [high school: (0.0%-50.0%) vs. university (0.0%-13.6%)].

629. Alcohol use in the high school and university samples also warrants close attention. Alcohol was not only the most commonly used substances, but also the first substance students reported experimenting with. Though it is true that that many drinkers at this stage may reduce their consumption later in life, still the fact that our high school findings show that age at initiation was related to a greater risk of abusive consumption must not be overlooked.

### 3. Social Milieu of the students

630. Keeping in mind that on average 7% of the high school and university samples reported the use of one or more illicit substance, more than a third



of the high school students reported having at least one close friend who frequently uses any illicit substance, and 16.5% of the university sample who reported having at least one close friend who regularly uses drugs other than alcohol.

631. Despite the somewhat lenient peer environment, the RSA findings further show that the family atmosphere is rather conservative given that the great majority in each of the two samples reported that their parents would be very upset if their child used hashish/marijuana, heroin, or cocaine once or twice; slightly more so among the university sample. Interestingly though, HS students perceived their parents as being least upset when it comes to the use of tranquilizers once or twice, compared to other substances. Regarding family use of substances, very few of the students in both samples reported that their parents and/or siblings had ever used at least one illicit substance, with slightly higher reports among the high school students.

#### 4. Students' level of knowledge on drugs:

632. Almost half of the high school students were unaware of the comparative harmfulness of hashish/marijuana, cocaine, or heroin, which may be partly explained by the other finding that a large number of students from both samples has never been exposed to any drug or alcohol educational material in an academic setting (or outside, though less so).

633. Another point worth noting here is that a higher percentage of HS students reported being exposed to drug/alcohol educational in school, compared to the university students in their university setting. Given that substance use may initiate during the university years, and that the substance use behaviour that had initiated in school years may continue, it might be just as important then to expose the students to drug/alcohol educational material during their university life.

#### 5. Availability of drugs

634. Data from this HS survey reveal that drugs are generally perceived by this young population to be easily to very easily available, especially with about a third or more of the students reporting hashish/ marijuana, ecstasy, tranquilizers, and amphetamines as being easily or very easily available. This finding is corroborated in the case of licit substances by the students' reported attempts

to purchase licit drugs (tranquilizers, amphetamine, medicinal opiates, or barbiturates) from a pharmacist without a doctor's prescription, whereby 5.8% were able to do so- the majority of whom were able to illegally purchase the licit drugs with no objection from the pharmacist.

#### 6. Legalization of illicit substances

635. The general attitude of the university and high school students is against the legalization of illicit substances, but softer on the "soft drugs" [with 42.5% of the high school students are in favor of hashish/ marijuana/ XTC legalization or their consideration as minor violation, compared to 24.1% who thought so regarding cocaine/heroin]. Slightly a lesser percentage of the high school students, compared to the university students, favored the legalization of hashish/marijuana, while more of them favored the legalization of heroin and/or cocaine.

#### C) Factors related to the use of any illicit substance and/or non-medical use of any licit substance (in high school sample only)

The following section includes a discussion of the results pertaining to the number of factors (individual, social, and environmental) that were found to be significantly associated with the ever use of any illicit or licit substance (excluding alcohol and nicotine), among the HS sample only. (See Chapter six-IIA)

636. Generally speaking, males are more likely to have ever used any licit or illicit substance compared to the females; more particularly though, while males are more likely to experiment with hashish/marijuana, heroin, and XTC, tranquilizer use is more prevalent among the female student population. No gender differences were found in both samples with respect to cocaine ever use.

637. Living abroad for at least 3 months was associated with ever use of any licit or illicit substance (namely, hashish/marijuana); this may be possibly explained by "exposure" or more openness about admitting its use during the survey. Though HS students' religious affiliation did not differentiate ever users from the never users, students' religiosity (manifested through their belief in God, practice of their religious activities, and personal belief that



the use of drugs/alcohol conflict with one's faith) was associated with significantly lower rates of ever use of any licit/illicit substance, particularly illicit (hashish/marijuana, heroin, and cocaine); this finding was in concordance with international literature (Miller, 2000 and Yang, 1998).

638. The profile of ever and never users of substances was also compared with respect to a number of problem-behaviour indicators, and the findings show that users are more likely to get low grades, skip school, get into fights or damage school property, and engage in illegal activities (such as theft, getting arrested, etc.). Substance use has been associated in the literature with both primary and secondary anti-social and/or criminal behaviour and thus we can at this level only relate these factors to substance use but not infer *causality*, given the cross-sectional nature of our study; it might be that these personality traits in reality predisposed substance use rather than followed it.

639. Given that 8.6% of the HS sample has ever used at least one illicit substance raises concern over the accessibility of these substances to such a young student population. From where and/or from whom are these students getting the substances? Upon looking at the extent of availability of the substances as perceived by the high school students themselves-more than 1/3 of the students reported perceiving hashish/marijuana and tranquilizers to be easily/very easily available and about a 1/3 thought similarly with respect to amphetamines and XTC. Though to a much lower extent, still an average of 18% of the HS student sample perceived heroin and/or cocaine to be easily/very easily available. For each illicit drug surveyed, users perceived the drug as more easily available to them than the non-users, but then again given their use, this finding might be considered superfluous. Nevertheless, the fact that a portion of the HS student sample perceived problematic drugs to be easily available to them warrants further investigation.

640. On a socio-environmental level, the roles of peer and parental influences have been the focus of a number of studies (Yang, 1998; Rhodes, 1997; Hops et al., 1996). There is little contention that peer factors play a role in mediating patterns of drug use, despite the ongoing debate of the mechanisms of their influence (Rhodes, 1997); growing up entails seeking personal independence and identity, and the identification with the behaviour and value system of peers is part of a natural

development (Yang, 1998). Parents serve as models to their children, and if they themselves are substance users, then this would encourage their children to imitate them and perceive it as normative behaviour. Indeed, the RSA results show that students who reported having at least one parent, sibling or close friend who has ever used any illicit and/or licit substance were more likely to be ever users of any licit or illicit substance themselves.

641. In addition to parental use of substances, studies have also investigated the potential influence of parenting style, and though many aspects are still controversial, there is consensus that the two extremes of over protection and of supervision by parents are associated with some form of drug use (Rhodes, 1997; Chilcoat, 1996). In fact, the RSA findings show that moderate parental strictness towards dress, and curfew was associated with lower rates of ever use of licit/illicit substances; higher parental strictness towards dress, proved to be even more protective. Thus, in light of these findings, advocating for parental monitoring and supervision would be a helpful ingredient in public health interventions, given that monitoring practices may protect against youthful drug taking or delay the age of youthful drug use, even in the presence of substance using peers (Chilcoat, 1996). Still, there is a possibility that careful monitoring by parents and low use in children might be both the result, at least in part, of other antecedent personal behaviour (including genetic) characteristics whereby the relation might not be causal but correlational.

642. In addition to the role of family and friends, one must not forget the role that the school per se can play in promoting and raising the awareness of these young people by making essential, accurate, and credible information available to them in order to prevent the development of any misconceptions, and consequently adoption of ill-health behaviours. Thus, the integration of substance use prevention and awareness education into the school curriculum is crucial so that all students acquire the minimum but necessary scientific information regarding drugs (description, harmfulness, and effects on the individual, and the social environment). According to the RSA data, more than 1/3 of the students have neither been exposed, not even once, to any drug or alcohol educational material in school nor outside the school campus through any media route (TV, radio, newspapers, etc.), and a sizable proportion (45.4-53.7%) of the HS students are unaware of the extent of harmfulness of drugs. However, the RSA



study revealed that exposure to any drug/alcohol education material in school (our outside for that matter) was not related to the use of any of the substances surveyed, except for alcohol. Successful intervention stories have been told, but unless the strategy followed in the prevention and awareness programs is not carefully and innovatively designed to meet the needs of the target population at hand and penetrate the widest pool of audience, the intervention per se may have little effect on the students' substance use behaviour, given the multiple factors that may help instigate use.

#### **D) The issue of "legalization" of substances**

643. Quite important is the students' perception towards the legalization of drugs, namely hashish/marijuana and cocaine/heroin. Though users of any licit/illicit substance were more likely to be in favor of considering hashish/marijuana as entirely legal or a minor violation (compared to non-users), both users and non-users had similar views with respect to the legalization of cocaine/heroin (i.e. were against their legalization); nevertheless, about 10% of both groups reported being in favor of their legalization. Also important is the fact that students who were in favor of considering hashish/marijuana as entirely legal or a minor violation were comparable with those who did not, in terms of their scholastic achievement, absenteeism rates, and problematic conduct in school or frequency of arguments with parents, but still more frequently reported on at least one illegal conduct.

## **II. Substance Use Treatment Indicators**

### **A) Profile of substance users seeking treatment**

644. Substance users entering treatment tend to be males, and in their 20's or 30's, as shown in other international treatment surveys (EMCDDA, 2000). Treatment figures are thought to generally under-represent women with substance-use problems; though the reasons affecting their decision to seek treatment are unknown, possible reasons may relate to motherhood. The age range of those seeking treatment in the RSA treatment sample (28.09-30.45 years) was closest to that observed in Denmark (32.5 years), but higher than that of Ireland (24.3 years). Moreover, and as observed in the RSA study, adolescents and young adults make up less than 10% of the sample; two explanations are proposed:

1) substance users at this age may still be in their "abuse" phase, and not the addiction stage, or 2) parents, having found out about their child's behaviour, may try to help out and support their kids at first, before admitting them to treatment.

### **B) Decision to seek treatment**

645. The majority of those who sought treatment had done so out of personal willingness or family pressure, which could be indicative of both the presence of "will to get better", as well as the concern and support of their families which could prove helpful throughout and after the recovery process. It is important to highlight here that despite the fact that almost all (98.1%) reported having at least one friend who has ever used at least one illicit substance, more than 1/4 reported that it was their peers (alone or in combination with other factors) that pushed them to seek treatment, which highlights both negative and positive sides to peer influence, and which ought to be considered when planning a public health intervention.

646. Data on those who have been in treatment only once showed that a sizeable proportion of them had not sought treatment before because they had not "perceived the need to" (the truth of which cannot really be ascertained), followed by matters such as "unaware of substance use treatment facilities" (more relevant for rehab centers than hospitals), "embarrassment", "distrust in treatment effectiveness", and "cost". Given that these findings reflect the substance users' perceptions rather than the reality of the matter, the answers may not be valid; nevertheless, they warrant a close look and ought to be addressed especially that a sizeable proportion (35.3%-56.5%) of each of the samples thought they "did not need to" when they may or may not have, not to mention the other reasons provided that may be possibly resolved upon the dissemination of accurate and useful information. Given that most of the substance use experimentation takes place during adolescence and young adulthood (i.e. during school years) sensitization and proper education can thus be part of the school educational program.

647. Though the need for prior treatment among those who were in treatment for the first time at the time of the survey cannot be ascertained, data from our street sample suggests that the substance users' perception may not necessarily be right. 2/3 of the street users have never received any type of



treatment, 43.5% of whom haven't because they don't perceive the need to. However, the majority (89.1%) were poly-substance users (reported using 2 or more substances excluding alcohol and nicotine at least once during the past 12 months), 89.2% were abusing (DSM-IV defined) their 'primary drug', and 80.6% were dependent on it. In fact, among those who were diagnosed with DSM-IV abuse and/or dependence on their "primary drug" of use, almost 60% (59.3% among the abusers and 58.2% among the dependents) have never received any form of treatment. Thus, this non-treatment seeking subgroup of substance users need to be 'reached', and their reasons for non-treatment ought to be addressed, possibly through out-reach services, which could serve to complement the conventional drug-treatment centers. Although out reach services have only been recently introduced in some countries like Greece and Finland, they are spreading in the EU countries; depending on the specific needs of the users and the available resources, these services may provide the users with the necessary information, hygiene facilities, and even psycho-social and medical support

### C) Most common drugs of admission

648. In concordance with other international treatment data (EMCDDA, 2000), the drug most commonly responsible for admission to treatment was heroin (47.5%-84.2% of those in treatment), more so for rehabilitation than for hospitalization. Also, and quite importantly, admission for heroin was significantly more prevalent among the younger age categories (69.2% among those less than 20 years, 63.8% between 20-29, and 36.4% among those aged 30 and above), and the single (62.2% vs. 33.3% among the ever married), a point that ought to be well considered, especially that heroin use was prevalent among our young and at risk HS sample (0.8%).

649. Cocaine, alcohol and tranquilizers are also common substances for admission to treatment (following heroin). Quite importantly, and with respect to alcohol, more than half of those not admitted for alcohol reasons were diagnosed with alcohol abuse (DSM-IV defined) and almost 8% with alcohol dependence (DSM-IV defined). These findings imply that alcohol abuse and/or dependence is left unattended in some substance using individuals, and the reasons behind that (such as not perceiving the need for treatment) ought to be properly addressed. Contrary to those admitted for

heroin, those admitted for alcohol tend to be older (0% among those less than 30 years, and 30.3% among those 30 and older), and ever married (35.3% vs. 2.7% among the single).

650. Though admission for heroin prevails in all samples, it was found that hospitals are more likely to cater for tranquilizers and alcohol, compared to the rehab center, despite the possible need for rehabilitation; this is quite important to highlight given the variation in the mode of treatment received in each of the two treatment settings: hospitals (short-term, more likely to be mainly detoxification), and rehab centers (long-term).

### D) IV use and risky sexual behaviour

651. The proportion of ever IV users (having used drugs intravenously ever- even if only once) is a potential indicator of the magnitude of the drug problem in a country (keeping in mind however the extent of the generalizability of the data), and calls for close attention. The proportion of ever IV users among hospitalized substance users was lower (25.4%) than that reported by users under rehabilitation (51.5%), which is possibly indicative of a sicker population in the latter. Ever IV use reports across all samples ranged from 25.4%-51.5%, with more than 1/4 of them (almost 2/3 in the street sample) having shared the needle at least once. Intravenous drug use is also, though not exclusively, generally associated with heroin use and the percentage of injectors among heroin users is as follows: treatment sample (55%), ISF sample (69%), and street sample (35%).

652. It is also imperative not to overlook the risky sexual behaviour (under the influence of drugs) reported by a sizeable majority of the samples (67.6-90.9%), especially that about two thirds and even more of the samples (all but the ISF) reported not using protection at the time of the intercourse.

653. All these findings, pertaining to IV use, needle sharing, and unprotected sex, have many broader health implications, and the fact that infectious

654. diseases, STD's and HIV, may become an issue renders this problem two-fold. Data from the Lebanese Ministry of Health on HIV cases shows that the cumulative number of HIV cases in Lebanon from 1984-2000 are 613, 8.5% of which are due to drug-injection. Markedly, there is a need for



increasing risk-awareness among the users, and decreasing their risky behaviours, which may begin at an early stage to include at-risk populations such as students (schools and universities), and extend to substance using populations, possibly through the broader umbrella of out-reach programs.

### E) Outcome of substance use treatment

655. The range of non-compliance rate reported across the samples was (23.5-86.1%), the lowest being among the rehab sample (23.5%) and the highest among the street (86.1%), whose majority was last treated in a rehab center. Despite the small number (of respondents who provided reasons for their non-compliance), it is still essential to consider and address these reasons, the most common ones being: "disliking the center" and "resuming use" or relapsing, in order to improve on the level of compliance and consequently on the outcome of treatment. With respect to relapse, the RSA treatment data shows that the risk of relapse is highest during the first two years (as expected), whereby the majority of the substance users who in treatment at the time of the survey had been in treatment within the same year (38.9%) or a year before (36.7%).

### III. Law Enforcement Indicators: Substance related arrests

656. Drug-related data from law enforcement agencies reflect more on drug legislations, enforcement activities and available resources, rather than the drug use problem. Still, recorded numbers (such as the most common substance of arrest) may be possibly indicative of the extent of drug supply and availability of substances in the market or even, but to a lesser extent, its use among the substance users.

657. During the two and a half months data collection period in 2001, 52 individuals were sampled from the arrestees for drug-related offenses (use, possession, and facilitation). Criteria for selection of interviewees excluded those arrested for large-scale drug dealing, commerce, plantation and/or production. Data was also gathered from the ISF database for the same time period for the purpose of comparison and discussion. Upon comparing the number of individuals sampled in the ISF survey (N=52) with those arrested for drug use or facilitation (N=209) as per the ISF database, evidently only 1/4 of those arrested was interviewed. Reasons for this discrepancy, as explained by the Internal Security

Forces-Office for Drug Enforcement, mainly are: 1) sometimes a large number of individuals would be arrested at the same time, of which only a subset were interviewed due to the shortage in both human and time resources; 2) the arrested person was given the right to refuse participation in the survey, and a number did, particularly those who denied what they were under suspicion for. Furthermore, it is important to note that while the data collection period spanned from mid April to end of June, the numbers provided by the ISF database refer to the entire month of April (in addition to May, and June), which may also possibly explain part of the disparity in the number of arrestees between the two different data sources.

658. Nevertheless, our findings on the 52 sampled arrestees are comparable to total number arrested (based on the ISF database). Males and Lebanese prevail among the total arrested. Drug use is the main reason for arrest in our sample (88.6% of those arrested in our sample and 89.9% of the total arrested); according to the EMCDDA 2000 report, drug use/possession predominated in 1998 and 1999 in all countries that penalize such offenses, from 61% of all the drug offenses in Portugal to 87% in Austria (though the latter includes trafficking in small quantities as indicated in the report). A point worth highlighting is the number 'drug-dealing' offenses; despite the fact that a number of drug offenses (facilitation, promotion, in addition to large-scale drug dealing) fall under the umbrella of 'drug dealing', the RSA data shows that the latter did not account for a substantial percentage of drug related offenses (3.6%-13.6%). However, given that large-scale dealers have been excluded from the survey, the corresponding percentages possibly refer to the facilitators/promoters only.

659. Findings from the RSA ISF survey show that the most common substances implicated in drug-arrests were heroin and hashish (58.6% vs. 27.6%, respectively). Data on all the 'substance users' arrested during the months of April-June from the ISF database show that cocaine accounted for 31.5% of the arrests, followed by heroin 30.5%, and then hashish (26.7%). Looking at international data, findings from the EMCDDA 2000 report reveal that cannabis was the most common substance involved in drug-related arrests in Ireland (39%) and France (85%), whereas heroin accounted for 40-60% of such arrests in Luxemburg and Portugal.

660. Keeping in mind that the data collection



covered only two months of the year 2001 and the circumstances may not necessarily resemble the situation at the ISF at all times, data from the ISF sample does not seem to reflect an application of the section of the Lebanese law relating to the treatment of arrested substance users, nor did it corroborate the views of the ISF officers who felt, during the FGD, that they are actively engaged in referring the substance users to treatment rather than imprisoning them. Among those who were previously arrested for substance use, none reported being referred by the ISF to any treatment facility; 3 substance users from the treatment sample (2.1%) reported ever being referred to treatment by the ISF. The issue of referral to treatment by the ISF, however, should be considered in light of a few pertinent matters: 1) the lack of a public hospital or governmental rehab center to which the ISF can readily refer their substance using arrestees to; 2) should the arrestees be referred by the ISF to a private treatment center, there lies the risk of the arrested user (who is given immunity from prosecution by the Lebanese law while under treatment-please refer to section on Lebanese Law

on Drugs) to leave, and this is problematic especially that most treatment centers refrain from reporting to the ISF their patients' departure or escape; the substance users (according to the ISF) would then end up neither in prison nor in treatment, but rather free to engage in substance use once again. Governmental treatment facilities, or 'special beds' in already existing treatment facilities, including rehab centers, may serve as a necessary step for the proper implementation of the law, and for the facilitation of the role, played by the ISF.

661. The fact that the respondents- who are arrested for substance related offenses- were being interviewed by ISF officials affects the validity of the results-as noted in some of the replies that clearly showed that the respondents were trying to reflect a better image than their true selves. Nevertheless, the fact that some of the more sensitive questions were left unanswered clearly shows that ISF officials wore to a great extent the cap of researchers rather than policemen, given that interviewees were not forced to respond and the decision to participate was left to the respondent.



# Recommendations



## Chapter Eight

The Lebanon RSA study generated many important findings, which formed the basis of several recommendations that centred around three main themes: substance use prevention and awareness, substance use treatment and rehabilitation, as well as substance use and the legal and judiciary system. Two national workshops (January and May 2002) were organized by IDRAC and UNODC, during which these recommendations were discussed, refined, and finalized in the presence of a large pool of government officials, health professionals, law enforcement officials and other experts from both the demand and the supply reduction fields. Several other pertinent and relevant recommendations were also raised during these two workshops, based on expert opinion. The following section includes the final set of recommendations that has been prepared to be presented to the Government of Lebanon as part of the National Action Plan.

To present the findings of the RSA and the draft National Action Plan Framework, a conference on “*Substance Abuse in Lebanon: where are we?*” was held in Beirut in May 2002. During the conference, representatives from UNODC and IDRAC presented the methodology and findings of the RSA study. Moreover, UNODC presented the draft National Action Plan Framework and the recommendations regarding UNGASS and the National Policy on Demand Reduction. The presentation focused on the need to strengthen the Inter-Ministerial coordination mechanism on drug control with a view to ensuring long-term commitment for the implementation of the Action Plan and active involvement of all ministries concerned with drug control.

**The recommendations have been categorized under four themes:**

1. Theme #1: Role of the Lebanese Ministries
2. Theme #2: Substance Use Prevention and Awareness
3. Theme #3: Substance Use Health Care Services
4. Theme #4: Substance Use Legal and Judicial System

**Additionally, the recommendations have been divided into two types:**

- The symbol ( ■■■ ) precedes the recommendations that emanated from the RSA research findings. The findings could support more recommendations; interested organizations (groups and/or individuals) are urged to correspond with us for further suggestions.
- The symbol ( ^ ) precedes the recommendations that emanated from focus group discussions and key informant interviews (See Chapter 5-III) with experts working in the field of substance use (health professionals, law enforcement officials, active NGOs, etc...).



# Role of the Lebanese Ministries

## All ministries

Substance abuse is a pervasive disorder and affects all areas of life. Thus, all Ministries (Health, Education, Social Affairs, Justice, Labor, Tourism...) will find themselves meshed by the problems of substance abuse, though some more than others. We have addressed below some specific ministries and call upon the Interministerial committee of the National Council for Drugs (NCD), to meet soon. We recommend that the NCDs membership be revisited to include general directors of the Ministries, and not only Ministers (as designated by the Lebanese Law on Drugs), as well as representatives from all active NGOs and substance use treatment and rehab centers; this would hopefully clear the way for meetings of the NCD to start and not be delayed by other issues that the Ministers have to face.

## Ministry of Health (MOH)

- Permanent full time positions in the MOH need to be reserved for substance use specialists, or a committee with financial and executive power has to be formed, in order to monitor the problems at hand and track fast all possible changes in the field of substance use.
- ^ Until the activation of the NCD, an interim committee may be set up (officially or unofficially) under the auspices of the General Director of the Ministry of Health, and its members would include representatives from private organizations and/or persons active in the field of substance use demand reduction. The interim committee would meet on a regular basis to discuss and take decisions on salient drug related issues, in order to keep up with the recommendations and push for their implementation. Moreover, each party would be designated a specific role or task to fulfill, in a consolidated effort to realize the global plan.

## Ministry of Education (MOE)

- ^ The MOE is encouraged to call on (officially or unofficially) all the active people/institutions working in the field of drug demand reduction and advise them on preventive methodology. The Public school system would benefit directly and the private sector could be encouraged to do so by letter(s) from the Minister of Education.

## Ministry of Social Affairs (MOSA)

- ^ Since substance abuse is clearly a major source of handicap (poverty, car accidents, theft, family disruption...), it is important that the role of MOSA in substance use prevention and awareness be highlighted and the MOSA to engage fully in it

## Ministry of Justice (MOJ)

Please see section entitled: "Substance use: Legal and Judicial System"



# Substance Use Prevention and Awareness

## Substance use prevention and awareness programs: General directions

- Substance use prevention and awareness programs need to be well planned and prepared in their content. The factors shown in the RSA 2001 study to be associated to substance use (such as personal use of alcohol and nicotine, family and peer use of substances, problem behaviour, etc..) needs to be targeted, among other pertinent information relating to description of drugs, the harmfulness of each drug, and risk prevention.
- Substance use prevention and awareness programs need to be age specific. It is recommended that they target students (high school and university), as well as adolescents and young adults not within an academic setting. Moreover, prevention and awareness programs need to also target the older population in charge of the youth, whether at home (parents) or in academic settings (teachers), who are considered as role models in the lives' of the adolescents/young adults
- Substance use prevention and awareness programs need to focus on the young population in different settings: inside and outside academic settings, sports' clubs, scouts, as well as recreational places (movies, theatres...)
- Substance use prevention and awareness programs need to be reinforced within the school curriculum of both private and public schools.
- ^ Substance use prevention and awareness programs in academic settings need to be conducted more frequently, and not on a one-time basis, and all concerned parties are encouraged to collaborate and contribute.

## Promotion of demand reduction services

- Available substance use treatment and rehabilitation centers are encouraged to promote their services and engage in advocacy to attract a larger proportion of the population, given the RSA research findings which indicate that substance users who have never sought treatment have not done so primarily because they did not perceive the need to, followed by their unawareness of existing treatment/rehab facilities. Hotline services could serve to provide information on drugs and available services, and act as referral point.

## Support and Guidance Systems for Parents

- ^ Facilities are needed to provide information and counseling to parents on ways to prevent, detect, and deal with substance use among their children.

## Action Assignments to Parents and School Administrators

- Based on the fact that some school directors refused to participate in the RSA high school survey (for a variety of reasons), regular meetings between the directors (or higher authorities if present)



and parents are encouraged in order to address substance use research in their schools albeit in a way that would be consonant with the specificities of the school.

- ^ School administrators need to meet on a regular basis to discuss issues relating to substance use/addiction, in the presence of treatment experts or government officials if possible for clarification and explanatory purposes.

## The need for regular research

- Considering the paucity of substance use related research in Lebanon, more cost-effective and methodologically sound, small or large scale studies, need to be undertaken and repeated regularly for monitoring purposes. For this purpose, a standardized data collection form could be constructed for use by all the active organizations and persons in the field of substance use.
- ^ Field assessments need to be conducted before carrying out any substance use prevention and awareness program, in order to examine the characteristics of the target population(s) and its environment, for the purpose of tailoring the program accordingly
- ^ Substance use prevention and awareness programs in academic settings need to be assessed regularly. Rapid and cost-effective assessment surveys need to be conducted before the implementation of the program in order to assess the baseline substance use conditions, and after its implementation for monitoring purposes, evaluation of the effectiveness of the program, and control over the expenditure of provided funds.



Staff from UNODC and IDRAC present the findings of the RSA and the draft National Action Plan Framework, at the conference on “Substance Abuse in Lebanon: where are we?” held in Beirut in May 2002

# Substance Use Health Care Services

## Classification and Evaluation of Health Care Services

- All individuals working in the field are urged to receive specific training in substance abuse service provision, and thereafter be regularly evaluated.
- ^ The Government of Lebanon needs to properly classify the existing treatment and rehab centers, as well as others yet to be established (there is yet no proper terminology for rehab centers).
- ^ The National Council on Drugs is urged to overlook and evaluate the effectiveness and quality of available substance use health care services, particularly for those centers receiving public grants.

## Establishment of treatment/rehab centers

- The treatment/rehab centers need to be diversified in their theoretical and practical approaches. Some of the methods that were suggested and agreed upon were:
  - \* Short stay centers
  - \* Walk-in services
  - \* Hotline services
  - \* Out patient support groups such as Alcohol Anonymous and Narcotics Anonymous
  - \* Substitution therapy, along with the implementation of strict control measures, such as regular urine tests, proper and monitored administration of the medication...
- The treatment/rehab centers need to be specialized and tailored to the:
  - \* Substance of abuse, given the various substances being abused. It is possible that different treatment facilities would be needed for different substances (alcohol vs. tranquilizers vs. heroin...)
  - \* Substance users' gender, given the relative increase of female substance users
  - \* Substance users' age, given the presence of youth substance users
- Rehabilitation centers need to incorporate within their programs the concept of vocational and educational training to help reintegrate post-treatment the individuals either into their work environment or scholastic environment, respectively.
- More public treatment/rehabilitation centers are needed (see first recommendation in section Substance Use Legal and Judicial System: "Provision of Alternatives to Conviction and Punishment")
- ^ Geographical spread is needed in treatment/rehab centers

## Role of Primary Health Care System

- ^ The existing primary health care system is encouraged to encompass substance use related services, and play the role of 1- early identification, 2- basic counseling, and 3- referral. The World Health Organization (WHO-Lebanon) expressed its willingness to provide training and other services, yet this point needs to be pursued further.



## Role of the First Aid Services

- ^ Red Cross and other licensed available first aid services ought to be trained and allowed by law to deliver immediate acute care for substance users

## Relapse and Aftercare

- Post discharge close follow-up: since relapse rates reach high peaks within the first year following treatment, substance users need to be followed up very closely after discharge from treatment and rehab centers by those same centers or by other specialized service centers.
- Social integration programs need to be instituted as part of rehab or as other independent entities.
- Substance use is a chronic condition and distrust in the effectiveness of its treatment may be a consequence of the patients' unawareness of this aspect and the relatively high relapse rates associated with this disorder. Thus, it is very important to be clear and open with the patients from the start of treatment by informing them that the treatment takes time, and that relapse is frequently a part of the picture.

## Establishment of Specialized Laboratories

- ^ Specialized and up-to-date laboratories are needed for the detection of substance use and types of substances used, for forensic and other purposes.

## Needed Research

- A central and standardized monitoring system ought to be established (possibly at the MOH) to make available pertinent data on substance users in different treatment settings, which could benefit and support research efforts. Data should include demographic information of those admitted and a code for their identification (whilst ensuring confidentiality and protection against prosecution) in addition to other pertinent information (substance of admission, reason for admission...)
- A central registry, including a list of all substance use treatment/rehab facilities, as well as governmental and non-governmental organizations active in the field of substance use (prevention/awareness, social work, etc...), needs to be established. The list would encompass information on the activities, services, resources, etc... of each institution.
- Research is needed to study the different relapse and compliance rates in treatment centers between those referred by the judiciary system and those who are admitted on their own will or through family pressure, etc...
- ^ Regular data on different treatment/rehab methods needs to be collected in order to evaluate effectiveness of novel methodologies.
- ^ Regular data from different treatment/rehab centers is needed to shed light on the state of substance use in the country.



# Substance Use: Legal and Judicial System

## Revision of the Lebanese Law on Drugs

- ^ The Lebanese Law on Drugs needs to be revisited:
  - = Some of its parts need to be clarified and others amended to become more practical and applicable.
  - = The definitions and terms need to be more clearly specified, especially in what pertains to drug dealing, facilitation, and pushing. Recommendations on this issue have been raised to the Minister of Justice, and a special league is being established to address these recommendations.
  - = Substances listed in the law should be listed in their common names to help judges recognize them.
- ^ The judges are encouraged to become more involved in the law making process. A committee, comprised of experts on legislative matters and experts on drugs, is needed to study the judges' feedback and incorporate it into one comprehensive up-to-date fruitful law.
- ^ Suspension of punishment and "alleviating" circumstances needs to be tailored according to the type of user (occasional vs. addict) and the different substances used. Judges are encouraged to learn more about the different effects of different substances, be it licit or illicit, and about the different forms of use (recreational vs. addictive). This would help them assess more comprehensively the punishment (that could vary from the minimum of acquittal from punishment to the maximum of 3 years imprisonment).

## Action Assignments to Ministries and Other Entities

- ^ The National Council for Drugs needs to be activated and its members revisited to include general directors of the Ministries, and not Ministers as designated by the Lebanese Law on Drugs), as well as representatives from all active NGOs and substance use treatment and rehab centers; this would hopefully decrease problems related to time, politics and others related to the higher posts in the Ministries. Until the activation of the NCD, an interim committee may be set up (officially or unofficially) under the auspices of the General Director of the Ministry of Health, and its members would include representatives from private organizations and/or persons active in the field of substance use demand reduction. The interim committee would meet on a regular basis to discuss and take decisions on salient drug related issues, in order to keep up with the recommendations and push for their implementation. Moreover, each party would be designated a specific role or task to fulfil, in a consolidated effort to realize the global plan.
- ^ The Addiction Committee (as designated by the law) needs to be established in order to assess whether the substance user (arrested or self admitted) is an addict or not, and accordingly act as an official point of referral to treatment and rehabilitation.
- ^ It is recommended that drug offenders under arrest be provided with a lawyer by the state if they cannot afford one on their own. The Syndicate of Lawyers are encouraged to help in this respect.



## Prisons and Correctional Facilities

- Prisons and correctional facilities need to be geared towards the following:
  - = Different age groups: this is recommendable given the presence of young adults who are arrested or imprisoned for substance-related offenses. The suggestion was to tailor the facilities for the following three age categories: below 18 years, between 18-25 years, and above 25 years.
  - = Gender: females have to have special quarters, given the increase of female substance users over the years.
- ^ Prisons and correctional facilities need to be tailored to the different age groups and gender in a manner that would serve the purpose of rehabilitation.

## Provision of Alternatives to Conviction and Punishment

- Given that 30%-50% of addicts who are in/seeking treatment have been previously arrested by the Internal Security Forces (or imprisoned), the ISF and Public Prosecutors could play an important role in helping the substance users at a relatively earlier stage by referring them to treatment/rehabilitation (the importance of the Addiction Committee could weigh in here). For this purpose, public treatment/rehabilitation centers, which will be operated under the supervision of the Internal Security Forces, are needed to cater for these arrested substance users. Until their establishment, a trained physician needs to be made available upon arrest to assess the substance users' medical condition, and should s/he need medical care, the ISF officials/Public Prosecutor could cooperate with already existing treatment facilities for his/her referral.
- ^ It is encouraged that arrested addicts be incarcerated and interrogated in a treatment center (rather than police headquarters). If this is not possible, they could be released and therefore may be banned from traveling or put under surveillance or forced accommodation.
- ^ The passing of a legislation allowing the “clearing” of addicts' criminal record within a one-year period after proving their remission from the state of addiction is encouraged, so that it does not affect their career and prevent them from travel. Moreover, treated substance users in remission need no longer have their previous acts of substance use counted as a prior offence.

## Cooperation between the legal and judicial sector and the health and social welfare systems

- In spite of the fact that the RSA research findings show that only a very small fraction of the substance users may be seeking treatment to escape the ISF, but in light of the fact that the Lebanese Law on Drugs provides immunity to the substance user in treatment, care should be given to avoid turning treatment into a means for escaping prosecution.
- ^ Treatment/rehabilitation centers are not obliged to report substance users to the ISF if the substance users had sought treatment personally. However, if the substance user(s) is referred to treatment by the ISF/Public Prosecutor (see first recommendation in section above on "Provision of Alternatives to Conviction and Punishment") and the treatment facility accepts to admit the substance user(s),



then this latter facility is compelled to report the progress of treatment and whether it was completed or not.

## Control Over the Availability of Licit substances

- Given the high school students' perception that licit substances (particularly tranquilizers) are easily available, reinforcement of the law (related to the selling of prescription medications) coupled with regular monitoring needs to be put in place.
- Given the RSA research findings that show that most of the high school students have drunk alcohol at least once, and more than half before the age of 15 years, the law prohibiting the sale of alcohol to minors should be enforced.
- ^ It is recommended that sale of medications to minors be prohibited, even by prescription.
- ^ The Ministry of Health regularly revises and updates the list of substances regulated by the Lebanese Law on Drugs in collaboration and consultation with international organizations (such as WHO-Geneva). The private sector could contribute to this process by supplying the MOH with names and information on all medications that are potentially addictive (not only psychiatric ones) in order to ban their purchase without a prescription.
- ^ The law banning the sale of prescription medications without a prescription is currently being applied by pharmacists and the Syndicate of Pharmacists regularly monitors their sale. To help pharmacists maintain their efforts, they must be regularly updated with the final and revised list of substances, and must be warned that if they fail to abide by it, they would be breaking the law and thus be punished accordingly.
- ^ The practicality of selling medications only with prescriptions must be considered, given that poor people may not be able to afford a doctor's fee; thus, the law on the purchase of prescription drugs may need to be enforced in parallel to the increase in the availability of free care and free refills, or the increase in the number of physicians who could offer renewed prescriptions for free.
- ^ The Ministry of Health needs to establish a monitoring system to supervise the provision and sale of prescription medications through dispensaries and institutions other than pharmacies (permitted to sell or dispense of medications), as they are not subject to any monitoring.
- ^ To avoid turning a prescription into a tool to help addicts, it is recommended that legislation be passed requiring pharmacists to keep the prescription after every sale.
- ^ A special label should be included on all medicines that have the potential of being abused.
- ^ The Lebanese Law, which dictates the effective regulation and monitoring of the export/import of precursors and other chemicals used in the illicit manufacture of narcotic drugs and/or psychotropic substances, needs to be reinforced.

## Research requirements

- Research is needed to study the difference in treatment/rehab compliance as well as relapse rates among addicts referred to private treatment centers by the ISF and Public Prosecutors and addicts who have entered on their own. Such studies would shed light on the outcome of the role played



by the ISF and Public Prosecutors in helping addicts receive treatment/rehab.

- In view of the perception among students that hashish (but not other drugs) should be thought of as being a minor violation, the authorities (political, legal, social, medical, etc) need to be constantly aware of the developments in the field. Researchers and the decision makers need to be watching closely the present trend of softened attitudes in some parts of the world. This is a major experiment and Lebanon need not change its present position and it is highly preferable to maintain a public and conservative attitude at this stage while actively monitoring developments in countries that have a more relaxed attitude.



# References



1. Abdel-Malak, N. (1989). *Evolution de la toxicomanie a travers les annees de la guerre*. [The evolution of drug addiction throughout the years of war]. Unpublished thesis, St. Joseph University, Beirut, Lebanon.
2. Al Hajj, S. (1988). *١١٢٣٤٥٦٧٨٩١٠ ( «,d<sup>٤</sup>J» )*. [Drugs: the problem of this age]. Lebanon: Dar Al Shamal.
3. American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.), Washington, DC: APA.
4. Antoun, F. (1996). Drug Abuse in Lebanon. *Epi News*, 3
5. Baddoura C. (1992). Toxicomanie au Liban. [Drug addiction on Lebanon]. *Bull. Acad. Natle.Med.* 176(9), 1505-1515.
6. Boustany, A. (1993). *Histoire des paradis artificiels*. [The story of artificial paradise]. France: Hachette.
7. Bukstein, O. G. (2000). Adolescent substance abuse. In B. J. Sadock, & V. A. Sadock (Eds.), *Comprehensive Textbook of Psychiatry 7<sup>th</sup> edition* (pp. 2932-2938). Philadelphia, PA. Lippincott Williams and Wilkins.
8. Central Intelligence Agency, website: <http://www.cia.gov/cia/publications/factbook>
9. Chen, K. & Kandel, D. B. (1995). The natural history of drug use from adolescence to the mid thirties in a general population sample. *American Journal of Public Health*, 85(1), 41-47.
10. Chilcoat, H., & Anthony J. (1996). Impact of parent monitoring on initiation of drug use through late childhood. *J Am Acad Child Psychiatry*, 35(1), 91-100
11. Dewit, D., Adlaf, E., Offord, D., & Ogborne, A. (2000). Age at first alcohol use: a risk factor for development of alcohol disorders. *Am J Psychiatry*, 157(5), 745-750.
12. European Monitoring Centre For Drugs and Drug Addiction. (2000). *Annual report on the state of the drugs problem in the European Union*. Lisboa, Portugal: EMCDDA.
13. Faour, M., Saxena, P., Naufal, H., & Farah, A. (2000). Demographic estimates and projections. In *The Population of Lebanon. Beirut, 2000*. Beirut, Lebanon: UNFPA & Ministry of Social Affairs.
14. Golub, A., & Johnson, B. (2001). Variation in youthful risks of progression from alcohol and tobacco to marijuana and to hard drugs across generations. *Am J Public Health*, 91(2), 225-232
15. Hops, H., Duncan, T., Duncan, S., & Stoolmiller, M. (1996). Parent substance use as a predictor of adolescent use: A six-year lagged analysis. *Ann Behaviour Medicine*, 18 (3), 157-164
16. Ingold, F. (1994). *Rapid assessment of illicit drug use in great Beirut*. United Nations, Office for Drug Control and Crime Prevention.
17. Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2000). *National survey results on drug use from the monitoring the future study, 1975-2000. Volume I: secondary school students*. Michigan, The University of Michigan, Institute for Social Research.
18. Kandel, D., & Davies. M. (1996). High school students who use crack and other drugs. *Arch Gen Psychiatry*, 53, 71-80



19. Karam, E. G., Melhem, N., Mansour, C., Maalouf, W., & Saliba, A. (2000) Use and abuse of licit and illicit substances: prevalence and risk factors among students in Lebanon. *Eur Addict Res*, 6, 189-197.
20. Karam E. G., Yabroudi, P., and Melhem, N. (in press). Comorbidity of substance abuse and other psychiatric disorders in acute general psychiatric admissions- a study from Lebanon. *Journal of Comprehensive Psychiatry*.
21. Karam, E. G. (1993, August). *Substance abuse in Lebanon*. Expert report presented to the WHO. Geneva Switzerland.
22. Karam, E. G., & Maalouf, W. (2001). *Mental health research in the Arab world (1966-1999)*. [CD ROM]. Beirut, Lebanon: Institute for Development Research and Applied Care [Producer and Distributor].
23. Kulczycki A and Saxena P. (1999) New evidence of fertility transition through wartime in Lebanon. *Genus*, (LV), 131-152.
24. Lebanese Family Planning Association. (1995). *لا إدمان*. [No to addiction]. Lebanon: Lebanese Family Planning Association.
25. Melikian, L. H., Nassar, N. T., & Der-Karabetian, A. (1973). Some personality correlates of marijuana users at the American University of Beirut. *Lebanese Medical Journal*, 26(3), 233-240.
26. Miller, L., Davies, M., & Greenwald, S. (2000). Religiosity and substance use and abuse among adolescents in the national comorbidity survey. *J Am Acad Child Adolesc Psychiatry*, 39(9), 1190-7.
27. Naja, W. J., Pelissolo, A., Haddad, R., Baddoura, R., & Baddoura, C. (2000). A general population survey on patterns of benzodiazepine use and dependence in Lebanon. *Acta Psychiatrica Scandinavica*, 102, 429-431.
28. Nassar, N. T., Melikian, L. H., & Der-Karabetian, A. (1973). The non-medical use of marijuana, LSD, and amphetamine by students at the American University of Beirut. *Lebanese Medical Journal*, 26(3), 215-232.
29. Nassar, N. T., Zurayk, H. C., & Salem, P., A. (1980). Smoking patterns among university students in Lebanon. *College Health*, (28), 283-285.
30. National Institute of Health. (1998). *Age of drinking onset predicts future alcohol abuse and dependence*. National Institute on Alcohol Abuse and Alcoholism. Press Release, 1998.
31. Nehme, C. (1989). *Pharmacovigilance et abus des drogues au Liban*. [Pharmacovigilance and abuse of drugs in Lebanon]. Unpublished thesis, St. Joseph University, Beirut, Lebanon.
32. Nuwayhid, I., Sibai, A., Adib, S., & Shaar, K. (1997). Morbidity, mortality, and risk factors. In M. Deeb (Eds.), Beirut: *A Health Profile 1984-1994*. Beirut, American University of Beirut.
33. Odgers, P., Houghton, S., & Douglas, G. (1997). The prevalence and frequency of drug use among western Australian metropolitan high school students. *Addictive Behaviours*, 22(3), 315-325.
34. Oum el Nour Rehabilitation Centers: Online resource: [www.oum-el-nour.lbgo.com](http://www.oum-el-nour.lbgo.com)
35. Prendergast ML. (1994). Substance Use and Abuse among College students: A review of recent literature. *Journal of American College Health*, 43, 99-113.



36. Puzantian, V. R. (1973). Problem of drug addiction in Lebanon. *Lebanese Medical Journal*, 26(3), 211-213.
37. Rhodes, T., Lilly, R., Fernandez, C., Giorgino, E., Kemmesis, U., Ossebaard, H., Lalam, N., Faasen, I., & Spannow, K. (1997). *Risk factors associated with drug use: the importance of 'risk environment'*. Unpublished review paper.
38. Saab, B. R., Damlouji, N. Lakkis, N., & Usta, J. (2001). *War, peace and the relaxing pill*. Unpublished review report.
39. Shediak-Rizkallah, M., Afifi-Soweid, R., Farhat, T., & Yeretizian, J. (2000). Health practices of older adolescents in post-war Lebanon: Results from a university survey and comparison with Western findings: Report presented at the First Mediterranean Social and Political Research, Florence, Italy.
40. Sibai, A. & Kanaan, N. (1999). Youth health risk behaviour survey among secondary school students in Lebanon: Prevalence and clustering of risk behaviours. 1997. Unpublished report presented to the WHO/UNICEF.
41. Sukkar, Benoit. (1980). *ﺑﺄﺗﺘﺎﻟﯩﺔ ﺍﻟﺸﻮﺑﺎﺩﺓ* . [The tragedy of the contemporary youth]. Lebanon: Dar Al Nahar.
42. Sukkar, Benoit. *ﺑﺄﺗﺘﺎﻟﯩﺔ ﺍﻟﺸﻮﺑﺎﺩﺓ ﻋﻨﺪ ﺍﻟﺸﻮﺑﺎﺩﺓ* . [Drugs the tragedy of the contemporary youth]. Lebanon: Holy Spirit University-Kaslik (reprint of reference 40).
43. Tabbara R. Introduction *In The Population of Lebanon. Beirut, 2000*. Beirut, Lebanon: UNFPA & Ministry of Social Affairs.
44. Hibell, Bjorn., Andersson, Barbro., Ahlstrom, S., Balakireva, O., Bjarnason, T., Kokkevi, A., & Morgan, M. (1999). *The European school survey project on alcohol and other drugs*. Alcohol and other drug use among students in 30 European countries. The Swedish Council for Information on Alcohol and Other Drugs, CAN & The Council of Europe.
45. The Middle Eastern Council of Churches. (1989). *ﺍﻟﺸﻮﺑﺎﺩﺓ ﻋﻨﺪ ﺍﻟﺸﻮﺑﺎﺩﺓ* . [The problem of addiction]. Cairo, Egypt: The Middle Eastern Council of Churches.
46. United Nations 1998 Common Country Assessment Report, available online: <http://www.un.org.lb/data/cca/cca.htm>
47. United Nations Drug Control Program, The Drug Abuse Situation Among Young People. United Nations 1998
48. United Nations Office for Drug Control and Crime Prevention. *Drug abuse rapid situation assessment and responses. ODCCP studies on drugs and crime: Guidelines*. Vienna, Austria: United Nations.
49. United Nations Development Program. (1998). *The national human development report-1998. Youth and development*.
50. Weinberg, NZ., Rahdert, E., Colliver, JD., & Glantz, MD. (1998). Adolescent substance abuse: a review of the past 10 years. *J Am Acad. Child & Adolescent Psychiatry*, 37 (3), 252-61.
51. Yaakoub, G. (1992). *ﺍﻟﻨﻮﺗﺎﺗﯩﺔ ﻋﻨﺪ ﺍﻟﺸﻮﺑﺎﺩﺓ* : ﺍﻟﻨﻮﺗﺎﺗﯩﺔ ﻋﻨﺪ ﺍﻟﺸﻮﺑﺎﺩﺓ . [Developmental psychology among teenagers: Drugs and their harmfulness]. Lebanon: Dar Al Nahar.
52. Yabroudi, P., Karam, E. G., Chami, A., Karam, A., Majdalani, M., Zebouni, V., Melhem, N., Mansour,



C., & Saliba, S. (1999). Substance use and abuse: The Lebanese female and the Lebanon wars In L. Rustsm Shehadeh, (Eds), *Women and War in Lebanon*. (pp. 282-316). Florida: University of Florida Press.

53. Yang, MS., Yang, MJ., Liu, Y., Ko, Y. (1998). Prevalence and related risk factors of licit and illicit substances use by adolescent students in southern Taiwan. *Public Health, 112, 347-352*
54. Zaarour, R. (1994). *La toxicomanie au Liban: Etude et enquete*. [The drug addict in Lebanon: study and research]. Unpublished thesis, St Joseph University, Beirut, Lebanon.



# ANNEX I



## RSA participants *(In alphabetical order within each category)*

Institution/ Post	Name
<b>United Nations</b>	
UNDCP Regional Drug Demand Reduction Advisor for Africa, Nairobi	Dr. Abdool Rey Chad
UNDP ,National Program Officer, Beirut, Lebanon	Ms. Ali Ahmad Zeina
UNODC, Regional Office for the Middle East and North Africa, Assistant Regional Representative, Cairo, Egypt	Mr. Schiefer Wolfgang
UNODC, Regional Office for the Middle East and North Africa, Program Coordinator, Cairo, Egypt	Mr. Villadsen Leif
World Health Organization, Beirut, Lebanon	Dr. Saadeh George Aoun
<b>Ministries and Parliament</b>	
Ministry of Education, Beirut, Lebanon	Ms. Abboud Nazli
Ministry of Education, Beirut, Lebanon	Ms. Nina Lahham
Ministry of Education, Beirut, Lebanon	Ms. Traboulsi Juliana
Ministry of Health, Chief of Drug Use Bureau, Beirut, Lebanon	Dr. Ghezzawi Samia
Ministry of Health, General Director, Beirut, Lebanon	Dr. Ammar Walid
Ministry of Justice, Minister, Beirut, Lebanon	Mr. El-Jisr Samir
Ministry of Social Affairs, Beirut, Lebanon	Ms. Haddad Viviane
Parliament (Committee of Education), Beirut, Lebanon	Ms Hariri Bahia
Parliament (Committee of Education), Beirut, Lebanon	Mr. Jaradi Ahmad
Parliament (Committee of Education), Beirut, Lebanon	Mr. Kalash Ghassan
Parliament (Committee of Education), Beirut, Lebanon	Ms. Naaman Ghazwa
Public Prosecutor, Tripoli, Lebanon	Judge Oueidat Raymond
Supreme Criminal Court Judge, Beirut, Lebanon	Judge Riachi Ralph
<b>Syndicates</b>	
Syndicate of Doctors	Dr. Mallat Samir
<b>Internal Security Forces- Drug Enforcement Office</b>	
Central Bureau for Drug Enforcement, Beirut, Lebanon	Captain Abou Mrad Jihad
Central Bureau for Drug Enforcement, Head, Beirut, Lebanon	Colonel Chakkour Michel
Central Bureau for Drug Enforcement, Former Head, Beirut, Lebanon	General Daher Sami
Central Bureau for Drug Enforcement, Beirut, Lebanon	Lieutenant Khalil Abdo
Central Bureau for Drug Enforcement, Head of the Beka'a office, Bekaa, Lebanon	Captain Muja'es Rabih
Central Bureau for Drug Enforcement, Head of the South office, Sidon, Lebanon	Captain Oueidat Ibrahim
Central Bureau for Drug Enforcement, Head of the Tripoli office, Tripoli, Lebanon	Captain Sabsaby Khalid
Central Bureau for Drug Enforcement, Beirut, Lebanon	Lieutenant Yehia Bassem



Institution/ Post	Name
<b>Treatment/ Rehabilitation centers</b>	
American University Hospital, Beirut, Lebanon	Dr. Khani Mounir
American University Hospital, Beirut, Lebanon	Dr. Khoury Briggite
Balamand Hospital, Beirut, Lebanon	Ms. Fazaa Rania
Cross Hospital, Mount Lebanon, Lebanon	Dr. Azar Jocelyne
Cross Hospital, Mount Lebanon, Lebanon	Dr. Baddoura Charles
Cross Hospital, Mount Lebanon, Lebanon	Dr. Baladi Andre
Cross Hospital, Mount Lebanon, Lebanon	Dr. Hachem Dory
Cross Hospital, Mount Lebanon, Lebanon	Dr. Haddad George
Cross Hospital, Mount Lebanon, Lebanon	Dr. Kanaan Reve
Cross Hospital, Mount Lebanon, Lebanon	Dr. Karam Simon
Cross Hospital, Mount Lebanon, Lebanon	Dr. Mehanna Alain
Cross Hospital, Mount Lebanon, Lebanon	Dr. Pharaon Eugette
Cross Hospital, Mount Lebanon, Lebanon	Dr. Raad Pascal
Cross Hospital, Mount Lebanon, Lebanon	Dr. Richa Samy
Lebanese Hospital, Beirut, Lebanon	Dr. Skaff Madi Josyan
Oum el Nour, Beirut, Lebanon	Mr. Kisirwani William
Oum el Nour, Beirut, Lebanon	Mr. Sfeir Nadi
Oum el Nour, Beirut, Lebanon	Mr. Wheibe Elie
Oum el Nour, Beirut, Lebanon	Ms. Wheibe Jacqueline
Oum el Nour, Beirut, Lebanon	Ms. Yazigi Mona
Serhal Hospital, Beirut, Lebanon	Dr. Naja Wadih
St George Hospital, Beirut, Lebanon	Ms. Cordahi Caroline
St George Hospital, Beirut, Lebanon	Dr. Fayyad John
St George Hospital, Beirut, Lebanon	Dr. Karam Aimee
St George Hospital, Beirut, Lebanon	Dr. Karam Elie
St George Hospital, Beirut, Lebanon	Dr. Khalifeh Sami
St George Hospital, Beirut, Lebanon	Ms. Siriani Nathalie
St. Charles Hospital, Beirut, Lebanon	Dr. Boustani Antoine
St. Charles Hospital, Beirut, Lebanon	Dr. Chedid Elie
St. Charles Hospital, Beirut, Lebanon	Dr. Faran Christiane
<b>Non Governmental Organizations</b>	
Association Justice Et Miséricorde (AJEM), Coordinator of the Substance use program, Beirut, Lebanon	Ms. Assli Mirna
Association Justice Et Miséricorde, Director, Beirut, Lebanon	Pere El-Aya Hadi
Association Justice Et Miséricorde, Social worker, Beirut, Lebanon	Ms. Bazergi Shirene
Association Justice Et Miséricorde, Assistant Director, Beirut, Lebanon	Ms. Nassif Hana
Drogue Libère, President, Beirut, Lebanon	Ms. Arbeid Roweida
Drogue Libère, Beirut, Lebanon	Ms. Mehanna Leila
Jeunesse Anti-Drogue (JAD), General director, Mount Lebanon, Lebanon	Mr. Hawwat Joseph
Jeunesse Anti-Drogue, General director for the regional office, Mount Lebanon, Lebanon	Mr. Nakhle Richard



Institution/ Post	Name
<b>Non Governmental Organizations (cont'd)</b>	
Jeunesse Contre la Drogue (JCD), President, Beirut, Lebanon	Mr. Lahhoud Elie
Jeunesse Contre la Drogue (JCD), Former manager, Beirut, Lebanon	Mr. Rahme Elie
Lebanese Family Planning Association (LFPA), General Secretary Beirut, Lebanon	Mr. Osseiran Tawfiq
Lebanese Family Planning Association, Project coordinator, Beirut, Lebanon	Ms. Shami Cicilia
Lebanese National Council for Scientific Research, Beirut, Lebanon	Ms. Assad Shafica
Mouvement Social, Lebanon	Ms. Salomi Roxanne
National Center for Rehabilitation of Addicts, Amman, Jordan	Mr. Sallaj Ahmad
Soins Infirmiers et Développement Communautaire (SIDC), Director, Beirut, Lebanon	Mr. Aaraj Elie
Soins Infirmiers et Développement Communautaire (SIDC), Beirut, Lebanon	Dr. Hermez Joumana
<b>Consultants</b>	
Public Arena, Public relations consultant, Beirut, Lebanon	Mr. Eid Ibrahim
Public Arena, Assistant Public relations consultant, Beirut, Lebanon	Mr. Zoghbi Wael
<b>High Schools and Universities</b>	
Balamand Highschool, Principal, Koura, Lebanon	Mr. Bitar Salim
Balamand High School, Koura, Lebanon	Mr. Elias Sami
Balamand University, Beirut, Lebanon	Mr. Awad Khodor
Champville School, Prefect, Beirut, Lebanon	Mr. Farah Emile
Champville School, Director, Beirut, Lebanon	Pere Jarjour Antoine
Champville School, Prefect of Secondary III school, Beirut, Lebanon	Mr. Rayyes Joseph
College Louise Wegman, Former head, Member of the Board of Directors, Beirut, Lebanon	Ms. Abou Reymonde
College Louise Wegman, Physician, Beirut, Lebanon	Dr. Abou Sawwan Jean
College Louise Wegman, Head of Secondary School, Beirut, Lebanon	Ms. Geha-Villar Tiba
Evangelical School, Director of Secondary School, Zahle, Lebanon	Ms. Eter Helen
Evangelical School, Head, Sidon, Lebanon	Mr. Daoud Jean
Evangelical School, Sidon, Lebanon	Ms Koteb Aida
Evangelical School, Social worker, Sidon, Lebanon	Ms. Mulle Karen
Evangelical School, Head, Zahle, Lebanon	Mr. Abboud Malak
Evangelical School, Former Head, Zahle, Lebanon	Mr. Eter Kimham
Evangelical School, Head, Tripoli, Lebanon	Mr. Succar Iskandar
International College, Director, Beirut, Lebanon	Ms. Mujabber Mourani Michka
Lebanese Preparatory School, Psychiatrist, Beirut, Lebanon	Dr. Eid Nabih
Lebanese Preparatory School, Head, Beirut, Lebanon	Ms. Sayegh Nelly
Notre Dame University, Beirut, Lebanon	Mr. Ziad Fahed



Institution/ Post	Name
High Schools and Universities ( <i>cont'd</i> )	
Sainte Famille School, Head, Zahle, Lebanon	Soeur Khoury Felix
St Joseph School, Head, Zahle, Lebanon	Soeur Mardini Theodora
Universite Saint Joseph, Dean of Student Affairs, Beirut, Lebanon	Mr. Abi Zeid Ghassan
Universite Saint Joseph, Beirut, Lebanon	Ms Azar Karina
Universite Saint Joseph, Beirut, Lebanon	Ms Daccache Nora
Universite Saint Joseph, Beirut, Lebanon	Ms. Rami Rosa



# ANNEX II



## Secondary data presented in reverse chronological order of publication year

<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>		<i>Type (ref. #)</i>
Comorbidity of Substance Abuse and Other Psychiatric Disorders in Acute General Psychiatric Admissions- A Study From Lebanon	Karam, E. G., Yabroudi, P. F., Melhem, N.	2002	<i>Objective:</i>	To asses the comorbidity of substance abuse with other psychiatric disorders	Original research- Published article in the Journal of Comprehensive Psychiatry (20)
			<i>Population:</i>	222 patients with present/past substance abuse/dependence admitted during 1979-1992 to St. George Hospital's Psychiatry and Clinical Psychology Department	
			<i>Design:</i>	Retrospective chart review of consecutive admissions (1979-1992)	
War, Peace and the Relaxing Pill	Saab, B. R., Damlouji, N. Lakkis, N., Usta, J.	2001	<i>Description:</i>	Review of secondary data on psychotropic substance use in Lebanon and its associated factors.	Unpublished review report (38)
Use and Abuse of Licit and Illicit Substances: Prevalence and Risk Factors among Students in Lebanon	Karam, E. G., Melhem, N., Mansour, C., Maalouf, W., Saliba, S., Chami, A.	2000	<i>Objective:</i>	To examine the prevalence and pattern of substance use among university students in Lebanon, and identify the associated risk and protective factors.	Original research- Published article in the European Journal of European Addiction Research (19)
			<i>Population:</i>	A random sample of 1,851 students from the American University of Beirut and St. Joseph University	
			<i>Design:</i>	Cross-sectional survey, using stratified cluster sampling. The instrument (based on DIS-III) was self-administered, and assessed the ever use, more than five time use, daily use, abuse and dependence (based on DSM-III criteria), of both licit and illicit substances including: (alcohol, nicotine, tranquilizers, barbiturates, morphine, stimulants, codeine, cannabis, cocaine, and heroin). The study also delineated a number of risk and protective factors possibly associated to substance use.	
A General Population Survey on Patterns of Benzodiazepine Use and Dependence in Lebanon	Naja, W. J., Pelissolo, A., Haddad, R., Baddoura, R. Baddoura, C.	2000	<i>Objective:</i>	To determine the prevalence of benzodiazepine consumption in Lebanon, the patterns of use, and the risk factor profile of those who are dependant.	Original research- Published in Acta Psychiatrica Scandinavica (27)
			<i>Population:</i>	A random sample of 1000 subjects selected from the community	



Title	Author	Year	Methodology/Synopsis	Type (ref. #)
			<p><i>Design:</i> Stratified, multi-stage cluster sampling. A 54-item questionnaire was elaborated for the study (based on previous research), and was administered through direct interviewing. The instrument assessed benzodiazepine ever use, last 30-day use, and dependence (based on DSM-IV criteria), in addition to a number of risk factors possibly linked to benzodiazepine dependence.</p>	
<p>Health Practices of Older Adolescents in Post-War Lebanon: Results from a University Survey and Comparison with Western Findings</p>	<p>Shediac-Rizkallah, M., Afifi-Soweid, R., Farhat, T., Yeretizian, J.</p>	<p>2000</p>	<p><i>Objective:</i> To assess the health-related practices, including substance use, among newly enrolled university students for the purpose of planning future programs to improve students' health and well being and render the university environment as a safe and healthy one.</p> <p><i>Population:</i> 954 students were sampled, covering the vast majority of the students newly entering the American University of Beirut during during Fall 1998</p> <p><i>Design:</i> Cross-sectional survey. The instrument is a self-administered questionnaire, covering 15 behavioural risk/lifestyle areas, identified from previously developed and used questionnaires in Lebanon and abroad; two of the areas pertained to pattern of substance use: 1) Alcohol and drugs (ever use of alcohol, had at least one alcoholic drink per day on one or more days during the last 30 days (among ever drinkers), had at least 5 drinks in a row on one or more days during the past 30 days (among last 30-day users) and ever use of sedatives, marijuana, illegal drugs), 2) Tobacco (ever smoking cigarettes or hubble-bubble, smoked on one or more days during the past 30 days (among ever smokers), smoked more than 10 cigarettes per day during the past 30 days (among last 30 day smokers)</p>	<p>Original research- Report presented at the First Mediterranean Social and Political Research Meeting (39)</p>



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>		<i>Type (ref. #)</i>
Women and War in Lebanon: Substance Use and Abuse: The Lebanese Female and the Lebanon Wars	Yabroudi, P. F., Karam, E. G., Chami, A., Karam, A., Majdalani, M., Zebouni, V., Melhem, N., Mansour, C., Saliba, S.	1999	<i>Description:</i>	Comprehensive review and discussion of the available secondary data	Book chapter (review of available original research) (52)
			<i>Addressing:</i>	dual diagnosis of psychiatric illness and substance abuse, drug use and abuse in the university setting, and alcohol use and abuse in the university and community setting.	
Youth Health Risk Behaviour Survey Among Secondary School Students in Lebanon: Prevalence and Clustering of Risk Behaviours. 1997	A. Sibai, N. Kanaan	1999	<i>Objective:</i>	To assess the prevalence of six health risk behavioural characteristics among secondary school students	Unpublished report- Presented to the WHO/UNICEF (40)
			<i>Population:</i>	1093 randomly selected secondary students, selected from 14 different schools (5 public and 9 private) located in administrative Beirut and its suburbs	
			<i>Design:</i>	Descriptive cross-sectional survey based on a two-stage sampling design The instrument is a 110-item self-administered questionnaire including questions on alcohol and drug use, cigarette and hubble-bubble smoking, and other behavioural risk factors. The instrument is an adaptation of the Youth Risk Behaviour Survey Questionnaire used by the Center for Disease Control and Prevention. Substance use indicators include: ever smoking, frequency of smoking (number of days during past 30 days), cigarette consumption (cigs/day during past 30 days), daily smoking for a period of at least one month, ever alcohol drinking, drinking within past 30 days, frequency of binge drinking, ever and past 30 day use of cannabis, and cocaine (or other drugs)	
Drug Abuse in Lebanon	Antoun, F.	1996	<i>Description:</i>	A report on the number of drug abusers in treatment for the year 1994 (N=804) based on data obtained from different institutions (JAD, Oum el Nour, and St Charles Hospital). Data was gathered using a WHO questionnaire to be adopted in the future by the various institutions providing treatment	Published review report in the Journal of Epi-News (4)



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>		<i>Type (ref. #)</i>
				for substance use in Lebanon for the purpose of maintaining a database in the Ministry of Public Health.	
(No To Addiction)	لا للإدمان Lebanese Family Planning Association	1995	<i>Objective:</i>	This book consists of 8 chapters as well as the results of a study conducted to assess the students' attitude towards substances, their substance use behaviour, and related factors	Book (24)
			<i>Population:</i>	2088 students sampled from the Lebanese University (Beka'a and Beirut branches), and the Lebanese American University in Beirut.	
			<i>Design:</i>	Systematic random sampling in the LU, but in the LAU the interviewers stood on campus and interviewed whoever accepted. Data was collected through direct interviewing. The substance use indicators include: ever use of hashish, opiates, cocaine, tranquilizers and other drugs.	
Beirut: A Health Profile 1984-1994: Morbidity, mortality, and Risk factors	Nuwayhid, I., Sibai, A., Adib, S., Shaar, K.	1994	<i>Objective:</i>	To describe the level of morbidity and mortality in Beirut, in addition to their associated risk factors	Book (32)
			<i>Population:</i>	1217 Lebanese adults (18 years and above) sampled from the Beirut community	
			<i>Design:</i>	A stratified multi-stage cluster random sampling. Data was collected through direct interviewing. The instrument assessed several risk factors, including smoking and alcohol intake.	
Rapid Assessment of Illicit Drug Use in Greater Beirut	Ingold, F. R.	1994	<i>Objective:</i>	To describe the pattern of drug abuse situation in Lebanon in 1993	Original research- Presented to the UNDCP (16)
			<i>Population:</i>	substance users in treatment, and street substance users.	
			<i>Design:</i>	Data was collected using quantitative and qualitative data collection techniques, following the Rapid Situation Assessment methodology.	



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>		<i>Type (ref. #)</i>
La Toxicomanie au Liban: Etude et Enquête (Drug Addiction in Lebanon: Study and Research)	Zaarour, R.	1994	<i>Description:</i>	This thesis is mainly divided into two parts: the first includes a description of different substances (natural history, chemical composition, effects, treatment, etc.), and the second entails the results of an original research.	Original research- Thesis (54)
			<i>Objective:</i>	To collect descriptive information on the patients substance use behaviour, their demographic profile, treatment information, and some factors related to substance use	
			<i>Population:</i>	852 substance use patients admitted to St. George Hospital and Cross Hospital during the designated study period Design: retrospective chart review (1980 and 1993) on consecutive admissions	
Substance Abuse in Lebanon: Expert Report Special Reference: Women in Lebanon: Substance Abuse- AIDS	Karam, E. G.	1993	<i>Description:</i>	Expert report including a review and a discussion of the available literature on substance abuse treatment in Lebanon, with a focus on women (substance use, abuse behaviour, HIV, etc...)	WHO (Geneva) Expert report (21)
Histoire des paradis artificiels (The story of artificial paradise)	Boustany, A.	1993	<i>Description:</i>	This book includes in its first part the astonishing saga of the psychoactive substances. The second part is concerned with role of drugs in the Lebanese society, which the author has been an active witness for, through the organization of the first services to address the war against drug addiction.	Book (6)
Toxicomanie au Liban (Drug Addiction in Lebanon)	Baddoura, C.	1992	<i>Objective:</i>	To describe the pattern of substance use in Lebanese patients	Original research- Published in the Bulletin Académie Nationale Médicale (5)
			<i>Population:</i>	990 drug addicts hospitalized in Cross Hospital for detoxification, during 6 different periods (throughout the Lebanon war period) each extending for one year	
			<i>Design:</i>	retrospective chart review of consecutive admissions during the periods 1973-1974, 1976-1977, 1979-1980, 1984-1985, 1986-1987, 1989-1990	



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>	<i>Type (ref. #)</i>
سيكولوجيا النمو عند المراهق: المخدرات و أخطارها (Developmental Psychology Among Teenagers: Drugs and their Harmfulness)	Yaakoub, G.	1992	<i>Description:</i> This book consists of 9 chapters that tackle the following: a general definition of drugs, and a detailed description of the consequences, symptoms, and harms associated with the use of each of different drugs. It also addresses the means for prevention and treatment. The book also includes a field study on a sample of 900 college and university students, sampled from the Beirut University College (both branches), American University of Beirut, Arab University, Saint Esprit University (Kaslik) and St. Joseph University.	Book (51) (includes original research)
مشكلة الإدمان (The Problem of Addiction)	The Middle Eastern Council of Churches	1989	<i>Description:</i> This book includes several reports written by a number of different authors, addressing different aspects of the addiction problem, including a description of the addicts' personality, the Law on Drugs and addiction, Christianity and alcoholism, the role of media and addiction, and other relevant topics.	Book (45)
Pharmacovigilance et Abus des Drogues au Liban	Nehme, C.	1989	<i>Description:</i> This thesis is mainly divided into two parts: the first includes a description of different substances and dependence on each family of substances, and the second part entails a description of the drug situation in Lebanon, including information on plantation, drugs and AIDS, the diagnostic tests available, some statistics, and preventive measures.	Original research- Thesis (31)
Evolution De La Toxicomanie A Travers Les Années De La Guerre (Evolution of Drug Addiction Throughout the War Years)	Abdel-Malak, N.	1989	<i>Description:</i> This thesis consists of 11 chapters. Generally, it includes a literature review on the prevalence of drugs (worldwide and in Lebanon), information on addiction and pharmacodependence, psychopathology, etc.), a description of the pharmacology of different substances including their effects, personality of substance users, and an evaluation of substance use disorder treatment. The thesis also includes the results of an original research.	Original research- Thesis (1)



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>	<i>Type (ref. #)</i>
			<p><i>Objective:</i> To collect descriptive information on the patients' substance use behaviour, their demographic profile, and some factors possibly related to their substance use</p> <p><i>Population:</i> 622 drug addicts hospitalized in Cross Hospital for detoxification, during 5 different periods (throughout the Lebanon war period) each extending for one year</p> <p><i>Design:</i> retrospective chart review of consecutive admissions during the selected period</p>	
المخدرات: جريمة هذا العصر (Drugs: the Crime of This Age)	Al Hajj, S.	1988	<p><i>Description:</i> This book consists of four chapters; chapter one includes a description of the different types of drugs, and tackling the production and smuggling of drugs in Lebanon; chapter two tackles the factors related to drug use, and anecdotes as relayed by some substance users; chapter three addresses the harmfulness of drugs and their relation to other crimes; and finally chapter four portrays the societal attitudes towards the drug problem.</p>	Book (2)
Smoking Patterns Among University Students in Lebanon	Nassar, N. T., Zurayk, H. C., Salem, P. A.	1980	<p><i>Objective:</i> To assess the prevalence of Cigarette and cigar/pipe smoking among university students in Lebanon</p> <p><i>Population:</i> A random sample of 940 university students from the American University of Beirut</p> <p><i>Design:</i> A cross-sectional survey, using systematic random sampling. The instrument was administered by mail. Smoking indicators that were assessed were: prevalence, incidence and frequency.</p>	Original research- Published in the College Health Journal (29)
مأساة الشباب المعاصر (The Sufferings of Contemporary Youth)	Sukkar, B.	1980	<p><i>Description:</i> This book consists of 7 chapters, including statistics: chapter one describes drugs in terms of their history, and psychosocial consequences; chapter two tackles the effect of drugs on the cellular level and the neurological system; chapter three includes a</p>	Book (41) Reprint (42)



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>	<i>Type (ref. #)</i>
			classification of drugs and the effects produced by each type of drug; chapter four is entitled "a call for the parents", and the last three chapters tackle the Lebanese law on drugs and propose solutions to the drug problem on the national level.	
The non-medical use of marijuana, LSD, and Amphetamines by Students at the American University of Beirut	Nassar, N. T., Melikian, L. H., Der-Karabetian, A.	1973	<p><i>Objective:</i> To assess the prevalence of non medical use of marijuana, LSD, and Amphetamines among university students in Lebanon</p> <p><i>Population:</i> A random sample of 621 university students from the American University of Beirut</p> <p><i>Design:</i> A cross-sectional survey, using systematic random sampling. The instrument was administered by mail, and it was adopted from an instrument used by Eells, K. in a Marijuana and LSD survey on one college campus. Substance use indicators that were assessed were: prevalence, incidence and frequency of use of substances, in addition to a question relating to the frequency of use of sleeping pills and tranquilizers</p>	Original research (Part I)- Published in the Lebanese Medical Journal (28)
Some personality correlates of Marijuana users at the American University of Beirut	Melikian, L. H., Nassar, N. T., Der-Karabetian, A.	1973	<p><i>Objective:</i> To compare the scores of ever users and never-users of marijuana on self-acceptance, flexibility, self-control, and anxiety</p> <p><i>Population:</i> A random sample of 621 university students from the American University of Beirut</p> <p><i>Design:</i> A cross-sectional survey, using systematic random sampling. The instrument was administered by mail, and it was adopted from an instrument used by Eells, K. in a Marijuana and LSD survey on a college campus. In addition to the substance use indicators, the instrument included several scales: four personality scales, a self-acceptance scale, a flexibility scale, a self-control scale and an anxiety scale.</p>	Original research (Part II)- Published in the Lebanese Medical Journal (25)



<i>Title</i>	<i>Author</i>	<i>Year</i>	<i>Methodology/Synopsis</i>	<i>Type (ref. #)</i>
Problem of Drug Addiction in Lebanon	Puzantian, V. R.	1973		Editorial (36)

Upon reviewing the secondary data sources, particularly those including field data from the community or hospital setting, the following themes were extracted and summarized, where applicable (*See Chapter Six-I*):

- \* Prevalence of substance use, gender differences in substance use, mode of use of substances;
- \* Treatment data including number of substance use admissions, gender differences in admission to treatment, mean age of patients

