## **Prevention** of Drug Use in Schools



# Prevention of Drug Use in Schools



**Regional Office for South-East Asia** 

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## • What is this document about?

Drug use or substance abuse as it is often called has become a serious problem in many Member States of the South-East Asia Region of the World Health Organization (WHO). A wide-variety of substances are being abused, some of which are licit and others illicit. Thus the importance of programmes for the prevention of drug use is rapidly increasing.

Drug-use-prevention programmes are generally designed for use in a particular setting, for example, at home, at school or within the community. Programmes are also designed for specific audiences, for example, the general population, high-risk groups or current users. However, programmes can be designed for more than one audience.

Schools are generally the most popular setting for drug-useprevention programmes, and are used both by governmental and non-governmental agencies. This may be for many reasons: ease of obtaining funding for school drug-use-prevention programmes, the captive audience, and the popular perception that drug prevention should start from schools, or the need to show that action is being taken to control a serious social problem.

There is a substantial amount of published research on schoolbased drug-use-prevention programmes from western countries. In these countries there is documented scientific evidence of the impact of intervention programmes. However, the effectiveness of such efforts in the South-East Asia Region, has hardly ever been documented or evaluated. There are very few studies that have reported sustainability of the process or the results of interventions. Nevertheless, there are successful programmes which could be implemented in this Region. Increasing incidence of drug use in the SEA region of WHO requires the urgent implementation of drug-useprevention programmes.

Schools are generally the most popular setting for druguse-prevention programmes.





This document attempts to provide a simple, evidence-based guide for implementing drug-use-prevention interventions in schools. It is in two parts. The first deals with the current evidence related to various aspects of programme planning and implementation, the second part outlines how the best practices can be implemented in a school.

The information outlined in this document was collected from a review of published English language literature through the Medline database. Best practices guidelines published by national institutions involved in drug-use-prevention were also reviewed.

This guide can be used by anyone connected with drug-useprevention programmes. This guide can be used by programme planners, implementers and evaluators of drug-use-prevention programmes in schools. Those working outside the school system should also find it useful.

# Which "drugs" are we talking about?

The words "drug use" in this document denotes the use of any substance which can harm an individual. These substances can be licit e.g. alcohol, tobacco, pharmaceuticals (amphetamine), volatile substances such as glue or petrol, or illicit e.g. cannabis, heroin and marijuana. A short introduction to these substances is given in the Annex, at the end of this document.



## What are the important areas related to the prevention of drug use?

The main issues in the prevention of drug use are:

- Overall structure or approach of the programme: Drug-useprevention programmes can take many approaches which can address the over-all issue through broad interventions (e.g. enforcement, policy development and implementation, advocacy) general interventions (e.g. mass media programmes), or specific interventions (e.g. community interventions, interventions aimed at special groups such as young people or specific settings such as schools).
- **Delivery:** how, when, where, by whom and to whom the programme will be delivered.
- Content: The technical content the issues that are addressed during the intervention e.g. harm from use, addressing factors leading to use, creating supportive social environments that promote non-use etc.
- Evaluation: How and when was the impact and the outcomes of the programmes evaluated, and the indicators used.
- Sustainability: If the impact reported initially was maintained, following cessation of interventions.



How, when, where, by whom and to whom druguse-prevention programmes will be delivered, is of vital importance.



### What are the main approaches to drug-use-prevention in schools?

The two main approaches to overall druguse-prevention are demand reduction and supply reduction. The two main approaches to overall drug-use-prevention are demand reduction and supply reduction. There are many approaches under each of these headings. As this document is specifically for the school setting and deals with younger age groups, the interventions discussed below fall almost exclusively under demand reduction strategies.

There are two main approaches to demand reduction for drugs in the school setting.

- a. Programmes incorporating a "child development" approach in which a child's characteristics, conditions and processes observed at one stage in life might attempted to be modified, in order to achieve healthier behaviour later in life. Such programmes are generally referred to as "developmentally inspired" programmes.
- b. Programmes containing drug-specific content: These programmes deal more specifically with the drug use initiation age and consist of interventions designed to prevent and delay the commencement of drug use.

### Developmentally inspired programmes

The theory and conceptual models to support early developmentally inspired preventive intervention have been evolving over several decades. This approach has showed promise, especially for younger children, in reducing youth drug consumption (Gottfredson and Wilson, 2003).

#### Components of developmentally inspired programmes

Such programmes incorporate classroom-based interventions and improving family relationships.

Classroom-based interventions are aimed at improving critical thinking, listening and comprehension skills and improving management of classroom behaviour, by teachers. It should be noted that critical thinking, listening and comprehension skills are different from enhancing self-esteem and responsible decisionmaking programmes (discussed later) which have been found to be ineffective. Further, these skills programmes were implemented with a wider perspective of behaviour and development. The programmes on self-esteem that were found to be ineffective have been tried in a drug-specific context and therefore not comparable with the developmentally inspired context discussed here.

Interventions aimed at improving family relationships consist of parent-school communication, partnership building, and providing parents with effective teaching and child behaviour management practices. It has been shown that brief, family-focused interventions for the general population can positively change specific parenting behaviour that can reduce later risks of drug use (Spoth, 2002). Interventions aimed at improving the relationship between parents and children include – spending more time with each other, listening to each other, participation in each others work, etc. In addition, such interventions also consist of improving relations between the parents and schools, and sharing of responsibility for the children's progress. Parents are also given inputs on child management practices such as how to handle diverse and difficult situations at home, and how children should be positively or negatively rewarded. Spending more time with each other will help to improve the relationship between parents and children.



It should be noted that these programmes are aimed at the over-all well-being of children and at reducing not only the use of drugs, but also crime and the number of school dropouts etc.

#### Relevance to the South-East Asia Region

It has been noted by experts that the research on underlying theories of developmentally inspired programmes has taken place mainly in urban communities of the USA. These are very resource intensive. They are also difficult to evaluate due to the long lag-time for the impact, related to drug use, to be seen. Since the sociocultural context in the USA is very different from that of the Region, the widespread applicability of these programmes may not be appropriate.

In the context of the SEAR, the findings of studies on improving family relationships are important from the viewpoint that family ties are considered to be stronger here than in Western countries. This can serve as a reminder of the importance of a culture that values close relationships within families.

## Programmes containing drug-specific content

Programmes implemented in this Region deal with the effects of drugs, as well as the attitudes and behaviours related to drug use. These programmes are most often implemented in this Region. Such interventions deal with the effects of drugs, as well as the attitudes and behaviours related to drug use. Changing drug-using behaviour by modifying and reversing specific proximal factors that promote initiation and maintenance of drug use, such as the glamour attached to the use and users of substances, are addressed by these programmes. These factors are dealt with, in greater detail, later. This drug-specific approach is more appropriate in the context of this Region because there is more evidence for their effectiveness, they are less resource-intensive, require less training and evaluation, and the impact can be seen in the short and medium term.

# • What are the strategies that do not work?

Some approaches have been shown to have minimal impact on changing drug-using behaviour but remain popular and are considered effective. In some cases, these approaches may even result in increasing drug use (Hawthorne, 1995).

## Some programmes which are not effective:

- One-off programmes (e.g. lectures to large audiences)
- Didactic, or one-way lectures
- Providing factual information on the harm caused by drugs
- Extolling non-use, and seeking commitment for non-use
- Resistance skills programmes preparing students to face peer-pressure and to "Just say no" to drugs

Unfortunately, the evidence for transferring research knowledge to practice about school-based substance-use-prevention programmes is limited (Gorman, 2003). Thus many myths related to the structure and content of "effective" drug prevention programmes continue to be perpetuated. A drug-specific approach is more appropriate in the context of this Region, since it has a more visible impact, both in the short and medium term.



One-off programmes such as lectures to large audiences have no significant effect, instead these can be counter-productive. Also programmes will fail despite being well planned and funded, unless the determinants of drug-use behaviour are addressed appropriately.

Many of us fail to appreciate that knowledge alone rarely changes behaviour. Factors affecting behaviour are diverse and many, and knowledge itself plays a minor role. Therefore, providing facts alone can be counter-productive with those groups that are most likely to experiment with and initiate regular use. For younger thrill-seeking groups, the danger of an activity may be an incentive to indulge in it.

It has also been shown that very few implementers use effective content delivery (Ennett, 2003). "Effective delivery" covers how programmes are delivered, by whom, to whom, where, etc. The content is the issues that are contained within the programmes, aimed at changing drug-using behaviour.

Some experts are of the opinion that adolescent drug use has risen in recent years despite the infusion of resources into school-based drug-use-prevention efforts. They also feel that evaluations continue to show that the effectiveness of school-based drug-use-prevention programmes is limited (Gorman, 1998).

Such critiques should be taken seriously, as some highly publicized and funded school drug-use-prevention programmes which have been implemented for a long period of time, such as Drug Abuse Resistance Education (Project DARE), have been shown to be ineffective for nearly ten years now, although the programme still continues (Clayton, 1996). One fundamental area of the DARE programme is "resistance skills", or more popularly "just say no" to drug use. Therefore, the basis on which such prevention programmes are conceptualised and executed should be questioned.

Studies conclude that there is little evidence that health education makes people refrain from using alcohol and illicit drugs or reduces the levels of their use. According to Tobler and Stratton (1997), scare tactics, providing only factual information on drugs and their effects, self-esteem building, responsible decision-making and didactic presentation of material have not proved to be particularly effective in the prevention of alcohol, tobacco and other drug use. Some of these programmes are built on the premise that awareness of the harms of drug use will prevent drug use (Botvin and Botvin, 1992).

The long-term impact of the programmes is another issue that should be considered (Wiehe, 2005). Skara and Sussman (2003), show that meta-analyses indicate that programmes that have been shown to be not effective in the longer-term are also not effective in the short-term. Programmes that have shown some effects in the short-term have had longer-term beneficial impact. Therefore, it is argued that the continuance of the impact depends on the initial results, which in turn depends on the robustness of the design and content of the programmes.

# • What are the general features of effective prevention programmes?

The single most important characteristic of an effective drug prevention initiative is its ability to change behaviour. Therefore factors that initiate and maintain drug use should be addressed effectively if programmes are to be successful. Behaviour change is a continuous process. Factors related to a certain type of behaviour The single most important characteristic of an effective drug prevention initiative is its ability to change behaviour.





(e.g. drug use) should be dealt with in a sustained manner for changes in behaviour to occur and persist.

In broad terms, drug education should be evidence-based, developmentally appropriate, sequential, and contextual. Ideally, programmes should be initiated before drug use commences. Teaching should be interactive and use peer leaders. The role of the classroom teacher is central (Midford, 2002). Prevention programmes should also be long-term with repeated interventions (i.e., booster programmes) to reinforce the original prevention goals (Scheier, 1999).

Drug education should be evidence-based, developmentally appropriate, sequential, and contextual. It has been shown that prevention programmes should address all forms of drug use, including the use of legal drugs such as tobacco and alcohol, the use of illegal drugs such as marijuana or heroin and the inappropriate use of legally obtained substances such as inhalants, prescription medications, or over-the-counter drugs (Johnston, 2002). Researchers such as Tobler disagree with this, as tobacco and alcohol-specific programmes have shown more significant impacts than multi-drug-use-prevention programmes (Tobler, 1992). In our experience, successful drug-use-prevention programmes should cover all drugs, but should identify and address behavioural and other issues related to specific drugs.

Perceptions of proximity and the intensity of harm by the recipients do matter. For example, for a middle-aged person, the possibility of a tobacco-related heart attack is proximal and will nudge him towards changing behaviour. But the same is not true for a schoolgoing youngster. The most proximal or important health harm for this group can be the possibility of impotence or impaired beauty. Changes that occur in the skin and teeth, is more relevant to this group. Many experts agree that the social influences approach has been more effective (Cuijpers, 2002). The social influence model aims to develop the social skills useful in resisting social influences which encourage drug use. It seeks to strengthen students' awareness of and resistance to the external pressures exerted by friends, family, and the media, and internal pressures such as low self-esteem, which can lead youth to drug use (Norem-Hebeisen, 1983; Pentz, 1990; Benard, 1990). Prevention curriculum based on SIM consists of objective information about drug use, examines drug use attitudes and behaviours, and gives social resistance skill training (Ellickson, 1990; Mohai, 1991).

## • What is the best timing for interventions?

It has been shown that there are three important time periods of relevance to drug use, in a student's development. Based on an extensive literature review, McBride (2003) suggests the following timings when interventions are crucial.

First, programmes can be delivered immediately prior to initial experimentation. This inoculation phase is where the initial knowledge and skills related to drug use have the potential to modify behaviour patterns and responses to drug-using situations.

Second, initiatives should be implemented when students are experiencing initial exposure – the early relevancy period. Here, students gain exposure to programmes when information and skills most likely have meaning and practical application.

The third or the late relevant phase is when the prevalence of use increases and the context of use changes, such as in drinking and

Interventions are best made at three important junctures: prior to initial experimentation, at the time of initial exposure (early relevancy period) and when the prevalence of use increases (late relevancy period).

driving. This phase is important in providing new knowledge and skills for dealing with new situations.

# • What is the most effective content?

#### Awareness about ways used to influence adolescents

There is now good evidence for reducing tobacco use, especially from the "Truth" Campaign in the USA, and initiatives carried out in the South-East Asia Region, that show that increasing awareness about the methods by which the drug and alcohol trade operates has a significant effect on youth consumption.

Findings indicate that the "Truth" campaign accounted for a significant portion of the recent decline in the prevalence of youth smoking (Farrelly, 2005). This campaign was carried out in the USA. It involved making teenagers aware of the tactics employed by the tobacco industry to lure young people into smoking. And more importantly, it highlighted through the media, how such tactics should be identified and countered by the youth themselves.

This approach has been tried with success in Sri Lanka for several years. It is apparent from this experience that, young people do not like to be deliberately manipulated, for instance, into considering tobacco use as smart, sophisticated and fun. Once such strategies become clear, young people often become resistant to them. In Sri Lanka similar effects have also been observed with regard to the exposure of strategies used by alcohol vendors.

In this approach, school children are encouraged to look for strategies used by the alcohol industry, especially the beer industry

Awareness of the methods of operation employed by the drug and alcohol trade has a significant effect on youth consumption. to promote the use of its products. They are shown examples of direct advertisements, indirect advertisements, examples of sponsorships, events, product placements in television programmes and films. Next, they are requested to be vigilant for these and other promotions in their day-to-day life, such as while reading newspapers, watching television, travelling to and from school, at entertainment venues etc. As for tobacco, children, once able to identify promotions (be they direct or indirect), regardless of the media or the message used, become resistant to them. They are then encouraged to attempt to reverse the impact of these strategies.

Adolescents can also be inspired to protect their less informed friends – who may fall prey to such strategies. This implies that the users of alcohol and tobacco are less informed (not of the health effects, but as to how they are being manipulated) and therefore urgently need help.

#### Reshaping the expectations from drugs and alcohol

Following extensive reviews of the standard alcohol education programmes, it has been suggested that another approach would be to reshape the environment of norms and expectations and construct caring communities to reduce problems of drugs and alcohol (Keeling, 1994). This approach has shown promise in the context of this Region.

As discussed before, it has been shown that the normative education component is the most important contributor to behaviour change in social influence programmes. The approach that has shown success in Sri Lanka is wider in scope. It attempts to change the norms and expectations related to drug use by Once young people realize that they are being deliberately manipulated they do not like it and often become resistant to these strategies.

Reshaping the environment of norms and expectations and constructing caring communities will reduce the problems of drugs and alcohol use.





individuals, sub-groups and communities through self-examination, critical thinking and active participation.

Exploring and exposing the "culture" related to drug and alcohol use in school settings and reversing factors that promote the use of these substances have shown significant impact. How drug and alcohol use is promoted and expectancies created through words, phrases or actions that occur daily within the school milieu is ascertained and reversed through this approach. This is explained in the section on practical implementation of programmes.

#### Questioning the perceived effects of drugs

Questioning the perceived effects like pleasure, courage, relaxation, increase in sexual prowess of drugs also plays a major role in reversing the glamour attached to drug use. Questioning the perceived effects (e.g. pleasure, courage, relaxation, increase in sexual prowess) of drugs also plays a major role in reversing the glamour attached to drug use.

Pharmacologically, some drugs have a depressant effect on the nervous system (alcohol, and opioids such as heroin), while some others do not have specific stimulant or depressant effects (e.g. cannabis). The perceptions and expectations that are created around the use of these drugs, however, are otherwise. Separating the chemical effect from the effect of expectation and the environment can play a major role in drug-use-prevention programmes especially for alcohol and most illicit drugs. This involves a more intense and rather intellectual approach, which will empower students to critically analyze their own perceptions and compare it with the real effects experienced, which are very often unpleasant (Fekjaer, 1993).

For example, heroin is chemically a depressant of the nervous system, but, in some sub-groups of heroin users, it is perceived

that it gives strength to carry out heavy manual work. Some users believe that it improves performance during sexual intercourse. Both these beliefs are contrary to the chemistry of the substance.

There are many such examples related to alcohol use too. Although it is a depressant of the nervous system, many consider that it improves the users' ability to have fun and be funny, bold or strong. Scientifically, alcohol, once taken, has to be absorbed in the intestine, and is metabolized in the liver before it is released in the systemic blood circulation, through which it can travel to the brain, and have an effect on its functions. This process usually takes around 30 to 45 minutes.

Generally, alcohol users know what they feel around an hour following alcohol use — headache, nausea, lack of coordination, etc. – which are the real chemical effects of this substance. On closer examination of alcohol-using behaviour, it becomes clear that most of the so-called "positive" effects of alcohol are felt when one joins an alcohol-using group, and begin even before actually consuming alcohol. Therefore, the positive effects which are felt are actually learned behaviour, and expectancy plays a major role (Fekjaer, 1993).

# • Who should be the target group?

As stated in the introduction, drug-use-prevention programmes can cover general audiences or specific audiences. Within the school setting too, the audience can be segmented. Although effective prevention messages and interventions should reach all students, those who are most likely to use these substances should be specifically targeted. For drugs, the most-likely-touse group, are the students who are more outgoing, ready to experiment and ready to follow new trends.





The most-likely-to-use group, are the students who are more outgoing, ready to experiment and ready to follow new trends. Such students can be easily identified by teachers at the classroom level. This group includes not only "problem" students who have repeated disciplinary problems and come from troubled social or economic backgrounds, but also many ordinary students.

## How should interventions be delivered, and by whom?

#### Students should lead

Interventions are most effective when they become studentcentred and students take the lead role in observing and working on the factors that promote drug and alcohol use. Such efforts should be made attractive and fun. This also ensures that it is appealing to the specific target group and will help to engage them.

Research shows that interventions are most effective when they are student-centred, with students taking the lead role in observing and working on the factors that promote drug and alcohol use. Interactive peer interventions are superior to noninteractive didactic, lecture programmes led by teachers/researchers.

#### Programmes should be interactive

Research shows that interactive peer interventions for middle school students, where they employ interactive techniques, such as peer

discussion groups and role-playing that allow for active involvement in learning about drug abuse, are superior to non-interactive didactic, lecture programmes led by teachers/researchers (Black, 1998).

Role plays, simulations, Socratic questioning, brainstorming, small group activities, cooperative learning, and class discussions are strategies that engage students in self-examination and learning (Bosworth and Sailes, 1993; Tobler and Stratton, 1997; Botvin, 1995). Designing programmes that can be delivered primarily by peer leaders will also increase the effectiveness of school-based substance-useprevention programmes. The results also imply that such programmes need not be lengthy (Gottfredson and Wilson, 2003).

#### Role of teachers

Sussman, (2003), speculate that explicit action on the part of the teacher to have students make statements and ask each other questions, may be the essence of effective drug education programme delivery.

When the programmes are implemented through the teachers there are several factors that should be kept in mind. Intense teacher training alone will not help in ensuring long-term success. It should not be assumed that all teachers will implement the programme equally well (Rohrbach, 1993). Teachers with the proper characteristics should be selected for such training. The more outgoing teachers who have good formal and informal relationships with students are best qualified to implement initiatives that need the engagement and participation of the students at risk. Studies show that successful implementers have fewer years of teaching experience and stronger self-efficacy, enthusiasm, preparedness, teaching methods compatibility, and encouragement from the principal of the school, Students making statements and asking each other questions, may be the essence of effective drug education programme delivery.



than the non-implementers (Rohrbach, 1993). It has also been shown that the more effective teachers were the ones who were recently trained in substance-use- prevention and were comfortable using interactive teaching methods (Ennett, 2003).

In this context, the role played by the principal is crucial. The chances of success are higher in schools where the principal supports the intervention and takes a personal interest in its success.

## How can programme effects be augmented?

School drug and alcohol prevention programmes can be augmented by increasing the prices of licit drugs (alcohol and tobacco), stopping advertisements and restricting access to these substances. School drug and alcohol prevention programmes can be augmented by the introduction of certain measures outside the school, which influence community behaviour and norms. The most important are:

#### Increasing the prices of licit drugs (alcohol and tobacco)

Research from many parts of the world confirms the finding that reducing affordability has been shown to be extremely effective in reducing the consumption of both tobacco and alcohol (Jha and Chalupka, 2000; World Bank, 1997). Especially for tobacco, it has been shown that an increase in taxes will reduce consumption. This reduction in consumption is seen most significantly in the younger age groups and poorer socio-economic groups. However, the industry hotly contests these findings.

#### Stop advertisements

There is also substantial evidence that stopping of direct and indirect promotions will also reduce the consumption of licit drugs (World Bank, 1997).

#### Restricting access

Though restricting access (e.g. minimum ages for purchase) for tobacco is a popular policy, the totality of the evidence suggests that youth access interventions do not significantly decrease youth smoking (Fichtenberg and Glantz, 2002; Thomson, 2004). However, for alcohol, evidence suggests that consumption of alcohol is usually influenced by the age at which alcohol is legally available (for purchase in shops or consumption in bars) and a higher age for purchasing/drinking is effective in reducing alcohol-related problems and the consumption of alcohol by minors (Grube, 2001).

## How should such interventions be evaluated?

Evaluation should always be built into any programme. Although we are quite used to evaluating programmes at the end, such evaluations are of little value for improving the efficacy of on-going interventions. Thus we need to think about how to assess progress before we begin an action. Short-term indicators of impact should be developed and used to ensure that the programme is progressing the way we had envisaged it to. We have to also remember that the most popular indicators, such as actual levels of drug or alcohol use in the target group, may not be the best indicator of progress of the programme, during the initial and intermediate phases of the intervention.

### Indicators of progress in a school

The easiest way to understand what to do is to imagine what the ideal school should be like, from the point of view of



preventing drug use. You can then discuss with the students how to measure progress towards achieving this ideal state.

#### The image of substances of abusea hypothetical example:

**In school A,** all students are taught that use of drugs is bad and dangerous. They learn that through it may cause wonderful feelings but that it can even kill you or send you to jail or to hospital.

**In school B,** students think that drug use is a boring and over-rated pastime created for fools. They recognize that it is the image that is built up by the media and uninformed adults and their gullible friends that makes it appear special.

A student in school B, who is rumoured to have taken a drug, is looked at with some sympathy and amusement by his peers – as someone who is easily duped. The reaction to such a student in school A is of awe and fear, and a certain measure of envy and curiosity.

The image of substance use, whether it is cannabis, alcohol, tobacco, or heroin, is more attractive and special in school A than in school B.

The imagined effect of drugs is most important in creating a positive image. Those in school A think it is some wonderful and magical experience, but to be avoided only because it is harmful.

The expectation of what a drug will make you feel is more positive among students in school A than in B.

There is good evidence that those who have a highly positive expectation reportedly feel very good after taking the drug, while those with negative expectations do not report a positive experience at all. So the expectation is really important and not a trivial matter. It colours the way students interpret and report their drug experience. So, a good indicator of progress is that students have less positive expectations of drug effects. How we measure this is included in the section "Action". The idea here is to recognize that we should assess changes in the positive expectations from drug use among students.

A second aspect is what they think of drug use. In school A they think a user is tough and fearless and willing to take risks. In school B the others don't think it such a special deal to take drugs. So a second possible indicator is therefore the image of the student who uses drugs.

#### Good indicators of progress are:

- Students have less positive expectations of drug effects,
- There is a change in the perception of the image of the student who uses drugs, as well as in the symbolic meaning of drug use.
- Drug use is no longer seen as a 'normal' or 'done thing.'
- Special privileges previously assigned to drug-users have been removed.



There are symbolic meanings or images attached to drug use. Use of a drug can be seen as a symbol of non-conformity, protest, affluence, sophistication – which is probably what prevails in school A. It may instead be seen, as in the case of school B, as a symbol of trying to conform to a stereotyped image, subservience, lack of intelligence, and lack of sophistication as to what is smart. A change in the symbolic meaning of drug use is also an indicator.

Another indicator of progress is whether drug use is no longer seen as a 'normal' or 'done thing', and any individual who does not consume drugs is not seen as an outsider or not a proper member of the group.

Finally there is the tendency to allow drug-users to 'get away with' certain things that others are not allowed to do. These are privileges that are given only to users and this too can be an incentive. Whether special privileges previously assigned to drug-users have been removed is also an indicator.

In the "Action" section we look at how to measure these changes. Different indicators are used by different schools. But each school has to make an attempt to check whether these things are

### Examples of required changes:

- Expectations of drug effects.
- Image attached to drug use and users.
- Symbolic meanings attached to use.
- Whether seen as the norm or expected behaviour in the group.
- Privileges or penalties attached to use.

actually changing. The way to measure such movement has to be worked out. We need indicators that will show us a shift in the right direction. These are discussed in the next section. Thus, in an ideal school, the indicators listed should all be seen to be moving in the direction that makes drug use appear less and less attractive to students.

Students too should be able to see how opinion among them is changing in the right direction. To make things change, they need to understand how a positive or negative image is built up, and then take action to change the image in the desired direction.

## • Implementing Best Practices

### Who will conduct the activity in schools ?

Whoever wants to reduce the likelihood of students taking to the use of drugs, has to reach the students directly or indirectly.

## If you are an outsider, how do you change the school's conduct?

You may have influence over the school's administration or with a teacher or some teachers or with the Parents Teachers Association or Old Students' Association. Whatever route you work through, you will generally find a positive response to an offer to help in reducing the risk of students starting to use drugs – including alcohol and tobacco

#### Why will you be welcome?

Most school administrations are happy to hand this responsibility to someone else – so they can say they are doing something about the problem.



• Parents and students all like these activities.

Some activities are easy to conduct but have been shown not to have any beneficial effects. Often these are popular.

- If you do things that are not likely to reduce the risk of drug use, your activity will generally be popular. This is because:
  - usually such programmes require only that students are given a lecture, shown a video, play or film or asked to participate in an essay or a drawing competition. All these provide entertainment and sometimes gifts for students and there is never any controversy.
  - everybody believes that is what you should do.
  - there will be no resistance from those who make profits from the sale of drugs.
  - most of these are short-lived and easy to organise.
- If you do things that are likely to reduce the risk of students taking up the use of substances such as tobacco, alcohol or illicit drugs, there will definitely be resistance. This is because:
  - those who trade in these substances will cause problems in hidden ways so as not to let you do things that will genuinely reduce use.
  - the proposed activities will require students taking the lead in action instead of you.
  - the effort has to be sustained for a fair length of time and include a variety of responses.
  - it is more trouble for everybody.

Some activities that are easy to conduct and are quite popular have been shown not to have any beneficial effects.

If you do things that are likely to reduce the risk of students taking up the use of substances such as tobacco, alcohol or illicit drugs, there will definitely be resistance. So if you really want to reduce the risk of drug use among students, you will have to anticipate resistance and try to minimise this before you start. If you only want to do some popular activity that everybody will praise and where you will not encounter any resistance, it is unlikely to produce a significant reduction in the use of drugs.

## If you are already part of the school, how can you change the school's conduct?

You can choose between the options listed above, which apply also to individuals outside the school. If you are already part of the school, you have another option. This is to learn what makes students less likely to get into drug use and create the necessary changes without having a public and formal programme. This means that you can try to create a correct understanding about drugs among the students, as set out below. The idea is to reverse the image that students have about various substances and the meanings attached to their use, which makes these look attractive and the 'done thing'. How this can be done is explained later.

Being part of the school you will have the opportunity to guide the more perceptive students to understand the mindset that needs to be created among their peers and how to go about it.

### Learning about effective actions

To be effective, your programme should create certain changes amongst students. One of the most important factors that govern use is what the students learn from their own culture or environment.



## Changes needed to be initiated in schools:

- Make tobacco, alcohol and other drugs, and the use of these, appear less and less attractive.
- Help students understand how a positive image of these is built up.
- Help them see who contributes to this image and why.
- Teach them how to reverse or counteract these.
- Help them to measure the progress achieved.

For a programme to be effective it should be based on understanding which things in the school milieu itself makes students prone to use drugs – and then reverse these influences. The way students talk about drugs, the local words used for different substances of abuse and the overall attitude towards intoxication are just a few examples.

It must also look at influences outside of school and see how these may be reversed or their effect neutralized. An example of this is a known local shop that surreptitiously sells such substances of abuse to students.

You will need to create some changes inside the school. These are changes to be achieved among students, in the student milieu or culture.

Each of these items needs proper action for its implementation. We go into details in the next section "Action".

### Action

Action needs to be taken to help students understand how a positive image of drugs is built up, and then to see what contributes to this image and how to reverse it.

#### How is a positive image of drugs built up?

The image is built mostly through the belief that people already have in their minds. You already have a particular idea of your own about the effect of different drugs. Some of these you have never tried but you still believe that they produce exhilarating effects and ecstatic states. How did you acquire these impressions? You too speak as if these impressions are true.

There may be substances that you are familiar with. Let us take the example of alcohol, as many of us are familiar with it. Many adults have used, and continue to use alcohol. Most of them, perhaps including you, take pleasure in alcohol use because we enjoy it, or because we see ourselves drinking it, and assume that it must be pleasurable because we like it and drink alcohol voluntarily. Some people have used alcohol for many years and have learnt to associate it with pleasure, and to feel good when they drink. This does not mean that most users enjoy it. You can guestion yourself whether you enjoy the effect of alcohol the next time you experience intoxication. You will be able to re-examine the effect and check whether you do actually enjoy the effect. And if you find that it is not as pleasant as you had believed, you can change your opinion about alcohol. But someone, who has never consumed alcohol and believes that it is a highly pleasant experience, will not be easily convinced that only some people, perhaps a minority, enjoy alcohol

The positive image of drugs is built up mainly from the beliefs and perceptions that people already have in their minds – but this opinion can be changed.





use per se. Most people enjoy the ambience connected with drinking; they like the mood associated with alcohol more than the effect of intoxication. This is why the best fun in drinking alcohol is early in the situation when the alcohol has not been absorbed in adequate amounts to produce an effect on the brain.

You should learn from these experiences, and extrapolate them to illicit drugs. Those who have never used a drug still argue strongly that they produce wonderful effects. Students in school acquire these impressions unknowingly.

It is very difficult to get people to question the common assumption that illicit drugs are highly pleasurable and produce magical and wonderful feelings. Because many people have not experienced these drugs, they simply assume from the behaviour of those who use these regularly, that it must be great. The example of alcohol helps people understand things more easily.

So one task is to see how we ourselves can stop adding the elements of glamour, pleasure and magic to the use of drugs. Only then, can we also teach students to stop creating a false and misleadingly positive image about the effect of these drugs.

The more perceptive students will understand the influences at work that build up the desirable image of drugs. They should try to explain this concept to others.

#### Changing the image

If we get our students to examine the words used in their community or social circles, to describe drug use and its effects , they will realize how much these words create a positive image.

You too can do your bit in this direction. Consider the words that are used in your own circle, in society and in the media to refer to intoxication, for example. Then examine the mood that such words evoke. Students too are quite aware that these words create a particular aura. Get some students to repeat the various words generally used among them, to refer to commonly used drugs. You will be able to point out how even uttering these names can create a mood of 'something special'. Then ask them how to devalue this tendency.

Now, see what happens if you use words that convey the opposite mood. The more perceptive students will understand how this influences the image that has been built up. They should try to explain this concept to others.

Take another example. Just ask someone whether he or she would like to join you in having a drink of alcohol. Even asking someone to join you to take a drink of alcohol evokes a casual mood of fun and mirth. Why do we all smile whenever a particular substance is even mentioned? And this is not just the reaction of regular users, but also of those who have never used the substance, and even of those who are opposed to its use!

Students can begin to reverse these automatic associations more easily than adults. In fact they can make fun of the adult images and impressions.

### Changing the positive image:

Questioning our own, and our community's assumptions and changing them by, for instance:

- challenging or changing the words that are used to describe drug use and intoxication.
- challenging or changing the automatic assumption of a good mood even at the mention of a given substance.

Students can be taught to examine the ways that books, music and the media in general reinforce the positive social image of drugs and drug-users.



#### Students can be taught to examine the ways that books, music and the media in general reinforce the positive social image.

For example, how alcohol and tobacco are consumed by the rich, how it is portrayed as being pleasurable, etc. They can then substitute less appealing words, images and reactions in their own circles.

They will not have the power to change these references and images in the media. So they will need to learn how to prevent their less perceptive friends from being swayed by these images.

### Changing the positive image:

Immunizing others, to the extent possible, from being influenced by the depictions of drug use and its effects in the media.

#### Role of dealers

Another important aspect is to see how dealers in these various substances deliberately create an image that is very attractive.

Some of this is achieved through advertising. In other cases, it is achieved through informal placements in stories, journals, films and TV productions. Students have to be made sensitive to the ways that the positive image is deliberately built up.

Some people take a lot of trouble to create a positive image about the use of different substances even though they do not earn money by selling them. These are people who are hooked onto these substances. Because they need the substance to feel good or to feel normal, they want others also to join them in taking the
drugs. Otherwise they look odd. So they keep pressing others to use the substance and always promote it through their statements, jokes and other similar methods.

**Students will need to recognise these people.** Sometimes they happen to be members of the school's own staff. Students have to learn to question their ideas or reject them in the student milieu.

#### Changing the positive image:

Help to expose the actions of those who deliberately create a positive image because they are hooked onto the substance or profit from selling it.

Students have to learn to reverse the influences in their own private world that is segregated from the staff and other adults. They have to learn how to influence and wean away their friends who are usually easily tricked from making a habit of drug use. This is not easy because the students who readily take up drug use are not very clever, so it is not easy to get them to question the image that is built up.

Thus, the first step is to see how many students realize the ways in which a very attractive image of drug use is built up.

They can then note their own progress as more students become aware.

But they will have to help the less perceptive students, who are easier to seduce into substance use, to see this too. In nearly all settings, the less 'intelligent' or less perceptive individuals are more easily taken in by the image that is built Students will need to recognize the people who deliberately create a positive image of these substances because they are hooked onto them.





**up around these substances.** So the brighter students should be taught that drug taking is not just a 'bad' habit but also a habit into which their less intelligent friends are easily duped.

They should try to show the less perceptive students how a rather silly activity, that anybody can do, is being promoted as something very special and tough. Often, people who have no other way to show that they too are achievers, take to smoking or drinking alcohol to prove themselves. And if this is not enough, they get addicted to illicit drugs to show that they are tough and that they are not intimidated by rules.

The idea is that they should bring about an understanding that many students who like to show that they are taking drugs are doing so only because they cannot achieve things, or feel important in any other way.

#### Changing the positive image:

Constantly addressing their less perceptive and less intelligent peers as to how they are being duped.

Thus, the first step is to see how many students realize the ways in which a very attractive image of drug use is built up. The steps outlined above are intended to make a change in one aspect of drug initiation, and that is, to reverse the things that nudge young people towards drug use. Similar steps are also needed for other changes that have to be achieved. The process for each of these is the same as for this one.

Some other changes that a school has to work towards are:

• Helping students appreciate the real harm from drug use, in a way that is relevant to young people.

- Strengthening students to counteract the activities of drug promoters.
- Generating interest among students to make drugs less easily and freely available to their peers.

In each of these situations, the steps described earlier in this chapter, for reducing the attractiveness of drugs, have to be followed.

#### Measuring progress

To ensure real progress, students must learn to assess whether the attractiveness of substance use in their culture is diminishing. They will have to develop ways to measure this change. The things to measure were described in the previous section as "required changes". The students in your school should work out which of these they think they can use as indicators for each item. The indicators that each school uses can differ.

The student body in general will have to pay special attention to the impressions and images that the less perceptive individuals among them carry. These are the students who, with very rare exceptions are the first to use drugs. So others should reach out to them and rectify their views from time to time.

Let us take an example: We have taken action intended to reduce the glamour and attractiveness of drug use among our student population. Now the task is to check whether this is indeed happening. Reducing attractiveness is only one step. There were other changes too that were listed for which the same process has to be applied.

The step to be taken now is to see how students and staff can know whether the image of drug use among students is becoming less The students in your school should work out their own list of indicators for each item. The indicators that each school uses can differ.

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attractive. An example of an indicator is the reaction of students when heroin use is spoken about. We need to check whether students' reactions to it are changing. One simple way to do this is to ask selected students about their opinion at the beginning and later on during the intervention. Suggested questions include:

- What do you think a person who inhales heroin feels?
- Is the use of heroin a sign of great adventurousness or of stupidity?
- Do you think using drugs is a normal part of youth behaviour?

One school may choose to check this by informally observing the students' responses. Another may choose to verify by asking the students in a classroom and noting the number of students who give different types of answers. A third school may ask some students to give anonymous answers in writing. Yet another may ask a group of students their opinions from time to time, in a group discussion. This is what we meant when we said that each school will use different indicators, but they are all measuring changes about the same issue.

#### Changing the positive image:

Continually assessing whether the picture that students have of drug use and its effects is becoming less attractive.

If we have the opportunities to influence the school's chosen method we can discuss with them the advantages and problems of each indicator. If a few members of staff are interested in minimizing the extent of drug use, licit and illicit, they have to take effective measures. It is necessary to take some interest to work out what should be done. We cannot just do the things that are easy to do and hope that it works.

# Handling obstacles and maintaining progress

When prevailing attitudes are questioned and students take the lead in reversing the unduly positive image of drug use, there will be a substantial amount of resistance and objections.

The commonest objections come from staff members who want to teach students right and wrong and do not particularly want students to take the lead in this activity.

Another source of problems are members of the staff who are attached to using addictive substances – usually tobacco or alcohol. They do not like students questioning the attractive and fun image that is created around their own habit. And they are not happy when students see their drug use as silly or as a sign of weakness or lack of intelligence! Parents whose drug use gets questioned by the students also object.

Sometimes people involved in the trade in these drugs create obstacles. The trade does not mind programmes that teach children about the dangers of drugs. But they are opposed to allowing students to counter the positive image that is created through direct and indirect advertising and promotions. When the trade objects, they usually work through higher officials. So protests are made to the education office of the district, for example, and the school's staff and principal are pulled up on some pretext. Those who really want to reduce drug use among students must anticipate the tactics of interested parties and inform the authorities beforehand to prepare them for their spurious objections.

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To prevent this happening, those who really want to reduce drug use among students must anticipate these tactics. They can then tell the authorities beforehand and prepare them for spurious objections from interested parties.



## References

Benard B. *The case for peers*. Portland, OR: Northwest Regional Educational Laboratory. ed 1990; 327 755.

Black D, Tobler N, Sciacca J. Peer helping/involvement: an efficacious way to meet the challenge of reducing alcohol, tobacco, and other drug use among youth? *Journal of School Health*, 1998; 68: 87-93.

Bosworth K and Sailes J. Content and teaching strategies in 10 selected drug abuse prevention curricula. *Journal of School Health*, 1993; 63: 247-253.

Botvin G and Botvin M. Adolescent tobacco, alcohol, and drug abuse: prevention strategies, empirical findings, and assessment issues. *Journal of Developmental and Behavioral Pediatrics*, 1992; 13: 290-301.

Botvin G, Baker E, Dusenbury L, Botvin E, Diaz T. Long term followup results of a randomized drug abuse prevention in a white middle class population. *Journal of the American Medical Association*, 1995; 273: 1106-1112.

Caulkins J, Pacula R, Paddock S, Chiesa J. What we can and cannot expect from school-based drug prevention. *Drug and Alcohol Review*, 2004; 23: 79-87.

Clayton R, Cattarello A and Johnstone B. The effectiveness of Drug Abuse Resistance Education (project DARE): 5-year follow-up results. *Preventive Medicine.* 1996; 25: 307-18.

Cuijpers P. Effective ingredients of school-based drug prevention programmes. A systematic review. *Addict Behav*, 2002; 1009-23.





Ellickson PL & Bell RM. *Prospects for preventing drug use among young adolescents*. Santa Monica, CA: The RAND Corporation. 1990.

Ennett S, Ringwalt C, Thorne J, Rohrbach L, Vincus A, Simons-Rudolph A, Jones S. A comparison of current practice in schoolbased substance use prevention programs with meta-analysis findings. *Prevention Science*, 2003 Mar; 4(1): 1-14.

Farrelly M, Davis K, Haviland M, Messeri P, Healton C. Evidence of a dose-response relationship between "truth" antismoking ads and youth smoking prevalence. *American Journal of Public Health*, 2005; 95: 425-431.

Fekjaer H. *Alcohol and drugs, myths and realities*. Molnycke: IOGT Alcohol and Drug Information Centre. 1993.

Fichtenberg C, Glantz S. Youth access interventions do not affect youth smoking. *Pediatrics*, 2002; 109: 1088-1092.

Gorman D. The best of practices, the worst of practices: The making of science-based primary prevention programs. *Psychiatric Service*, 2003; 54: 1087-1089.

Gorman D. The irrelevance of evidence in the development of school-based drug prevention policy, 1986-1996. *Evaluation Review,* 1998; 22: 118-46

Gorman D. Do school based social skills training programmes prevent alcohol use among young people? *Addiction Research*, 1996; 4: 191-210

Gottfredson D and Wilson D. Characteristics of effective school-based substance abuse prevention. *Prevention Science*, 2003; 4: 27-38.

Grube JW, Nygaard P. Adolescent drinking and alcohol policy. *Contemporary Drug Problems*, 2001; 28(1): 87–132.

Hawthorne G, Gerrad J, Dunt D. Does life education's drug education program have a public health benefit? *Addiction,* 1995; 90: 205-216.

Jha P, Chaloupka F, eds. *Tobacco control in developing countries*. Oxford University Press, 2000.

Johnston L, O'Malley P, Bachman J. *Monitoring the future national survey results on drug use, 1975–2002*. Volume 1: Secondary school students. National Institute on Drug Abuse, 2002.

Keeling RP. Changing the context: The power in prevention: alcohol awareness, caring and community. *Journal of American College Health*, 1994; 42: 243-247.

Norem-Hebeisen A & Hedin DP. Influences on adolescent problem behavior: Causes, connections, and contexts. *Child and Youth Services*, 6(1/2), 1983; 35-56.

McBride N. A systematic review of schools drug education, *Health Education Research*, 2003; 18: 729-742.

Midford R et al. Principles that underpin effective school-based drug education. *Journal of Drug Education*, 2002; 32: 363-386.

Mohai CE. *Are school-based drug prevention programs working?* (ERIC Digest). Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement. 1991.

Pentz MA et al. Effects of program implementation on adolescent drug use behavior: The midwestern prevention project (MPP). *Evaluation Review*, 1990; 14(3): 264-289.

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Plant M, Single E, Stockwell T, eds. *Alcohol: minimizing the harm: what works?* London: Free Association Books, 1997.

Rohrbach L, Graham J, Hansen W. Diffusion of a school-based substance abuse prevention program: predictors of program implementation. *Preventive Medicine*, 1993; 22(2): 237-260.

Scheier L, Botvin D, Diaz T, Griffin K. Social skills, competence and drug refusal efficacy as predictors of adolescent alcohol use. *Journal of Drug Education,* 1999; 29: 251-278.

Skara S, Sussman S. A review of 25 long-term adolescent tobacco and other drug use prevention programme evaluations. *Preventive Medicine*, 2003; 37: 451 - 474.

Spoth R, Redmond D, Trudeau L, Shin C. Longitudinal substance initiation outcomes for a universal preventive intervention combining family and school programmes. *Psychology of Addictive Behaviours*, 2002; 16: 129 -134.

Sussman S. Project ALERT reduces initiation of cigarette and marijuana use in 12-14 year olds. *Evidence Based Mental Health.* 2004; 7: 53.

Sussman S, Rohrbach L, Patel R, Holiday K. A look at an interactive classroom-based drug abuse prevention program: interactive contents and suggestions for research. *Journal of Drug Education*, 2003; 33: 355-368.

Thomson C, Gokhale M, Biener L, Siegel M, Rigotti N. Statewide evaluation of youth access ordinances in practice: effects of the implementation of community-level regulations in Massachusetts. *Journal of Public Health Management and Practice*, 2004; 10: 481-489. Tobler N. Drug prevention programs can work: research findings. *Journal of Addictive Disease,* 1992; 11: 1-28.

Tobler N, Stratton H. Effectiveness of school-based drug prevention programs: A meta-analysis of the research. *Journal of Primary Prevention*, 1997; 18: 71-128.

Wiehe S, Garrison M, Christakis D, Ebel B, Rivara F. A systematic review of school-based smoking prevention trials with long-term follow-up. *Journal of Adolescent Health*, 2005; 36: 162-169.

*Curbing the epidemic: governments and the economics of tobacco control.* Washington: World Bank, 1999. (http://www.usaid.gov/policy/ads/200/tobacco.pdf, accessed 16 June 2006).



### Annex: A short introduction to drugs of misuse

Drug group	Effects	Significant effects of long term use
Alcoholic beverages (e.g. Beer, Wine, Liquor)	Depresses the nervous system, relieves tension and anxiety, promotes relaxation, impairs the efficiency of mental and physical functioning, and decreases self-control. In higher doses there can be "drunken" behaviour, drowsiness, stupor, sleep/unconsciousness.	Alcohol dependence, alcoholic psychosis, many medical conditions including hypertension, pancreatitis and cirrhosis.
Benzodiazepines (e.g. Diazepam)	With the exception of minor tranquillisers, these effects may be associated with positive feelings of pleasure. Tolerance develops with frequently repeated doses.	
Solvents and Gases (e.g. Glue, Petrol)	In high doses there can be strong physical dependence to alcohol or hypnosedatives, less strong to minor tranquillisers, not at all to solvents or gases. Depressant effects may be dangerously augmented if more than one depressant drug is taken at a time, or if depressant drugs are taken with opiate-type drugs	Lasting impairment of brain function, especially affecting control of movement.
Opiates, Opiods, and Narcotic Analgesics (e.g. Morphine, Heroin)	Reduces sensitivity and emotional reaction to pain, discomfort and anxiety. Produces feelings of warmth, contentment. Relatively little interference with mental or physical functioning. Higher doses, sedation, stupor, sleep/ unconsciousness. Tolerance and physical dependence with frequently repeated doses.	Blood borne diseases such as Hepatitis, HIV in injectors.
	Depressant effects may be dangerously magnified if more than one opiate is taken at a time, or if opiates are taken with other depressant drugs. Very high doses can cause death by respiratory arrest.	

Drug group	Effects	Significant effects of long term use
Amphetamines and Amphetamine- like drugs	Increase alertness, diminish fatigue, delay sleep, increase ability to maintain vigilance or perform physical tasks over a long period, and elevate mood. Excepting tobacco, high doses can cause nervousness, anxiety and (with the exception of tobacco) temporary paranoid psychosis.	Long term use of amphetamines can cause increased blood pressure and heart failure in addition to delusions and hallucinations.
Cocaine (Slang: coke, crack, stone)	Withdrawal effects include hunger and fatigue. Although unpleasant, these effects are practically never of the kind that might require medical assistance.	Damage to membranes of nose, paranoid psychosis, nervousness, confused exhaustion due to lack of sleep.
Tobacco (e.g. cigarettes, cigars, bidi, pan, snuff, betel quid)		Tobacco is responsible for many conditions ranging from impotence, blindness, heart disease to many types of cancer is the most preventable cause of death in the world. More than half of tobacco users die of a tobacco related disease.

Drug group	Effects	Significant effect of long term use
Hallucinogenic Amphetamines (e.g. Ecstasy, "E")	Feelings of empathy at low doses; restlessness and anxiety at higher doses.	Anxiety, panic, confusion, insomnia, psychosis.
Lysergic acid Diethylamide (LSD)	Heightened appreciation of sensory experiences, perceptual distortions, feelings of dissociation, insight, elevation of mood. Sometimes anxiety or panic, occasionally severe.	Psychological reactions.
Cannabis (Slang: pot, dope, ganja, hashish, hash)	Relatively little physiological arousal or sedation, and minimal risk of physical dependence. With cannabis, relaxation, drowsiness, talkativeness.	Occasionally causes temporary psychiatric disorders.

Reference: Drug Abuse Briefing, 6th Edition, Institute for the Study of Drug Dependence, United Kingdom 1996.



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