





1 June 2011 P-PG/Med (2011) 17

# DRUG USE IN MOROCCAN SCHOOLS MedSPAD 2009-2010 report

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#### INTRODUCTION

MedSPAD, or Mediterranean School Survey Project on Alcohol and Other Drugs, is a crossdisciplinary survey conducted in schools on the basis of a questionnaire focusing on use of psychoactive substances and attitudes and opinions relating to them.

MedSPAD is an adaptation to the Mediterranean context of the European ESPAD survey (European School Survey Project on Alcohol and other Drugs), which is a cross-disciplinary survey conducted in schools in 35 European countries simultaneously. The MedSPAD survey forms part of the activities of MedNET, the Pompidou Group's co-operation network on drugs and drug abuse in the Mediterranean region.

MedNET aims to promote co-operation, exchanges and transfers of knowledge between the countries of the southern Mediterranean and the Pompidou Group's European member countries and donor countries (North-South and South-North exchange) and among the countries of the southern Mediterranean themselves (South-South exchange).

The MedSPAD project came into being after the conference organised by the Pompidou Group in 1999 on co-operation in the Mediterranean region, which showed the need for better knowledge of drug use among adolescents and young adults in the countries of the region.

The conduct of the MedSPAD survey for Morocco was entrusted to two joint teams from the Ministry of Education and Higher Education and Arrazi Psychiatric Hospital in Salé. This large-scale survey was in response to a joint policy decision by the Ministry of Education and Higher Education (2009-2012 emergency plan) and the Ministry of Health to evaluate the problem of drug use in schools at national level and draw up appropriate recommendations for managing it.

MedSPAD 2009-2010 followed a survey conducted in Rabat-Salé in 2006 among a population of 2139 upper secondary pupils, which itself followed a pilot survey of a sample of 400 pupils in Rabat in April 2003.

Similar MedSPAD surveys are carried out in countries around the Mediterranean basin, including some Arab and North African countries such as Lebanon and Algeria. For reasons of geographical proximity and cultural similarity, these surveys can be used for comparative purposes.

Our survey was the second to be conducted among a representative sample of Moroccan upper secondary pupils, following that carried out by Toufiq et al in 1993.

The MedSPAD survey, deriving from the ESPAD survey, was entirely reviewed to ensure that it was operational and tailored to Moroccan culture. The teams from the Ministry of Education and Higher Education and Arrazi Psychiatric Hospital held several preliminary working meetings to discuss the entire survey procedure point by point and devise optimum implementation strategies.

The main aim of MedSPAD Morocco 2009 was to evaluate the prevalence of psychoactive substance use among Moroccan school pupils, and more specifically those aged 15 to 17.

Further aims of the survey were to:

- Determine the age of first use of psychoactive substances;
- Identify certain factors which might be predictive of drug use among pupils (lifestyle, socio-economic level, family, environment) and which might provide focal points for a school mental health policy;
- Form an impression of this population's opinions and behaviour patterns;
- Highlight points which might serve as a basis for framing recommendations and taking action relating to the prevention of psychoactive substance use in schools;
- Be able to conduct further surveys of the same type every 3-4 years in order to evaluate the trends in drug use.

#### METHODOLOGY

#### CONDUCT OF THE SURVEY

Ten voluntary survey-takers were recruited from among the trainee psychiatrists working at Arrazi Hospital in Salé. They were trained in how to conduct surveys in schools and instructions were issued to them regarding the following specific points:

- introducing themselves as doctors working outside the school;
- the anonymity of the questionnaire, its scientific value and the need to give honest answers;

- no school staff to be involved and no information on drugs to be provided to pupils during the survey, and only the survey-takers to be present in the classroom when administering the questionnaire;

- classes to be chosen at random and, should a class be absent, a class of an equivalent level to be chosen at random by the survey-taker;

- ensuring confidentiality by placing a box at the back of the classroom in which the pupils themselves can deposit the completed questionnaires;

- survey-takers to thank the pupils at the end of the survey and to fill in a form for each class giving an idea of the number of pupils present, the number absent, cases of refusal, the atmosphere in which the survey took place, points raised by the pupils, questions not understood, the duration of the survey and any incidents arising during the survey;

- the questionnaires to be systematically checked after the administration of each questionnaire.

The Ministry of Education and Higher Education provided logistic support for all the surveytakers throughout the duration of the survey (travel from one school to another and from one region to another, telephone back-up, etc).

For ethical reasons, the survey was not carried out until the Ministry of Education and Higher Education had given its official agreement. The document authorising access to the schools to conduct the survey was given to the survey-takers so that they could show it to the school heads, and only consenting pupils were included in the survey.

The timing of the survey was not random. To avoid any distortion of the results, a period was chosen when there were no examinations, religious festivals or school holidays. The survey began on 21 December 2010 and lasted 6 days.

#### **SELECTION OF THE SAMPLE**

The survey took place country-wide. As it targets essentially pupils aged 15-17, four levels were selected, specifically the last three years of upper secondary education, ie the common core year and the first and second years of the baccalaureate, and the third year of lower secondary education.

All the country's regions (16) were included. Use was made of a database of Moroccan schools and the different levels and classes. A representative sample of Moroccan secondary-school pupils was defined and an average of 36 pupils per class was estimated. The sample was selected on a cluster basis, care being taken to ensure representativeness in relation to education authority areas, gender, rural and urban areas, and public and private education.

The towns and cities, schools and classes were chosen at random. The schools and classes were subsequently drawn by lot, the target being a sample of over 6000 pupils. Schools were not given advance warning of the survey-takers' visit in order to avoid any skewing of the results.

#### QUESTIONNAIRE

The instrument used was an anonymous self-administered questionnaire modelled on the ESPAD survey. The questionnaire was translated into Arabic and was revised several times, then reworked in relation to the questionnaire used in the 2003 pilot survey and the one used by the Algerian team, in an attempt to adapt it to the Moroccan context, the pupils' vocabulary and local terms for the different drugs. The questionnaire takes about 30 minutes to complete. It was also reworked in relation to the 2006 MedSPAD survey in Rabat-Salé and items on the use of shisha, cocaine and crack were added. Other items were added to the original questionnaire to meet the expectations of the Ministry of Education and Higher Education.

The questionnaires were checked before distribution to ensure there was nothing missing.

The questionnaire is easy to read and consists of 87 questions, including closed multiple choice questions and 5 open-ended questions designed to test the sincerity and consistency of the replies. The questions concern the respondents' socio-demographic characteristics (age, gender, standard of living), their parents, family and friends (parents' educational level, relations with family and friends, drug use habits), their education (previous term's marks, absenteeism, truancy), their use of psychoactive substances (tobacco, alcohol, cannabis, psychotropic substances, cocaine, crack and other drugs), their knowledge of the different psychoactive substances and of the legislation on drug use in Morocco, their sources of information about drugs and the sources from which, and ease with which, they obtain drugs.

## STATISTICAL ANALYSIS

Our data were entered and analysed on the SPSS version 17 (2008) software application. Analysis initially covered all pupils, then focused on those aged 15-17. The "gender" variable was incorporated in the study of the prevalence of psychoactive substances. We used the chi square test and the Student "t" test in the comparative studies. In the study of associations we used the Odd Ratio (OR) test. The significance threshold is determined by the variable "p", which is deemed significant when p<0.005.

## RESULTS

## CONDUCT OF THE SURVEY

The survey took place in accordance with the predetermined rules. The survey-takers entered the classrooms immediately after receiving the approval of the school head, to ensure that no instructions were passed on to the pupils. The survey-takers were pleasantly surprised at the way they were received by the school heads, who asked to be kept informed of the main results of the survey, and at the co-operative attitude of the teachers, who readily interrupted their classes. The survey-takers reported that, in 93% of cases, they were well received and had easy access, and the pupils were studious, showed an interest in drug use issues and filled in the questionnaire properly. In 7% of cases, their task was made difficult by noisy classes or difficulties of access to classes and pupils because of the bad weather conditions at that time of year.

The time taken to administer the questionnaire in each class varied from 15 to 56 minutes, with an average of  $35.14 \pm 7$  minutes.

87.7% of pupils said that they would have answered honestly if they had used alcohol or cannabis. Only 5% said that they would definitely not have answered honestly if this had been the case. The results are similar for pupils aged 15-17.

#### CHARACTERISTICS OF THE SAMPLE

The survey took place in 34 towns and cities in 14 education authority areas.

192 classes (22 in rural areas and 170 in urban areas) were selected at random in 110 different schools (14 in rural areas and 96 in urban areas). The number of 3rd year lower-secondary classes was 25. There were 77 common core year classes, 66 first year baccalaureate classes and 24 second year baccalaureate classes.

By the end of the survey, 6371 questionnaires had been completed.

The number of pupils absent was 671 and only 24 refused to participate in the survey.

#### **1. SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE**

The characteristics of the sample and of the pupils aged 15-17 are described in Tables 1 and 2 (see appendix).

#### a- Age:

The age of the pupils ranged from 10 to 23 with an average age of  $16.5 \pm 2.4$ . More than 2 pupils out of every 3 were in the 15-17 age bracket (71.9 %) and 5.2% of the pupils surveyed were under 15. Pupils over 17 accounted for 22.9% of the total sample.



Figure 1: Distribution of the pupils by age bracket

#### **b- Gender:**

The sample consisted of 3257 girls (51.5%) and 3057 boys (48.3%). Girls also predominated in the 15-17 age bracket (54.3%).



Figure 2: Distribution of the pupils by gender

#### c- Place of residence:

Of the total sample, 87% (n=5532) lived in urban areas and 13% in rural areas. Of those aged 15-17, 90.1% (n=4011) lived in urban areas and only 9.9% in rural areas. Only 7.3% of the sample were boarding pupils.





#### d- Average mark in the last term of the previous school year:

Nearly half of the pupils questioned (43.8%) had an average mark of between 10 and 12 in the last term of the previous school year. Only 9% of the total had an average mark below 10.

Among the 15-17 year olds, some 11% had an average mark of less than 10 out of 20.



Figure 4: Last term's average mark for pupils aged 15-17.

#### e- Absenteeism in the previous 30 days:

In the sample as a whole, approximately one pupil out of every two had been absent from school for at least one day in the previous 30 days.

Among the15-17 year-olds, nearly 50% had been absent for at least one day. The reason was sickness in 60% of cases.



Figure 5: Number of days' absence from school in the previous 30 days.

#### f- Relations with parents:

More than 2 out of every 3 pupils questioned reported very satisfactory relations with their parents (77% for relations with the mother and 68% for relations with the father). Of the pupils aged 15-17, 7% and 10% respectively claimed to be dissatisfied with their relations with their mother and father.



Figure 6: Degree of satisfaction with parental relations.

## g- Parents' level of education:

In the sample as a whole, 35% of pupils' mothers were illiterate as compared with 19% of the fathers. The figures for the 15-17 age group are similar.

## 2. KNOWLEDGE OF PSYCHOACTIVE SUBSTANCES:

Over 9 out of every 10 pupils questioned (91%) were familiar with alcohol. 84% of the pupils were familiar with hashish.

More than 2 out of every 3 pupils questioned (72%) were familiar with sleeping pills and sedatives.

69 % of the pupils questioned were familiar with cocaine.

Over 8 out of every 10 pupils questioned were unfamiliar with crack.





## PREVALENCE STUDY

## Tobacco:

20.4% (n=1301) of all the pupils questioned said they had smoked cigarettes in their lifetime. The 12-month prevalence rate was 10.8% (n=688) and the 30-day prevalence rate 7.4% (n=678).

The lifetime prevalence rate for shisha was estimated at 21.9% (n=1398).

In the 15-17 age bracket, 19.2% (n= 853) had smoked shisha in their lifetime. 18.4% (n=830) said they had smoked tobacco in their lifetime (27.7 % of all the boys and 10.4% of all the girls). 9.5% (n=419) had smoked tobacco in the previous 12 months (14.7% of the boys and 5.1 % of the girls). The 30-day prevalence rate was 6.1% (n=270), with 9.8 % for boys and 3.1% for girls.

The prevalence rates increase with the pupil's age (p< 0,0001) and are gender-dependent (p < 0.0001).



Figure 8 : Prevalence of tobacco use among the 15-17 year-olds

Over half the pupils aged 15-17 (51.25%) who had smoked cigarettes in the previous 30 days had smoked less than one per day, while some 17 % had smoked more than 5 per day. These regular users might already fall into the problem use category (see figure 9). In the majority of cases, cigarette use was still at the experimental stage.



Figure 9 : Frequency of tobacco use in the previous 30 days

## 2. Alcohol:

Of all the pupils questioned, 10% (n=630) said they had used alcohol in their lifetime. The 12-month prevalence rate was 5.6% (n=356) and the 30-day prevalence rate 3.5% (n=223).

Among the pupils aged 15-17, the lifetime prevalence rate for alcohol use was 7.7% (n=348); the figures were 11.8% and 4.2% for boys and girls respectively.

The 12-month prevalence rate was estimated at 4.2% (n= 191), with 6.9% for boys and 1.9% for girls. 2.5 % (n= 112) of the pupils said they had used alcohol in the previous 30 days, with 4.5% for boys and 0.8% for girls (see figure 10).

The prevalence rates are higher among boys than among girls and also among the older pupils (p<0.0001). Secondary school pupils use tobacco more than alcohol and the downward trend in the prevalence curves among the pupils aged 15-17 points to experimental use.



Figure 10 : Prevalence of alcohol use among pupils aged 15-17

54 % of those aged 15-17 (n=72) who had consumed alcohol recently had done so on one day, while 10% (n=13) of recent users seemed to have already developed problem alcohol use and said they had drunk alcohol on more than 10 out of the previous 30 days (see figure 11).



Figure 11 : Frequency of alcohol use in the previous 30 days

## 3. Cannabis:

9.2% (n=587) of the pupils questioned said they had used cannabis in their lifetime. 6.2% (n=392) of the sample had used cannabis in the previous 12 months, while 4.1% (n=259) had used the substance in the previous 30 days.

7.2% (n=326) of those aged 15-17 said they had used hashish or its derivatives in their lifetime (12.5% of the boys and 2.5% of the girls). 4.6% (n= 209) of the 15-17 year-olds had used cannabis in the previous 12 months (8.5% of the boys and 1.3% of the girls) and 2.6% (n=119) of them had used the substance in the previous 30 days (5.1% of the boys and 0.6% of the girls).

The male predominance is significant (p<0.001) and the prevalence rates increase with the pupils' age (p<0.001). The downward prevalence curve points to experimental use of cannabis (see figure 12).



Figure 1 : Prevalence of cannabis use among the pupils aged 15-17

Of the pupils aged 15-17 who had used cannabis in the previous 30 days, 38% (n=57) had done so on one day, while 26% (n=40) had used the substance on more than 5 days. This group of young users seems already to be involved in regular or problem use.



Figure 13 : Frequency of cannabis use in the previous 30 days among the 15-17 year-olds

#### 4. Non-prescription use of psychotropic substances:

In their lifetime, 4.3% (n=272) of the pupils questioned had used psychotropic substances without medical advice or a prescription.

2.4% (n=150) had used psychotropic substances in the previous 12 months while 1.7% (n=107) of the pupils questioned had used them in the previous 30 days.

Among the pupils aged 15-17, the lifetime prevalence rate for non-prescription use of psychotropic substances was 4% (n=182) (4.8% for boys and 3.4% for girls); it was 2.2% (n=98) in the previous 12 months (2.7% for boys and 1.7% for girls) and 1.3% (n=60) in the previous 30 days (1.7% for boys and 1.0% for girls) (see figure 14).

The prevalence rates for psychotropic substances are not influenced by gender.



Figure 14 : Prevalence of psychotropic substance use among pupils aged 15-17

The frequency of psychotropic substance use among the pupils aged 15-17 shows that as many as 23% (n=20) of those who had used them in the previous 30 days had used them on more than 5 days. The majority of users remain experimental users.



Figure 15 : Frequency of psychotropic substance use in the previous 30 days

#### 5. Cocaine:

1.5% of the pupils questioned said they had used cocaine in their lifetime.

The 12-month prevalence rate was 0.9% while the 30-day prevalence rate was 0.6%. The lifetime prevalence rate for cocaine use among the 15-17 year-olds was 1.2% (2% for boys and 0.5% for girls). The 12-month rate was 0.7% (1.1% for boys and 0.4% for girls), and the 30-month rate was 0.4% (0.8% for boys and 0.2% for girls) (see figure 16). The prevalence rates for cocaine seem low and are gender-dependent (p<0.001). They are

significantly higher among boys than among girls.



Figure 16: Prevalence of cocaine use among pupils aged 15-17

The figures for the frequency of cocaine use among the pupils aged 15-17 show that of 30% (n=10) of those who had recently used cocaine had done so on more than 5 days, while 48% (n=15) had done so on one day only.



Figure 17 : Frequency of cocaine use in the previous 30 days

## 6. Crack:

0.9% (n=56) of the pupils questioned said they had used crack in their lifetime. The 12-month and 30-day prevalence rates were both 0.5% (n=31).

The lifetime prevalence rate for crack use among the 15-17 year-olds was 0.7% (n=31) (1.1% for boys and 0.3% for girls). The 12-month rate was 0.4% (0.7% for boys and 0.1% for girls), and the 30-day rate was 0.4% (n=16) (0.7% for boys and 0.1% for girls) (see figure 18).

The prevalence rates for crack seem low and are gender-dependent. They are higher among boys than among girls (p<0.001).



Figure 18 : Prevalence of crack use among pupils aged 15-17

The figures for the frequency of crack use among the 15-17 year-olds show that some 35% (n=10) of recent crack users had used the substance on over 5 days in the previous month, while 55% (n=16) had only used it on one day (see figure 19).



Figure 19 : Frequency of crack use in the previous 30 days

## 7. Other drugs:

5.8% of the pupils aged 15-17 said they had used other drugs.

The other drugs mentioned were opioid derivatives, including heroin, ecstasy and inhalants (glue and other solvents), and the substances listed below, which were referred to by different terms, such as derivatives of cannabis (zalta, majoun, chkoufa etc) or tobacco (nafha, kala) or different families of psychotropic substances, mainly benzodiazepines.

## 8. Poly-drug experimentation

32% of all those surveyed said they had used at least one psychoactive substance. Of these, 18% had tried two substances and 11.5% three substances. 7.0% of users had tried four drugs, while 5.6% had used more than five.

## AGE OF FIRST USE OF PSYCHOACTIVE SUBSTANCES

#### 1. Tobacco:

The average age of first use of tobacco among those who had already smoked was  $14.5 \pm 1.9$ . The distribution curve rises sharply between ages 12 and 15, then falls off after age 15. Among the 15-17 year-olds, the average age of first use of tobacco was  $14.2\pm1.7$ .



Figure 20 : Age of first tobacco use among 15-17 year-olds who had already smoked.

## 2. Alcohol:

The average age of first use of alcohol among those who had already tried it was  $15.4 \pm 2.1$ . The distribution curve rises sharply between ages 12 and 16, then falls off after age 16. In the 15-17 age group, the average age of first use of alcohol was  $14.5\pm1.8$ .



Figure 21 : Age of first alcohol use among 15-17 year-olds who had already tried alcohol

## 3. Cannabis:

The average age of first use of cannabis among those who had already tried it was  $15.5\pm$  1.8. The distribution curve rises sharply between ages 12 and 15, then falls off after age 15. In the 15-17 age group, the average age of first use of cannabis was  $14.9\pm1.4$ .



Figure 22 : Age of first cannabis use among 15-17 year-olds who had already tried cannabis

## 4. Psychotropic substances without medical advice or a prescription:

The average age of first use of psychotropic substances among those who had already tried these substances without medical advice or a prescription was 15.4  $\pm$  1.9. The distribution curve rises sharply between ages 12 and 16, then falls off after age 16.

The average age of first use of psychotropic substances without a prescription was 14.8  $\pm$  1.6.



<u>Figure 23</u>: Age of first use of psychotropic substances among 15-17 year-olds who had already tried these substances without medical advice or a prescription.

## 5. Cocaine and crack:

The average age of first use of cocaine among those who had already tried it was  $16.1 \pm 1.9$ . The distribution curve rises sharply between ages 14 and 17, then falls off after age 17. Among the pupils aged 15-17, the average age of first use of cocaine was  $15.4\pm1.3$ . The average age of first use of crack among those who had already tried it was  $15.3 \pm 1.9$ . The distribution curve rises sharply between ages 14 and 16, then falls off after age 16. In the 15-17 age group, the average age of first use of crack was  $15.1\pm1.5$ .



Figure 24. Age of first use of cocaine among pupils aged 15-17 who had already tried it.



Figure 25. Age of first use of crack among pupils aged 15-17 who had already tried it.

## **KNOWLEDGE OF DRUGS AND SUPPLIERS**

## 1. Access to drugs:

44.3% of all the pupils said that access to drugs was very easy. 31.4% thought drugs were very easy to obtain and only 10.9% answered that it was very difficult to obtain drugs (see figure 26).



Figure 26 : Opinion of pupils on the ease with which drugs may be obtained

## 2. Places where drugs are obtained:

32.3% said that drugs were obtained on school premises. 56.6% answered that they were obtained in the vicinity of the school and 55.1% said that they were obtained in cafés and games rooms located close to the school (see figure 27).



Figure 27 : Places where drugs are obtained

## 3. Drug suppliers:

65% of the total sample answered that the suppliers were pupils. 9.1% said that the suppliers were members of the school staff, and school caretakers, teachers and even head teachers were mentioned. Other suppliers accounted for 26.5%, including dealers, security guards in the vicinity of the school, former pupils etc (see figure 28).



The girls said that the suppliers were pupils in 73.5% of cases, while the boys gave this answer in 56% of cases.

Figure 28 : Drug suppliers according to the pupils

## 4. Knowledge of the law against drug use:

58% of the pupils said that alcohol and drug use were prosecutable offences, while 23% and 17% respectively did not know this or said they were not prosecutable offences (see figure 29).



Figure 29: Prosecution for alcohol and drug use in Morocco

# PERCEPTION OF THE RISKS INVOLVED IN USING PSYCHOACTIVE SUBSTANCES

Table 1 sets out the main results for how the dangers of psychoactive substance use were perceived by the sample as a whole

|              | No d              | anger          | Moderate danger   |                | Moderate danger Serious danger |                | Don't know        |                |
|--------------|-------------------|----------------|-------------------|----------------|--------------------------------|----------------|-------------------|----------------|
|              | Occasional<br>use | Regular<br>use | Occasional<br>use | Regular<br>use | Occasional<br>use              | Regular<br>use | Occasional<br>use | Regular<br>use |
| Cigarettes   | 6.0%              | 3.3%           | 26.4%             | 10.7%          | 54.9%                          | 72.8%          | 12.7%             | 13.2%          |
| Alcohol      | 5.9%              | 3.9%           | 21.0%             | 14.5%          | 59.9%                          | 68.0%          | 13.2%             | 13.6%          |
| Hashish      | 3.5%              | 2.7%           | 15.0%             | 8.4%           | 69.0%                          | 75.8%          | 12.5%             | 13.1%          |
| Psychotropic | 2.7%              | 3.3%           | 8.4%              | 10.3%          | 75.8%                          | 67.6%          | 13.1%             | 18.7%          |
| substances   |                   |                |                   |                |                                |                |                   |                |
| Cocaine      | 1.9%              | 1.7%           | 9.1%              | 5.3%           | 73.6%                          | 76.9%          | 15.3%             | 16.0%          |
| Crack        | 1.9%              | 2.4%           | 7.4%              | 4.8%           | 57.6%                          | 59.1           | 33.0              | 33.7           |

Table 1: Perception by the sample as a whole of the dangers of psychoactive substance use

More than one out of every two pupils perceives occasional and regular use of all psychoactive substances as entailing serious danger. There is less perception of the risks of drugs among users than among non-users.

## SOURCES OF INFORMATION ABOUT THE DANGERS OF DRUG USE

Regarding the sources of information about the dangers of alcohol and drugs, the main sources mentioned were the internet (63.4%), the media (60%) and school (37.4%).





#### PUPILS' ATTITUDES TOWARDS PSYCHOACTIVE SUBSTANCE USERS

More than two out of every three pupils were against occasional and regular use of all psychoactive substances.

More than two out of every three pupils in the 15-17 age bracket said they were against occasional and regular users of all psychoactive substances.

This attitude varies according to the frequency of use, especially in the case of alcohol and tobacco, and suggests that pupils are able to distinguish more or less between occasional and regular use. This opinion might also infer an exclusive attitude towards users (see Table 2).

Between 53 and 89% of the pupils perceive drug use as entailing a serious risk. Perception of the risk varies according to the type of drug and the frequency of use. Between a quarter and a half of the pupils do not perceive drug use as entailing a serious risk (see table 2).

|                              | Yes                                     |                                   | No                                      |                                   | Don't know                              |                                   |
|------------------------------|---|-----------------------------------|---|-----------------------------------|---|-----------------------------------|
|                              | Are you against<br>occasional<br>users? | Are you against<br>regular users? | Are you against<br>occasional<br>users? | Are you against<br>regular users? | Are you against<br>occasional<br>users? | Are you against<br>regular users? |
| Cigarettes                   | 74.0%                                   | 81.2%                             | 15.9%                                   | 10.9%                             | 9.9%                                    | 7.9%                              |
| Alcohol                      | 82.0%                                   | 86.5%                             | 11.5%                                   | 7.5%                              | 6.6%                                    | 5.9%                              |
| Hashish                      | 86.3%                                   | 87.6%                             | 7.3%                                    | 6.2%                              | 5.8%                                    | 6.2%                              |
| Sedatives and sleeping pills | 82.1%                                   | 83.7%                             | 7.3%                                    | 6.1%                              | 10.6%                                   | 10.2%                             |
| Cocaine                      | 89.7%                                   | 90.0%                             | 4.8%                                    | 4.2%                              | 5.5%                                    | 5.8%                              |
| Crack                        | 81.8%                                   | 80.8%                             | 4.1%                                    | 4.1%                              | 14.1%                                   | 15.1%                             |

Table 2. Attitude of 15-17 year-olds towards psychoactive substance users



Figure 31 : Attitude of 15-17 year-olds towards drug users

#### PUPILS' CHARACTERISTICS AND PSYCHOACTIVE SUBSTANCE USE

There is a statistically significant correlation (p<0.001) between substance use and absenteeism from school, an average mark below the class average in the previous term, nights spent away from home, having a family member or friend who is a drug user, being unfamiliar with the law against drug use, being able to obtain drugs easily, and failing to perceive the serious danger involved in drug use.

However, no significant correlation was found between substance use and the pupil's environment (rural or urban), the family's socio-economic level and the parents' level of education.

#### COMPARISON BETWEEN MEDSPAD RABAT-SALÉ 2006 AND MEDSPAD 2009 (RABAT-SALÉ) FOR THE 15-17 AGE GROUP

Where the 15-17 age group is concerned, a significant increase may already be seen in the prevalence rates for tobacco, alcohol and cannabis between 2006 and 2009. The figures for psychotropic substances appear to be down on those found in 2006 (see figures 32).



<u>Figure 32 :</u> Comparison between the results of MedSPAD 2009 and MedSPAD Rabat-Salé 2006 for the 15-17 age group.







#### CONCLUSIONS

Our MedSPAD survey of psychoactive substance use among Moroccan secondary school pupils found higher prevalence rates among boys. The downward trend in the prevalence curves for the four psychoactive substances points to experimental use of drugs.

Tobacco is the most-used substance in our sample, followed by alcohol, then cannabis in the case of boys and psychotropic substances in the case of girls. Cocaine and crack come last and are little used among the pupils surveyed. In addition to a predominance of drug use among boys, it may be seen that preferences differ according to gender among the 15-17 year-olds. Drugs freely available over the counter and those which are easiest to obtain are the substances most used by the pupils in the survey (tobacco, alcohol and psychotropic substances in the case of girls). This predominance of use among boys and the difference in preferences may be explained by the ease with which boys can obtain drugs and the non-stigmatisation of certain substances, such as psychotropic substances, in our society.

Psychoactive substance use affects secondary school pupils in Morocco, but our prevalence rates are similar to those found among our Algerian neighbours and differ from those reported in the MedSPAD Lebanon survey. They are much lower than the rates found among young Europeans.

The early age of first drug use which was found should give cause for concern. It calls for the introduction of prevention and awareness-raising programmes at an early stage for the youngest pupils, given that the drugs most used by pupils are those freely available over the counter, such as tobacco and alcohol.

With use of psychoactive substances still at the experimental stage, preventive measures to avoid the progression to addiction and psychiatric or infectious (HIV, hepatitis or other) complications are essential for this age group.

Some aspects of the pupils' behaviour are correlated in a statistically significant way with drug use, such as missing school, staying away from home, having below-average marks or being dissatisfied with parental relations. These factors might be predictive of drug use and should therefore alert both the parents and the school authorities.

At the end of this survey, results suggest that the following preventive measures might make it possible to reduce the prevalence rates among pupils:

#### ✓ Increased awareness and knowledge:

- Promotion of health and mental hygiene among primary school pupils;
- Promotion of positive attitudes and coping skills among lower secondary pupils;
- Information and education for upper secondary pupils about at-risk behaviour and tobacco and drug use;
- Use of the internet and other means of communication (eg mobile phones) ;
- Use of social networks (eg Facebook) to raise awareness of drugs ;
- Review and strengthening of components relating to the promotion of mental hygiene and drug use issues in the lower and upper secondary curricula;
- Specific awareness-raising for parents and teachers;
- Control of the availability of, and access to, drugs

#### ✓ Better detection of the first signs of drug use

- Make teachers more aware of and better able to detect the first signs of use;
- Make parents more aware of and better able to detect the first signs of use;
- Create places where pupils in difficulty can obtain counselling, guidance and support;
- Involve school health bodies;
- Collaborate with specialist institutions and professionals;
- Awareness-raising campaigns aimed specifically at pupils in difficulty (underachievement, aggressive behaviour, instability, staying away from home, at-risk behaviour);
- Increased security around schools;
- Designation of drug-free zones within the perimeter of schools;
- Raise awareness among parents about psychotropic drugs and other psychotropic substances (alcohol etc.) available in the home;
- Specific awareness-raising for parents and teachers.

#### ✓ Care for users

- Building bridges with parents;
- Establishing links with specialist professionals and institutions;
- Creating support groups within schools.

#### ✓ Legislative provisions :

- Creation of drug-free zones around schools with harsher penalties for dealers operating there;
- Set an age limit for the purchase of tobacco and alcohol;
- Legislation against retail tobacco vendors;
- Legislation against selling glue and other solvents to minors.

This survey was the very first of its kind in our country. Its institutionalisation in the form of trend surveys (MedSPAD survey every 2 years) will make it possible to monitor the trends in prevalence rates and opinions in Morocco. Co-operation and information sharing with the other countries in the region which have adopted MedSPAD (Lebanon, Jordan, Egypt and Algeria) will also make it possible to compare our data and monitor overall trends in drug use in the region.

| Variables   | n (%)                     |
|---|---------------------------|
| Gender  |                           |
| . Girls   | 3257 ( <mark>51.5)</mark> |
| . Boys  | 3057 (48.3)               |
| Age*  | 16.5 ± 2.4                |
| Environment of the school                                 |                           |
| . Rural   | 720 <mark>(13)</mark>     |
| . Urban   | 5532 <mark>(87)</mark>    |
| Level of the class  |                           |
| . 3 <sup>rd</sup> year lower secondary                    | 883 (13.9)                |
| . common core year  | 2567 (40.4)               |
| . 1 <sup>st</sup> year baccalaureate                      | 2128 (33.5)               |
| . 2 <sup>nd</sup> year baccalaureate                      | 773 (12.2)                |
| Section   |                           |
| 3 vear lower secondary                                    | 725 (12.1)                |
| . Arts  | 1547 (25.9)               |
| . Science   | 3051 ( <b>51.1</b> )      |
| . Technology  | 320 (5.4)                 |
| . Economics and management                                | 327 (5.5)                 |
| Are you a boarder ?                                       |                           |
| . Yes   | 457 (7.3)                 |
| . No  | 5715 <mark>(91.9)</mark>  |
| What was your average mark in the last term last year?    |                           |
| . Below 5   | 101 (1.6)                 |
| . Between 5 and 9   | 625 (6.9)                 |
| . Between 10 and 12                                       | 2765 <mark>(43.8)</mark>  |
| . Between 13 and 14                                       | 1653 (26.2)               |
| . Over 15   | 1126 (17.9)               |
| In the last 30 days, how many days have you had off schoo | ol?                       |
| . None  | 3021 ( <b>48.2)</b>       |
| . 1 day only  | 1422 (22.7)               |
| . 2 days  | 759 (12.1)                |
| . Between 3 and 4 days                                    | 576 (9.2)                 |
| . Between 5 and 6 days                                    | 182 (2.9)                 |
| . 7 days or more  | 307 (4.9)                 |
| Reasons for absence                                       |                           |
| . Sickness  | 2557 <b>(57.9)</b>        |
|   | 371 (8.4)                 |
| . Other reasons   | 1313 (29.8)               |

Table 3. Sociodemographic characteristics of the sample as a whole

| Variables                                     | n (%)                |  |  |
|---|----------------------|--|--|
| Nights spont away from home in the last month |                      |  |  |
| Nights spent away from nome in the last month | E146 ( <b>93 1</b> ) |  |  |
| . None  | 5146 (82.1)          |  |  |
| . One night                                   | 357 (5.7)            |  |  |
| . I wo nights                                 | 258 (4.1)            |  |  |
| . Between 3 and 4 nights                      | 188 (3.0)            |  |  |
|   | 116 (1.9)            |  |  |
| . 7 nights or more                            | 202 (3.2)            |  |  |
| Father's level of education                   |                      |  |  |
| . Illiterate                                  | 1182 (18.7)          |  |  |
| . Primary                                     | 1100 (17.4)          |  |  |
| . Lower secondary                             | 620 (9.8)            |  |  |
| . Upper secondary                             | 1016 (16.1)          |  |  |
| . Higher                                      | 1877 <b>(29.7)</b>   |  |  |
| . Don't know                                  | 478 (7.6)            |  |  |
| Mother's level of education                   |                      |  |  |
| . Illiterate                                  | 2225 <b>(35.1)</b>   |  |  |
| . Primary                                     | 951 (15.0)           |  |  |
| . Lower secondary                             | 666 (10.5)           |  |  |
| . Upper secondary                             | 990 (15.6)           |  |  |
| . Higher                                      | 1191 (18.8)          |  |  |
| . Don't know                                  | 296 (4.7)            |  |  |
| Family's economic standing                    |                      |  |  |
| . Better than others                          | 1850 (29.3)          |  |  |
| . Like others                                 | 3968 <b>(62.9)</b>   |  |  |
| . Worse than others                           | 409 (6.5)            |  |  |
| Do you live with your father?                 |                      |  |  |
| . Yes   | 5435 <b>(86.3)</b>   |  |  |
| . No  | 836 (13.3)           |  |  |
| Do you live with your mother?                 |                      |  |  |
| . Yes   | 5858 <b>(93.1)</b>   |  |  |
| . No  | 427 (6.8)            |  |  |
| Do you live with your brothers and sisters?   |                      |  |  |
| . Yes   | 5540 <b>(88.0)</b>   |  |  |
| . No  | 753 (12.0)           |  |  |
| Do you live with your grandparents?           |                      |  |  |
| . Yes   | 900 <b>(14.3)</b>    |  |  |
| . No  | 5377 (85.6)          |  |  |
| Do you live with anyone else?                 |                      |  |  |
| . Yes   | 1003 (16.2)          |  |  |
| . No  | 5185 (83.7)          |  |  |
|   |                      |  |  |

| Variables  | n (%)              |  |  |
|--|--------------------|--|--|
|  |                    |  |  |
| Relations with your mother                               |                    |  |  |
| . Very satisfactory                                      | 4863 <b>(77.2)</b> |  |  |
| . Satisfactory   | 1037 (16.5)        |  |  |
| . Neither satisfactory nor unsatisfactory                | 279 (4.4)          |  |  |
| . Unsatisfactory   | 62 (1.0)           |  |  |
| . Very unsatisfactory                                    | 52 (0 ;8)          |  |  |
| Relations with your father                               |                    |  |  |
| . Very satisfactory                                      | 4201 <b>(67.7)</b> |  |  |
| . Satisfactory   | 1309 (21.1)        |  |  |
| . Neither satisfactory nor unsatisfactory                | 411 (6.6)          |  |  |
| . Unsatisfactory   | 149 (2.4)          |  |  |
| . Very unsatisfactory                                    | 124 (2.0)          |  |  |
| Relations with your brothers and sisters                 |                    |  |  |
| . Very satisfactory                                      | 3509 <b>(56.8)</b> |  |  |
| . Satisfactory   | 1895 (30.7)        |  |  |
| . Neither satisfactory nor unsatisfactory                | 547 (8.9)          |  |  |
| . Unsatisfactory   | 138 (2.2)          |  |  |
| . Very satisfactory                                      | 76 (1.2)           |  |  |
| Relations with your friends                              |                    |  |  |
| . Very satisfactory                                      | 2513 (40.0)        |  |  |
| . Satisfactory   | 2668 (42.4)        |  |  |
| . Neither satisfactory nor unsatisfactory                | 785 (12 ;5)        |  |  |
| . Unsatisfactory   | 149 (2.4)          |  |  |
| . Very unsatisfactory                                    | 154 (2.4)          |  |  |
| $^{st}$ Expressed as an average $\pm$ standard variation |                    |  |  |
|  |                    |  |  |

| Variables   | n (%)                    |
|---|--------------------------|
| Gender  |                          |
| Girls   | 2443 (54.3)              |
| Boys  | 2054 (45.7)              |
| Environment of the school                                 | 2001(1011)               |
| . Rural   | 441 (9.9)                |
| . Urban   | 4011 (90.1)              |
| Level of the class  |                          |
| . 3 <sup>rd</sup> year lower secondary                    | 573 (12.7)               |
| . Common core year  | 2169 (48.1)              |
| . 1 <sup>st</sup> year baccalaureate                      | 1430 (31.7)              |
| . 2 <sup>nd</sup> year baccalaureate                      | 339 (7.5)                |
| Section   |                          |
| . 3 <sup><sup>°°</sup> year lower secondary</sup>         | 460 (10.8)               |
| . Arts  | 966 (22.8)               |
| . Science   | 2262 <mark>(53.3)</mark> |
| . Technology  | 273 (6.4)                |
| . Economics and management                                | 282 (6.6)                |
| Are you a boarder?  |                          |
| . Yes   | 310 (7.0)                |
| . No  | 4090 <b>(92.5)</b>       |
| What was your average mark for the last term of last year | ?                        |
| . Under 5   | 90 (2.0)                 |
| . Between 5 and 9   | 397 (8.8)                |
| . Between 10 and 12                                       | 1799 <mark>(40.0)</mark> |
| . Between 13 and 14                                       | 1263 (28.1)              |
| . Over 15   | 943 (21.0)               |
| In the last 30 days, how many days have you had off sch   | ool?                     |
| . None  | 2220 <b>(49.8)</b>       |
| . 1 day only  | 1040 (23.3)              |
| . 2 days  | 524 (11.7)               |
| . Between 3 and 4 days                                    | 383 (8.6)                |
| . Between 5 and 6 days                                    | 123 (2.8)                |
| . 7 days or more  | 169 (3.8)                |
| Reasons for absence                                       |                          |
| . Sickness  | 1870 <b>(60.5)</b>       |
| . Truancy   | 244 (7.9)                |
| . Other reasons   |                          |
|   | 836 (27.1)               |
|   |                          |

Table 4. Socio-demographic characteristics of the pupils aged 15-17

| Variables                                     | n (%)              |
|---|--------------------|
| Nights spent away from home in the past month |                    |
| None  | 3694 (82.9)        |
| One night                                     | 253 (5.7)          |
| Two nights                                    | 178 (4.0)          |
| . Between 3 and 4 nights                      | 127 (2.9)          |
| . Between 5 and 6 nights                      | 77 (1.7)           |
| . 7 nights and more                           | 127 (2.9)          |
| Father's level of education                   | ()                 |
| . Illiterate                                  | 743 (16.6)         |
| . Primary                                     | 739 (16.5)         |
| . Lower secondary                             | 443 (9.9)          |
| . Upper secondary                             | 718 (16.0)         |
| . Higher                                      | 1493 (33.3)        |
| . Don't know                                  | 327 (7.3)          |
| Mother's level of education                   |                    |
| . Illiterate                                  | 1398 <b>(31.1)</b> |
| . Primary                                     | 673 (15.0)         |
| . Lower secondary                             | 480 (10.7)         |
| . Upper secondary                             | 763 (17.0)         |
| . Higher                                      | 967 (21.5)         |
| . Don't know                                  | 202 (4.5)          |
| Family's economic standing                    |                    |
| . Better than others                          | 1399 (31.2)        |
| . Like others                                 | 2797 <b>(62.4)</b> |
| . Worse than others                           | 236 (5.3)          |
| Do you live with your father?                 |                    |
| . Yes   | 3893 <b>(87.0)</b> |
| . No  | 561 (12.5)         |
| Do you live with your mother?                 |                    |
| . Yes   | 4180 <b>(93.5)</b> |
| . No  | 283 (6.3)          |
| Do you live with your brothers and sisters?   |                    |
| . Yes   | 3948 (88.3)        |
| . No  | 522 (11.7)         |
| Do you live with your grandparents?           |                    |
| . Yes   | 636 (14.3)         |
| . No  | 3821 (85.7)        |
| Do you live with anyone else?                 |                    |
| . Yes   | 693 (15.7)         |
| . No  | 3716 (84.3)        |
|   |                    |

I

| Variables                                 | n (%)              |
|---|--------------------|
|   |                    |
| Relations with your mother                |                    |
| . Very satisfactory                       | 3386 <b>(75.7)</b> |
| . Satisfactory                            | 786 (17.6)         |
| . Neither satisfactory nor unsatisfactory | 206 (4.6)          |
| . Unsatisfactory                          | 48 (1.1)           |
| . Very unsatisfactory                     | 44 (1.0)           |
| Relations with your father                |                    |
| . Very satisfactory                       | 2963 <b>(67.2)</b> |
| . Satisfactory                            | 957 (21.7)         |
| . Neither satisfactory nor unsatisfactory | 301 (6.8)          |
| . Unsatisfactory                          | 97 (2.2)           |
| . Very unsatisfactory                     | 84 (1.9)           |
| Relations with your brothers and sisters  |                    |
| . Very satisfactory                       | 2452 (56.0)        |
| . Satisfactory                            | 1382 (31.6)        |
| . Neither satisfactory nor unsatisfactory | 386 (8.8)          |
| . Unsatisfactory                          | 98 (2.2)           |
| . Very unsatisfactory                     | 51 (1.2)           |
| Relations with your friends               |                    |
| . Very satisfactory                       | 1784 (39.9)        |
| . Satisfactory                            | 1898 (42.5)        |
| . Neither satisfactory nor unsatisfactory | 554 (12.4)         |
| . Unsatisfactory                          | 104 (2.3)          |
| . Very unsatisfactory                     | 109 (2.4)          |
|   |                    |

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