

**Co-operation Group to Combat Drug Abuse
and illicit Trafficking in Drugs**



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MEDITERRANEAN NETWORK
**Co-operation in the Mediterranean region on drugs and
addiction**

**Mediterranean School Project on Alcohol and Other Drugs
(MedSPAD)**

Guidelines

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Towards a Strengthened Democratic Governance in the Southern Mediterranean

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Introduction

This report addresses particular issues related to the implementation of a school survey and consists of guidelines that should be adhered to if such an exercise is to continue to be implemented primarily in countries based in the southern region of the Mediterranean (Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia). The countries per se are the ones belonging to the MedNET network that also include those on the Northern rim namely, Cyprus, France, Greece, Italy, Malta and Portugal.

The success of the European School Survey on Alcohol and other Drugs: ESPAD, a Pompidou Group initiative, demonstrated that it is possible to co-ordinate, collect, collate, compare and publish data in relation to the prevalence of alcohol and other drugs amongst youth. In much the same regard, Health Behaviour in School-Aged Children study (WHO) has been able to collect specific data on children's health in most European countries and those of North America.

Overall, the historical precedence of ESPAD favours the general use of the instrument in the countries of the Mediterranean and thus the adaptation of the survey instrument in the form of the MedSPAD has now been successfully done in three countries, namely Lebanon, Morocco and Tunisia. Thus the use of such a tool may be twofold, in the first instance it may be adopted as a monitoring device of drug use amongst youth and secondly as tool through which one may gain some understanding of the determinants of such use. With regard to the monitoring aspect, this feature is inherent in the ESPAD and now the MedSPAD, thus such survey's with similar core questions enables the activity of monitoring and in addition the comparability between the two. A secondly likely outcome of adopting such a pragmatic approach would be the potential to use the data to predict possible diffusion patterns for the region and the ability to predict trends.

The short term aim is to share experiences between the countries of the MedNET Network who have conducted the MedSPAD and those who may wish to do so. The added value is to provide the opportunity to discuss the findings of the survey and how they may be used in prevention policy and the monitoring of such.

Moreover, this exercise is part of what is required by the National Observatories on drug and drug addiction that already exist in Europe and which are about to be set up in some countries of the Mediterranean Region in so far that prevalence of drug use among youth that is obtained through school surveys is one indicator on a list of a number that needs to be collected and analysed.

The long-term aim is to produce a MedSPAD regional report based on a database that would contain clean data, ready for analysis with the aim to achieve evidence-based information in the participating countries.

Purpose

The main purpose or objective of this school survey is first and foremost to determine the use of alcohol, tobacco and other drugs amongst school children aged 15-16 years old. The data generated by such a survey would provide valuable information in relation to already existing data sources on the usage of alcohol, tobacco and other drugs in the countries concerned and also provide a suitable platform from which Education, Prevention, Treatment and Rehabilitation Programmes may be revised or introduced. Moreover, such surveys repeated at different time points, in this instance if one adopted the four year cycle as practised by the ESPAD consortium, may be then be used to monitor trends and indirectly provide information on the impact of a particular policy or programme in operation.

In addition, the use of a common instrument with our European neighbours would enable one to use the data for comparative purposes that in turn may be useful from the point of view in determining the epidemiological status of the problem. Thus, depending on the status of a country per se in relation to the dynamics amongst its neighbours and those in Europe one may be able to make predictions on the progress of such and thus prepare in advance any necessary policy measures that may be effective in tackling the emergent problem.

Consequently, it was decided to use the ESPAD questionnaire as a base from which it would be possible to gather information on variables such as the lifetime use, yearly use and last month use of other drugs. Life time use normally refers to having a tried a substance once whereas last year's use usually refers to experimental use and not continued use whereas monthly use would suggest the opposite and the likelihood of problem drug use. Thus, the use of such a format would in the many instances provide comparability with those used by the European countries conducting the ESPAD survey.

Thus the following variables have been incorporated:

- frequency of self-reported lifetime substance use;
- frequency of self-reported substance use in the last 12 months;
- frequency of self-reported substance use in the last 30 days;
(note - substances: tobacco, alcohol, other drugs)
- age at first use;
- attitudes towards consumption of alcohol, tobacco and other drugs;
- knowledge of other drugs;
- perceived availability of other drugs;
- perceived risk of substances (alcohol, tobacco, other drugs);
- estimated other drug use among friends;
- first substance use occasion;
- use of online gambling - slot machines;
- background variables.

Moreover, it was emphasised that this exercise is not one that seeks to have in place a set questionnaire but data emanating from a questionnaire that addresses the specific variables as listed above. In light of this premise the task of each country is to arrive at a questionnaire for its own use that provides comparable data on the variables set out.

With these considerations, The Mediterranean School Survey Project on Alcohol, Tobacco and Other Drugs was launched in Rabat in 2003. Pilot-surveys were conducted in Rabat and Algiers to test the questionnaire. School surveys were then conducted in the cities of Algiers and Rabat on the basis of a revised questionnaire in 2005, followed by national surveys in

Lebanon in 2008 and Morocco in 2009 and in Morocco again in 2013 and one in Tunisia for the very first time in 2013.

Target Population

- **School children aged 15-16 years old.**

The ESPAD survey has been focused entirely on a single age group 15-16 year olds, that is those that were born in 1987 participated in the 2003 exercise, the ESPAD survey has been repeated again in 2015 for the sixth time. It is understood that students of this age group need to be attending regular, vocational, general or academic institutions. It however excludes students from special schools that cater for mental disabilities or severely handicapped. Moreover, those students that are absent on the day of the survey and those that have left the school system must also be excluded. However, the question arises in respect to those who were absent as these indeed should have been at school and thus it might be worth contacting a number of these to attempt to have them answer the questionnaire. The reason for such is that regular absenteeism may be a sign that such individuals have been using substances as this is one of the outcomes of regular use.

Ideally the age group to be surveyed as stated above is the 15-16 year olds but from the previous experience of the conduct of school surveys in Lebanon, Morocco and Tunisia it would appear that due to the system of education present in the Mediterranean that the cohort be extended if necessary to the 14-17 year olds.

Additional information such as the type of school, socio-geographic location of the school, class size, linguistic and racial composition may also be useful in describing the population for sampling purposes as well as understanding and interpreting the data.

Time of Survey

- **March – April.**

For the ESPAD survey it has always been recommended that the actual testing be done in the month of March-April, however on the last six occasions, 1995 and 1999 and 2003 and 2007 and 2011 and 2015, most countries completed testing during this period but some others have conducted the survey outside this time period. Moreover, in the main the survey was effected between the months of November and April of the scholastic year. It is thus advisable to keep within this time frame when selecting the survey month.

Sample

- **Class to be used as the basic sampling unit.**

The basic sampling unit in both ESPAD and HBSC was the class so it is recommended that MedSPAD use this unit. The use of a standard sampling frame is fundamental if data is to be comparable between participating countries. It does not however, restrict the sampling method to be adopted as indicated below. The classes per se are normally registered on a national database at the Ministry of Education, which would simplify matters for drawing up the sample.

It must be borne in mind that using the class as the basic sampling unit, will result in a random selection of classes and not individual school children. Thus the class per se is a cluster of school children being sampled. This has particular advantages related to the administration of the survey and importantly confidentiality is better secured with the result

that response outcome is less effected by such a factor. Logistical problems may arise when students are to be found in different classes but this factor may be allayed by sampling all classes in which 10% or more of the target population can be found and omit those students responses that do not meet with the inclusion criteria. It can be more problematic when students are assigned to sets based on subjects and as such do not belong to a specific class. Under such circumstances it might be possible to determine a common core of indispensable subjects that are taken by students and when these are in session during the week at the relevant school. Such sets then can be treated as a random realisation of all the possible groupings and the desired number of groups can be sampled.

Cluster samples, from a statistical point of view, are however, inferior to individual drawn samples, as the number of independent selections is equal to the number of classes selected and not the number of school children in the sample. This in turn results in a less precise population prevalence estimate of the use of the substances in question but this to some extent maybe compensated by increasing the sample size.

The size of the sample has a major influence on the accuracy of the prevalence estimates recorded in such surveys. Thus, it is acknowledged that if 10% of a random sample of 100 school children had tried alcohol once in their lifetime, there is a 95% probability that the real prevalence estimate lies between 3 and 17%. However, if the same estimate were established using a sample of 500, the real prevalence estimate would fall between 7 and 13%. Again, using a sample based on 1200 would only reduce the 95% confidence interval to 2% and the values then would fall between 8 and 12%. Thus for these statistical reasons and also drop out rates, the ESPAD opted for the use of 2800 (1 400 girls and 1 400 boys) whereas the HBSC set the figure of 1 536 students for each of the three age groups giving a total of 4 608. As the MedSPAD initiative has now been undertaken successfully in Lebanon, Morocco and Tunisia it is first recommended that a pilot study is performed in which one uses a minimal sample size of approximately 500 of the original school aged population aged between 15-16 years old. It is suggested that larger sample sizes are used for the full MedSPAD survey but it is important to note that increasing the sample size beyond the 1200 reduces the confidence intervals by marginal values which in some cases may be offset by the increased costs of using such large sample sizes and the complexities that arise with regards to the logistics.

Sampling Methods

- **Representative sample of the 15-16 year old school aged children.**

Whatever sampling procedures are to be adopted in drawing the sample be it Total population sampling, Random sampling of classes, Two stage random sampling of classes, or Stratified random sampling of classes, the final sample should be representative of the population to be studied.

As this effort in the first instance is a pilot survey to examine the possibility of the further use of such in the coming years, it might be more pragmatic at this stage to sample a region or for that matter a city or town. Thus if the student numbers in this particular location number less than 10,000 it might be worth considering surveying the entire cohort, that is total population sampling. This line of reasoning is supported by the fact that as the sample approaches the size of the population in question, the confidence interval becomes narrower. In addition, the complexities involved with sampling are greater than those involved with surveying, this factor would again favour the use of total population sampling.

If on the other hand, the numbers are greater than the 10,000 as suggested above, the easiest way to draw a clustered class sample consisting of a minimum of 500 students, is to draw a random sample of classes from an exhaustive list of all classes in the sampling frame

from a particular location, town city or country. A simple random sample of classes may be obtained from a complete list of classes and the use of random number tables available in statistical handbooks or by random case selection procedures in packages such as SPSS.

As was mentioned above, it might be more pragmatic at this stage, to limit the number of schools participating in this first pilot initiative, thus it might be useful to use a stratified random sampling of classes. If this method of sampling is adopted it is recommended that at least 40 schools are randomly selected for the first stage. It is however imperative that the random sample of schools be drawn proportionately to school size. This can be achieved by adding the school name on one or more occasion based on size, to the school list and drawing a random sample of schools until the desired list of unique school names has been accomplished. Following which, the next step is to randomly select a class from each of the schools on the final list. It is crucial that each class is randomly selected as otherwise the school in question might be tempted to select the “best class” to represent the school.

A more complex method of sampling involves stratified random sampling of classes that may yield more accurate results than a simple random sample in that less variation in each of the strata results as compared to the population as a whole. In effect schools and classes are further divided into strata of shared characteristics such as geography, school size, ethnicity and language. Using such a methodology it may be possible to ascertain the use of certain substances by particular subgroups within the total population. It is of course advisable in advance to know what subgroups are of interest to use such as the strata and also to over sample the particular subgroup. It is of essence however, that the data is weighted accordingly to produce the representative sample before computing the results and producing any national or regional figures.

Data Collection Instrument

- **MedSPAD questionnaire**

The questionnaire to be used to collect information on lifetime use, last year use and last month use of licit and illicit substances and other variables is based on the ESPAD questionnaire. This questionnaire has been adapted by each of the countries which have so far conducted the MedSPAD : Lebanon, Morocco and Tunisia. Suffice it to say that the addition of lifetime, last year and last month prevalence for all substances in this effort has also now been included by the ESPAD consortium for the next wave. Thus it will now be possible to report to international agencies such as the UNDCP that request such information in the form of returns as part of the Annual Report Questionnaire (ARQ part2).

Data Collection Procedure

- **Questionnaire completion under exam/test conditions.**

In line with the preceding accounts of the ways in which one can standardise the questionnaire and sample, the data collection procedure should also follow a standard format. In the majority of the ESPAD participating countries data collection took place during a certain normal week that was not pre-empted by a holiday the week before. The participating schools in turn should be contacted and informed of the proposed study. On the acceptance of the said school and pupils in said class, the headmaster should notify the teachers concerned of the classes selected and a date and time should be finalised for the administration of the questionnaire.

The teachers should also be advised not to inform the students as to avoid discussion of the issue between them prior to the completion of the questionnaire. Moreover, a single class period, duration of 45-60 minutes, should suffice for the completion of the questionnaire and

the conduct of such will be that of a written test. In accordance with this procedure, the teachers should sit at his/her desk and give neutral answers to questions if the need arises as is composite for written exams/tests. In addition, the teacher concerned should fill in the class report (see below) during this period. Following the completion by the students of the questionnaire it is recommended that they place them in an envelope at the back of the class away from the teacher. A selected student in each class should then seal the envelope with all questionnaires inside, completed or not, and return the envelope to the teacher who in turn should deposit it at the Headmaster's office for collection.

A standardised class room report should also be completed by the teacher that includes information on the number of students present and those absent, reasons for absence, any disturbances of note and what type, whether the students found it interesting and worked seriously, the time it took to complete the questionnaire and any personal comments.

Data Registration

- **Data file and standard tables**

Once the questionnaires have been completed and collected the next crucial stage is preparing a document file preferably in SPSS or Excell. The questionnaires will first have to be scrutinised to ensure they fulfil the inclusion criteria, that is, questionnaires should only be accepted for this purpose if respondents are aged 15-16 years old at the time of the survey, they are not defaced in any manner, are blank or mainly incomplete or contain responses that imply that the student was not attending to the task in question. Following such a filtering procedure input of the questionnaires may begin, this may be manual or through the use of a scanner with the required software such as OMR or lately as in Italy this has been done directly using a web based questionnaire.

Standard tables may be requested in relation to the production of a national report and also a final Mediterranean Regional Report.

National Reports

- **Background, Research Design, Methodological Considerations, Research Findings, Conclusion.**

It is suggested in the first instance that national reports report follow the same format. This would further enhance comparability and also provide the means through which data may be extracted for use by each of the countries for international use.

Background.

This section needs to provide the context for the selection of the instrument. Consequently, it is necessary to include all previous national or select studies done to date and the results thereof. It would also be appropriate to list comparability's and differences between these and the MedSPAD. Moreover, this would provide the backdrop for selecting such a survey instrument. Thus the purpose of the project, cum survey needs to be stated, that of surveying 16 year olds for their alcohol, tobacco and licit and illicit drug habits. In addition, other objectives may also be included such as the need to have a standard instrument, quality data, comparable data, to monitor trends over time, to determine associations between such use and certain groupings and finally to provide valuable information in relation to existing data sources that may have a direct impact on current policy formulation and prevention and/or treatment programmes in operation. This section should be completed by a list of Institutions and names of researchers involved in the project.

Research Design.

This section is divided into five parts, the first part, addresses the population of students from which the sample was drawn. As such, the population per se may have been selected from a certain geographical area, capital city for example, or may indeed represent the country as a whole. The rationale for the selection needs to be clearly stated be it a specific area or the country in total. Once the population has been chosen the grades or levels where such a population may be found need to be given in addition to the approximate percent of children born in the relevant year who were in school in your country/capital city during the survey year.

The second part should address directly the sample. Thus the number and types of schools in the country/capital should be stated as well as the number and types of schools chosen for the survey. Subsequently, the number and types of students selected should also be stated as well as any other information that would be helpful. The next description should be a thorough step by step account of the method of sampling. This in turn should be followed by an estimate of the representativeness of the sample, whether it is representative of the whole cohort, of all the students in the country, in a specific area, capital city, or specific type of school, for both male and female students. Finally, it should then be appropriate to state whether the sample is self-weighted and if not what weighting procedures will be applied. In addition, it does not always follow that if the sample is self-weighted, no weighting procedures need to be applied, in that the collected data for one reason or another may not be representative of the population sampled. For example if the ratio between boys and girls in the population is 50:50 but in the data per se the ratio is 65:35, then it would necessary to weight the data with respect to gender.

The following part deals with the procedures adopted with the fieldwork. A step-by-step description of the data collection procedure, from the preparation for printing of the questionnaires to entering the data on to the computer. This should include the rationale for the selection for the type of booklet/questionnaire produced that would support scanning or manual entry onto the computer. The delivery of the questionnaire to the schools in question, the safe keeping till the survey day, release of the questionnaires on the survey day, the number and type of people collecting the data, teachers or researchers, the instructions given to the students for completion of the questionnaire, the collection of the questionnaires, the deposit of the completed questionnaires for safe keeping at the school, collection of the questionnaires, time period when data was collected and possible comments from staff about the data collection procedure in the classrooms (Classroom report).

The penultimate part should provide information on the MedSPAD items, that is, those used in your questionnaire. A brief description should also be included on any of the possible non-MedSPAD questions included in the questionnaire and the reasons thereof. It is also important to include the necessary information on the translation process and its results and the outcome of any possible pre-testing of the questionnaire and its results. From a Mediterranean point of view, it is vital that any adjustments of the instrument as a result of cultural perceptions be described in detail. The questionnaire in the language of use and the English version should be attached to the said report.

Finally, this part deals with data handling. A description of the quality check of the data entry, for example one in ten was checked by an independent person. A description of the possible weighting procedures used to weight the data if the need arises and all the computer programmes used for entry, data storing and data analysis.

Methodological Considerations.

A statement needs to introduce this section in relation to the co-operation of the Ministry of Education in the provision of school lists under its jurisdiction as well as that of other schools operating in the country.

Representativeness, reliability and validity are in turn dependent to some extent on school co-operation, student co-operation and student comprehension. Thus, this section deals with these factors without going into the fine detail but at the same time provides a basis through which one can assess whether the sample was representative, answers were reliable, true or valid.

School co-operation no doubt will effect whether the sample in question is representative of the student cohort in question. Thus, the schools and classes willingness to participate in the survey should be stated and also the number of these refusing to participate and for whatever reasons. Proportion of classes not participating should also be provided and those replaced because of non-participation.

Student co-operation can be assessed in the first instance by the number of students refusing to participate in the exercise, which can also be gleaned from the classroom report. In addition, the number of questionnaires that are deemed to be unusable due to the fact that they have been defaced, left blank or completed in a such manner that do not fulfil the inclusion criteria is also an indication of student co-operation. Response rates per se also provide another measure of co-operation but it is also imperative to include an overall assessment on student co-operation.

Finally, in this section, student comprehension may be assessed in the first case by determining the number and proportion of completed and uncompleted questionnaires. The average time to complete the questionnaire, which may be extracted from the classroom report, is also indicative of student comprehension. The final pieces of information that are required to complete this section are in the main found in the classroom report and refer to possible disturbances during completion of the questionnaire, nature and type, comments by the teachers on the seriousness and interest of students during the survey exercise, any specific comments on problems and type of questions encountered during the time allotted for completion and a final overall assessment of student comprehension.

Research Findings.

The tables per se provide the framework through which the research findings may be elaborated. Thus, as a form of introduction to this section, it would be appropriate to give the sample size on which the following results were based in addition to any measures adopted, weighting etc. In addition, it is vital for the regional report that each country submits the tables in order that a collective summary is prepared (see below).

It is suggested that the order of presentation of the findings follows this sequence, namely, Alcohol, tobacco and other drugs. Figures pertaining to the tables should be drawn and include both boys and girls with the addition of colour to make them more expletive. A sequence such as the one posited below is recommended, as this in turn will also be followed in the collated report of all the countries participating in the project.

Alcohol:

- Frequency of self-reported lifetime alcohol use
- Frequency of self-reported alcohol use in the last 12 months
- Frequency of self –reported alcohol use in the last 30 days
- Frequency of consumption of beer, wine and spirits in the last 30 days
- Age of first use

- Quantities of beer, wine and spirits consumed on the last drinking occasion
- Drinking Venues
- Attitudes towards alcohol consumption
- Relationship between alcohol use and other variables:
 - Frequency of drinking and frequency of drunkenness
 - Use and experienced problems
 - Use and perceived risk
 - Use and reasons for drinking
 - Use and future drinking
 - Use and estimated use among friends
 - Use and leisure
 - Use and parental level of education.

Tobacco:

- Frequency of self-reported lifetime tobacco use
- Frequency of self-reported tobacco use in the last 12 months
- Frequency of self-reported tobacco use in the last 30 days
- Age of first use
- Relationship between tobacco use and other variables;
 - Use and perception of risk
 - Use and estimated use among friends
 - Use and leisure
 - Use and academic performance
 - Use and parental education
 - Tobacco and Alcohol Use.

Drugs:

- Frequency of self-reported lifetime use of drugs
- Frequency of self-reported drug use in the last 12 months
- Frequency of self-reported drug use in the last 30 days
- Age of first use
- Choice of drug on first use
- Methods of procuring other drugs
- Perceived risks associated with drug use
- Perceived availability of drugs
- Estimated drug use amongst friends
- Honesty in admitting marijuana use
- Honesty in admitting heroin use
- Relationship between the use of drugs and other variables;
 - Use of drugs and leisure
 - Use of drugs and perceived academic ability
 - Use of drugs and parental level of education
 - Use of drugs, smoking and drinking
 - Use of drugs and drunkenness

The final section of the report concerns the conclusions arising from the findings in the previous section. It is suggested that this section starts with an introduction to the main findings followed by sub-headings for alcohol, tobacco and drugs in which more detail may be forthcoming on the prevalence estimates for alcohol, tobacco and drugs given in the introduction to this section. It would also be appropriate if the percentages were converted to real numbers to reflect how many students of the given cohort actually partake in such activities. The opportunity also arises to ascertain what number may be referred to problem drinkers and drugs users and how many are involved with what may be termed experimental

use. Any differences that may arise due to gender should also be specified as well as problems arising with the use of such substances.

Mediterranean Regional Report

- **Based on same format as National Reports**

Collation of all tables from each of the countries as well as the sections on the background and research design and the section on methodological considerations will be used as the basis for the international/regional report. Those countries in the Mediterranean that have completed a school survey will be included to give a picture of the possible problems in the area related to substance use.

The format of the report will once again follow that of the national reports in which details on the background to the study and research design used by the participating countries will introduce the proceedings. Subsequently, this will be followed by the methodological considerations, which will involve a discussion on the representativeness of the data, the reliability and the validity. In turn this section will be followed by the research findings with figures for prevalence estimates for each of the substances and for each of the countries. Finally, a conclusion on the success of the first effort and recommendations for future studies will be drafted in addition to an area assessment of the state of the problem in relation to each of the substances.