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medicine

A drug education manual concerning illicit drugs and psychotropics

**For teachers in secondary schools in the
Member States of the European Community**

Report

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**For teachers in secondary schools in the
Member States of the European Community**

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P R E F A C E

Being a teacher in the closing years of this second millenium requires extensive training in the theory and practical aspects of education, together with the opportunity of continuously displaying one's knowledge and developing an expertise and a mentality geared to the needs of young people.

Faced with the challenge presented by licit and illicit drugs and the problems connected with their use by young people, it is essential not only to keep abreast of recent developments but also to adopt the right approach, to show a sense of understanding and open-mindedness and to avoid acting in a tactless manner.

This manual, sponsored by the Commission of the European Communities and written by F. BARO, J. CASSELMAN, L. MOORTHAMER and L. VAN HENDE of the Research Unit of the St Camille University Psychiatric Centre (Bierbeek) of the Catholic University of Leuven Belgium, serves as a response to the need to inform teachers as fully as possible, in particular those working in secondary education, of the complex aspects of the problems connected with the use of licit and illicit drugs. It tackles questions such as how to give advance warning, how to detect their use, how to "contain" them, how to come to terms with the problems and how to give advice to families.

Emphasis is placed in particular on the kind of information which is suited to passing on to young people as part of a health education adapted to fit the educational programme in its broadest sense. In addition, the reader will find in the manual a first-rate reference methodology which is presented in a lively and practical format.

This manual does not, of course claim to be a theological treatise. There must always remain a dividing line between the role of the teacher and that of the doctor. This publication, therefore, which is uncomplicated and easy to read, provided an answer to all the practical questions being asked by teachers. It will enable them to tackle the problems, which, unfortunately, will tend to become more pressing in the next five years.

Every teacher should make a point of reading this publication and using it as reference material to give his/her pupils a valuable education.

The Commission would like to thank the manual's authors for their first-class work and hopes that it will attract a wide readership.

Dr E. BENNETT

Dr H. ERISKAT

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1. GENERAL INTRODUCTION

The aim of this manual is to act as a guide for teachers in secondary schools when tackling the subject of drugs (more specifically : illicit drugs and psychotropic medicines).

Only the basic elements are presented here. Teachers using this manual are expected to adapt the material to the own country, the kind of education and the age level of the target group.

At the end of this manual a list of contact addresses is included.

Please involve these specialized agencies in order to obtain advice, documentation and didactic material.

Before presenting the basic elements in five lessons (Chapitre 2) the following topics are treated shortly in this general introduction : drug education as health education, the aim of the manual, tips before starting, possible general approaches and suggestions for the evaluation of the action.

1.1 DRUG EDUCATION AS HEALTH EDUCATION

Education of young people is accepted throughout the world as a fundamental human right. Consequently, education for health should be accepted as an integral part of the educational process of young people, because they can learn to be responsible for a substantial part of their own health care.

Health education for schoolchildren is an activity in which school heads and teachers can play a most important role, helping the individual to adapt to an often rapidly changing society. In particular, it provides a foundation of formal knowledge which can eventually lead to decision-taking, and it is of value in stimulating examination and clarification of a wide range of values and matters of controversy.

This is of course a very broad perspective. It implies a very widely determined subjects to be tackled. Phenomena as different as infections, working conditions, aspects of sexuality, smoking, use of alcohol, use of illicit drugs and many others are related to health. But it is important to keep to such a general perspective.

In this manual, however, we will consider only one part, one aspect of health education : education concerning **illicit drugs and psychotropic medicines in secondary schools**.

Focusing on a specific health problem in an isolated way comes into conflict with the concept of an overall health education approach. But it has been proved that the effects of an educational process – which is a learning process – for one kind of risk-behaviour can have a beneficial influence on other types of risk-behaviour.

1.2. AIM OF THE MANUAL

This manual is only one possible way - among other existing methods and programmes - of integrating the topic "drug use" into a health education programme. As mentioned in 1.1. an isolated, specific presentation of this topic is doomed to failure, bearing in mind the aims of health education.

This manual deals only with illicit drugs and psychotropic medicines : a discussion about these substances has at least to be accompanied by a discussion on alcohol and tobacco.

In general, this manual is intended to, within the scope of health education :

- help you discover that healthy behaviour presents a wide basis for all aspects concerning physical and mental health;
- give you a certain amount of information and techniques, to begin with or to work with, while you are experimenting with the development of a "health-behaviour programme" in your school;
- provide suggestions on how to increase the knowledge of your students in this field, how to change the attitudes and behaviour of your students towards healthy behaviour.

This manual is aimed at teachers of secondary schools. It contains a lot of information as a background for the teacher, who has the freedom to decide how to teach his students.

In Chapter 5 you can find a list of specialised agencies in your country. They can provide more detailed information, relevant to your country.

1.3. BEFORE YOU START

Before you start it is essential to know as much as possible about :

- (1) what are the current issues among your students
- and
- (2) what you want to achieve.

1.3.1. What are the current issues among your students ?

Do your students take an interest in the issue of "drugs" ? If no questions arise, if they do not show interest, it will not get through, and it probably will result in statements such as : "it's the problem of adults, and youth is saddled with it."

That is why drug education has to start from the needs and interests of the young people of your class.

It is good to ask yourself a few questions in advance.

- What do your students know about the subject ?
- Can we talk about this subject in class ?
- Is it a problem for them ?
- What can they handle ? Is it another matter they have to 'swallow' ?
- Are there specific implications taking into account their age and type of educational guidance ?

It is wise to ask the students to fill in a short questionnaire, so that you can get an impression of the existing state of affairs.

Some suggestions to foster their interest :

- Bring up actual problems and talk them over.
These problems may be published in the press, or have perhaps arisen in your school or in other schools.

- Give a list with statements. Drugs provoke value judgements, everybody has some sort of opinion about them. Such a list is useful for collecting views about this sort of issue.
- Organize a discussion on the subject, and find out the way they think about the matter.
- Show a film. Lots of arguments for and especially against can be found, because a film is not always close to reality for the young.

1.3.2. What do you want to achieve ?

Some questions always arise when preparing class activities.

- What are your aims ?
- Do you have realistic goals ?
- How much time do you want to spend on it ?
- How can it be effective ?

Aims are often very general. For instance, "promoting well-being". This can be interpreted in many different ways and lead to confusion, possible misunderstanding and failure of the action.

It is better to translate those long-term and vague objectives into specific goals.

- E.g. - develop a certain attitude towards some drugs
- reduction of the abuse of some drugs (tobacco, alcohol, valium, hashish, etc.)
 - increasing the knowledge of drugs, by giving objective information about different aspects
 - augmenting the decision-taking capacity of the pupils regarding e.g. the use of psychotropic medicines
 - improving the communication between teacher and pupils about taboos like drugs.

When you have defined your goals, you can work out the whole scheme of work.

But you have to take into account one thing.

In trying to realize your objectives, you will often meet some kind of opposition.

Before you start your lessons, ask yourself :

what opposition do I expect ?

Avoid big surprises and disappointments : try to foresee obstacles and see what you can do about them.

Example : A colleague has an opposite opinion on the subject and is a teacher in the same class.

Parents do not agree with the subject to be handled in class.

Some suggestions :

- 1. Plan carefully and avoid (as far possible) cancelling at the very last moment.
- 2. Provide a good and sound psychological atmosphere in class.
- 3. Begin with something easy, but in a very "concrete" way.
- 4. Do not be surprised when problems or tensions arise, and do not act in panic.
- 5. Keep the head, colleagues and parents informed.
- 6. The "success" depends a lot on
 - your strength and weakness
 - the capacities of the students
 - the goals you have
 - the time you have available
 - the facilities in the school
 - the experience you and the class have about a certain way of teaching.

1.4. POSSIBLE GENERAL APPROACHES

How do you work out your plan of teaching ?

In a health education programme different models can be worked out, each of them with the aim of providing "health education".

In brief, three models can be applied :

1. **The warning approach** consisting of alerting individuals to the danger of experimenting with drugs and especially of using them regularly.
2. **The factual approach**, consisting of giving information, both objective and as comprehensive as possible, on drugs and the reasons why they are used; it is left to the students to draw the conclusions.
3. **The individual, personal and problem-solving approach**, based on the principle that the causes or reasons for drug abuse must be studied and understood by the students for effective prevention.

The third approach seems to be the most effective, according to several investigations. But the other two are more effective for another kind of individual.

Who is best suited to first, second or third approach ?

There is a link between the three approaches and Kohlberg's theory of moral development. Kohlberg (1973) distinguishes three developmental stages in the growth of moral sense : Preconventional, Conventional and Postconventional. The judgement concerning standards and values develops in a straight line during the development of an individual.

In the **preconventional** phase, there is valuation of good and bad by reference to their physical consequences : punishment, pain, reward, pleasure.

During the **conventional** phase, the child justifies his moral opinions by the referring to expectations and rules, existing in the school, the family, the neighbourhood or nation. Those rules are of such importance that they have to be upheld at all times.

On the **postconventional** level, rules are defined by agreements between people, which possibly can be reconsidered according to established procedures.

The stage reached finally is : judging behaviour as an expression of a scrupulous decision. Respect for human dignity as a characteristic of an individual person is a prime notion.

The time taken to go through these stages depends on the individual : thus, the time is variable, but the sequence is fundamental.

A teacher can classify his students as one of the three types. Therefore, you need to know the value and standard pattern of your students. Having this information, you can use it in preparing the form of communication you want to achieve (see next page).

Application of this typology will have specific consequences on how the teacher presents the educative material.

In a nutshell, the choice of :

- type I means teaching
- type II means discussion, film, experts
- type III means project education.

Note : Changing or learning standards and values can also be the aim of preventive action : achieving a higher level of social morality.
This choice overestimates the ability of social systems to change at short notice.

FORM OF COMMUNICATION			
The 'meta-content'	Type I	Type II	Type III
image of sender image of receiver relation importance of the message the behaviour pattern you have to follow	authority dependent you have to ... I say it, so ... sanction, if you do not ...	one of us one of us we together you see it also we expect from you ...	trustful and honest independent you can do for yourself ... you can see for yourself ... you can choose for yourself the alternative you like

NOTE : it is advisable to know what image of the teacher exists among the students.
 Then the teacher can adapt his attitude in the class to this image,
 in order to have the most effective influence.

1.5. HOW WILL YOU EVALUATE YOUR ACTION ?

The evaluation starts by looking back to "what do you want to achieve?". Investigations showed that we cannot foresee longterm effects merely by analysing the immediate reactions of the students. On the other hand, it is necessary to examine whether we are on the right track.

Our evaluation may be oriented in three directions :

- a) To what extent did we classify the aims according to teacher and students ? Were the aims well-formulated ? Which needs arose and to which new goals did they lead ?
- b) Were the means meaningful, what was superfluous ?
- c) Which factors influenced content and process of education, and do we have to take them into consideration or not ?

In a matter such as this, where knowledge-transference is not the main objective, effect evaluation is a difficult thing to do. The things they are handling during the project will affect different students in different ways. More or less consciously or unconsciously, immediately or, for others, after a while.

How to evaluate ? Our own impressions can help, we can give them questionnaires, pupils can give their comments in discussions, and so on.

2. A PROPOSAL FOR FIVE LESSONS

The following chapters are proposals for five lessons.

Of course, the teacher has the freedom to organize the lessons according to his own opinion.

You can use one lesson-hour for each chapter, but you can also spread one chapter over several hours.

It will depend on your own interests and creativity whether you use a lot of time per chapter or not.

Each lesson starts with a package of basic information (and a short overview of the lesson) that you will need as background to be able to talk about the specific subject.

At the end of each lesson you will find one proposal as to how you can work out your lesson(s) practically (see "How to work out this information in a lesson"). So, you - as a teacher - have the choice between :

- teaching the information as we provide it in each chapter, or

- using the information as a background for yourself and conveying it to your students in a more pleasant and probably also more efficient way, by means of our practical proposals.

Some more practical proposals are described in Chapter 3.

Because this manual is written for all the EEC Member States, we have included only a minimum of country specific data.

About statistical data, we must point out that it is hardly possible to present comparable data for all the countries. Secondly, not all the countries have the same data available. Consequently, it would not be very well designed if all the different available data were presented.

In Chapter 5 we give a list of specialized agencies working in the field of drug use and abuse, in the EEC Member States.

Do not hesitate to contact these agencies if :

- you want specific references relevant to your country

- you want more detailed information to illustrate your lessons, such as useful books, videos, films, data about drug use in your country, etc.

- you want suitable pictures, photos and other illustrative material, appropriate for your country

- you are confronted with real drug problems among your students.

2.1. LESSON 1 – STEREOTYPE IDEAS ABOUT DRUGS AND DRUG USE

Since the late '60s, the phenomenon of drug use – especially illicit drug use – has been brought up frequently in discussions. The mass-media as well as governmental and many other agencies describe drug use as a growing problem. Different aspects of this phenomenon are being discussed and many attempts are being made to gain a better understanding of the origin of drug use and to "fight drugs". In spite of intensive information and education during the last 10 years, up to now many people still have only a partial view of the phenomenon of drug use.

Before discussing this topic with your students, ask yourself the following questions :

1. – in talking about "drugs", what products are you thinking of ?
2. – who are the biggest users of drugs ?
3. – is drug use problematic ?
4. – when talking about "drug use", do you think about other forms of deviant behaviour ?
5. – what can be done to help drug users ?

Compare your answers with the following information.

Perhaps you also have a rather "stereotype" view about drugs and drug use !

Perhaps you already take care not to dramatize nor minimize this phenomenon.

Faced with your students, you will find that a lot of stereotype ideas on drugs persist stubbornly. Not only your students, but also their parents, friends, environment, the mass-media, etc., help to maintain these stereotypes. But they only represent a partial view and must be eliminated.

As a teacher, you can confront your students – and yourself, their parents, etc. – with their own stereotype conceptions. Your task is to provide a more differentiated approach to drug use and drug problems without dramatizing or minimizing them.

FIVE STEREOTYPE IDEAS

1. DRUGS = illicit drugs

2. DRUGS = problems of youth

3. DRUGS = drug addiction

4. DRUGS = criminality

5. DRUGS = hopeless

1. "Drugs" are too readily associated with "illicit drugs".

Many people define marijuana, hashish, LSD, cocaine, heroin and other socially non-accepted substances as synonyms.

But they do not realize that alcohol, tobacco, some psychotropic medicines and volatile substances are drugs as well, although they are socially accepted.

All these substances are drugs because they act upon the user's own experience and the way he/she experiences his/her environment.

2. Drug problems are automatically related to young people.

It seems as if only young people are faced with drug problems. Although the use of illicit drugs can be more problematic among young people, it does also occur – albeit less frequently – among adults. On the other hand, alcohol, tobacco and psychoactive medicines are "drugs" of the adults. Young people are also confronted with the use of these products but in a less problematic way.

When all drugs, both socially accepted and non-accepted, are taken into account, adults seem to have more problems with drug use than young people.

3. Drug use is almost automatically associated with drug addiction.

Especially when problems occur because of illicit drug use, the person involved is almost automatically labelled as an addicted drug user. However, many people have only slight or mild problems because of use or excessive use of drugs.

Only a small – but important – group of young people develop serious problems such as overdose, traffic accidents, addiction and criminality.

Drug use is a process starting with the experiment of using one or several substances and ending in heavy addiction.

According to the stage of the process, mild (experimenting) or heavy problems (addiction can occur).

4. The association between drug use and criminality is exaggerated, especially in the field of illicit drugs.

Many people believe that a lot of criminal acts are related to the use of illicit drugs.

However, it is necessary to make a distinction between :

- drug sale for one's own use on the one hand and professional drug trafficking on the other hand ;
- direct and indirect criminality.

Direct criminality means that someone commits a criminal act because of the use of a drug.

Example : After having taken cocaine, someone robs a bank.

Indirect criminality represents an indirect relation between drug use and criminal activities.

Example : Theft, fraud, prostitution, etc. to obtain enough money to buy drugs.

Direct criminality because of the use of socially non-accepted drugs is overestimated, whereas direct criminality because of the use of socially accepted drugs is underestimated.

In the field of illicit drugs, an indirect relation with criminality cannot be denied. Theft, fraud, prostitution, etc. occur frequently to obtain enough money to buy drugs.

In general, it is obvious that the use of drugs and criminality are not indissolubly connected.

This indirect relation with criminality exist with all drugs (licit and illicit drugs ; socially accepted and non-accepted drugs), but occurs progressively more according the availability of drugs.

When drugs are easy to obtain (as in the case of alcohol), the indirect relation with criminality will be low. It will be higher for drugs that are legally regulated (such as barbiturates and other medicines) and highest for those drugs that are prohibited (such as heroin and all illicit drugs).

5. Problems of drugs use and addiction are hopeless and cannot be treated.

Yet many drug problems, even addiction, are not hopeless.

Efficient preventive measures and assistance can solve a lot of problem situations, or at least affect them in a positive way.

Besides these stereotype ideas there are a number of generalizations, such as from one drug to many others drugs, from one or only a few drug users to all drug users.

Other aspects such as the different kind of drugs, dose, the method of administration, individual differences between drug users, the psycho-social setting and the social reaction need to be taken into account when talking about drugs and drug use.

When you discuss all this information with your students, you can conclude that the reality of drug use is more complex but also less dramatic than these stereotype ideas would seem to indicate.

To clarify and to consolidate this approach, you also have to provide answers to the following questions : What are drugs ? What is the extent of drug use among young people ? What is important when recognizing or undervaluing drug problems ? How is treatment organized ? Is prevention possible ?

These topics will be developed in the following lessons.

LESSON 1 - OVERVIEW

STEREOTYPE IDEAS	A MORE DIFFERENTIATED APPROACH
<p>DRUGS = {</p> <ol style="list-style-type: none">1. Illicit drugs2. Problems of youth3. Drug addiction4. Criminality5. Hopeless	<ol style="list-style-type: none">1. Licit and illicit drugs; socially accepted and non-accepted drugs2. Problems of adults and youth3. Mostly infrequent use; only in a limited number of cases does it develop towards addiction4. Not necessarily related to crime5. Not hopeless when adequate prevention and/or assistance are available. They can solve a lot of problems related to drugs.

How to work out this information in a lesson

Before you start with lesson 1, you ask the students to collect newspaper articles about drugs, drug use, drug-related problem, research data, etc., during a certain period.

The students analyse their articles before the start of the lesson :

- how many articles did they find in one newspaper ?

- what is the length of the article and how much space does it take up ?

- where does the article appear : on the first page etc...?

- the content of the article.

During the lesson all the material collected by the students will be analysed.

The teacher can draw a diagram on the blackboard clarifying different topics discussed in different newspapers and/or magazines, the importance of the topics, the view on drugs, etc. of different newspapers, etc.

It gives an overview about the information provided by the mass-media.

This diagram has to describe whether the mass-media think and write:talk about drugs in a stereotyped or a more differentiated way. During a discussion with your students, you have to detect stereotype information and try to differentiate it.

If need be, you can finish this lesson with a discussion about

- what kind of information in the field of drugs do young people obtain ?

- where can they find this information ?

This is one possible way of handling the theoretical information of this lesson.

For other suggestions, see Chapter 3 "Other proposals as to how to work out your lessons."

2.2. LESSON 2 – WHAT ARE "DRUGS" ?

A Persian anecdote

Three men, intoxicated by alcohol, opium and hashish respectively, arrived by night at the closed gates of a city.

The alcoholic shouted furiously :

"Let's smash in the gate, that's easy with our swords".
(aggression)

"Oh no", answered the heroin user, "we can rest here outside very comfortably until tomorrow". (shake off all trouble)

The hash user on the contrary said :

"What a stupid idea, let us creep through the keyhole, we can make ourselves small enough".
(distorted sense of proportion)

Perhaps the attention of your students has been stimulated by the first lesson.

Perhaps their first opinion about this topic has been confused so that they wonder : "What do I really think about it ?"

Perhaps their curiosity is sharpened so that they desire more information.

The first question that will surely arise is :

what are drugs ?

The aim of this second lesson is to provide an objective and sufficiently differentiated answer to this question.

In the first lesson we already indicated that many people identify "drugs" as "illicit drugs" (see stereotype idea 1).

People think in the first place of socially non-accepted drugs : narcotics (such as morphine, heroin) and other drugs called narcotics by the law (such as marijuana, hashish, LSD, cocaine).

The original meaning of the English concept "drug" is threefold :

1. a medicine ;
2. a herb ;
3. an intoxicating substance.

This multiple definition describes the concept "drug" very widely because all medicines are defined as drugs.

A narrower view of "drugs" defines them as substances that influence the user in such a way that they experience themselves and their environment differently than when not using drugs.

These substances are also called psychoactive or psychotropic substances.

Some of them are socially non-accepted (such as hashish, LSD, etc.), others are accepted (such as alcohol, tranquillizers, etc.).

What we define as a drug does not depend on whether it is legally and/or socially accepted or not, but is determined by the influence of the product on its user.

Different kinds of drugs

We give a pragmatic overview of the most important drugs that are used by young people and, when used in a risky way, can cause slight, mild or serious problems.

These drugs are :

ALCOHOL	}	important but not treated in detail in this manual
TOBACCO		

PSYCHOTROPIC MEDICINES

- analgesics
- sedatives, tranquillizers
- hypnotics or sleeping-pills
- stimulants

VOLATILE SUBSTANCES

ILLICIT DRUGS

- cannabis : marijuana and hashish
- hallucinogens : LSD and others
- cocaine and other illicit stimulants
- opium, heroin and other illicit opiates

The ranking order of this list is not accidental but takes into account the frequency of use.

Alcohol and tobacco are used most of all by young people ; heroin, cocaine and LSD the least of all.

Psychotropic medicines, especially some commonplace substances, show an increasing use among young people; sedatives such as morphine and stimulants such as amphetamines are less frequently used.

The use of volatile substances is not so important; it can appear temporarily as a kind of fashion.

We will now describe all these drugs, except alcohol and tobacco, in more detail.

a) PSYCHOTROPIC MEDICINES

These are medicines that are psychically active because of their effect on human behaviour.

Some have a depressing influence (such as analgesics, sedatives, and hypnotics or sleeping-pills), other a stimulating effect (such as stimulants). They are socially accepted drugs, are mostly of recent origin and are very frequently used. Some describe them as modern sweets.

Analgesics

There is a distinction between commonplace analgesics (such as aspirin, etc.) and the narcotic analgesics.

"Commonplace" does not mean that they are not dangerous. When these products are used very frequently, they can cause a lot of damage (e.g. phenacetin can cause serious kidney-damage).

The most dangerous analgesics are the narcotics in a strict sense, such as morphine (derived from opium) and synthetic narcotics.

They are very effective, especially when injected.

The risk of heavy forms of dependence is great.

Some of these substances are sold on the black market.

Sedatives, tranquillizers

This is a heterogeneous group of sedative and anxiety-relieving substances.

Only the minor tranquillizers are concerned.

When used properly, these minor tranquillizers do not cause any harm. But excessive and prolonged use can cause dependence, while the underlying problems are not solved.

Hypnotics or sleeping-pills

The most common hypnotics are the so-called barbiturates and their derivatives. When the normal daily dose is exceeded, the risk of dependence, and eventually serious addiction, is possible.

Barbiturates are frequently used in suicide (or in suicide attempts). Recently non-barbiturate hypnotics have been developed. Although they are safer than barbiturates, they still present some risks and never induce real natural sleep.

Stimulants

The traditional stimulants are the amphetamines and their derivatives. They have been frequently used as dope during sports activities. They are sometimes used during examination periods and weight-reducing cures.

Excessive and regular use are very risky, especially when the user does not take extra rest to recover.

Some stimulating medicines are sold on the black market.

Injecting so-called "speed" can cause serious damage.

More commonplace stimulants are used more frequently but the consequences of their use must not be underestimated.

In general, we must stress that proper use of psychotropic medicines can improve the quality of life.

But they are too often used to alleviate human suffering temporarily without solving the real underlying problems. On the contrary, this is hampered by the use of these products.

The problem is that the saying "there is a pill for every problem" is becoming increasingly true. The demand for medicines by people in general is high and many doctors prescribe too readily.

The once-only use of a large amount of psychotropics (e.g. suicide attempt) or regular use of these products present more risks than people generally believe.

b) VOLATILE SUBSTANCES

These products are easily obtainable in drug-stores and cause a brief intoxication when sniffed.

Some illicit drugs such as heroin and cocaine are also sniffed but are not volatile products and are not discussed here.

The group of volatile substances includes solvents, cleaning products, stain removers, thinners and all kinds of glues.

As a rule, these substances are put on a handkerchief, on cotton wool or in a plastic bag and then sniffed up. The effect is only of short duration. Long-standing use can cause damage to various organs of the body.

Example : some people pull the plastic bag, filled with some volatile substance, over their head and fasten it with an elastic band. If they continue sniffing like this for any length of time, these users may become unconscious and still go on sniffing then. This can cause intoxication, which may be fatal.

c) ILLICIT DRUGS

The most important categories of illicit drugs are :

- cannabis (marijuana and hashish)
- hallucinogens (LSD and others)
- cocaine (and other illicit stimulants)
- opiates (opium, heroin and others).

Cannabis

The cannabis products, marijuana and hashish, are derived from the Indian hemp plant "cannabis sativa".

The concentration of psychoactive elements varies greatly according to the geographic origin of the plant. The effects within the user are very complex and difficult to predict. Important factors determining this effect are dose, smoking technique, initial state of mind, personal expectations, conditions of use and personal experience.

A general effect is a feeling of rest, relaxation and well-being.

Other effects can be taking refuge in the imagination, dreams, optical and auditory illusions, and somewhat rarely delusions and hallucinations.

Hallucinogens

Of all hallucinogens LSD is the best-known. It is a synthetic drug, already very active in small doses.

Generally, the user of LSD has less control over the effects than cannabis users. Also the negative reactions are difficult to predict. Euphoric experiences, all kinds of changes in perception and sensory perception, the feeling of timelessness, exceptional understanding and superior creativity can turn into anxiety, panic, depression, unhealthy mistrust and delusions.

Other hallucinogens (such as mescaline, STP, DOM, psilocybine, DMT, PCP or phencyclidine, etc.) show similar effects.

Cocaine

Cocaine is derived from the coca plant.

This plant is well-known among Indians in Peru and Bolivia. They chew coca-leaves to suppress hunger and tiredness.

It is a strong stimulant, causing an intense euphoric feeling of excitation. In some circumstances serious problems can arise.

Cocaine is temporarily off the black market, but recently it is again becoming the in-drug in some circles in certain countries.

Opiates

Some of the most important opiates are opium, morphine and heroin.

Morphine has already been mentioned among the narcotic sedatives.

Heroin in particular, and to a certain extent also opium and morphine, have come onto the illicit drug market.

They belong to the group of high-risk drugs.

Opium is the dried sap of the seed-capsules of the poppy plant.

Morphine is extracted from opium and heroin is a semi-synthetic product derived from morphine.

These products are real narcotics in the strict sense.

Opiates have a powerful sedative effect : they cause a feeling of well-being, suppressing all feelings of stress, anxiety, tension and pain. However, dependence and addiction can occur very quickly.

In order to get more money out of a quantity of heroin, the drug is often mixed with impure additives. This in itself can cause serious problems.

Soft and hard drugs

Sometimes a distinction is made between soft and hard drugs in order to differentiate several kinds of drugs according to effect and potential danger.

Light sedatives, minor tranquillizers, marijuana and others are defined as "soft drugs"; narcotics, cocaine and possibly LSD are examples of "hard drugs".

This kind of classification can be heavily criticized.

First of all, there exists no agreement about which drugs have to be called soft or hard drugs.

Secondly, this classification takes no account of intensity of use, the method of administration or differences between drug users. Yet these parameters determine the effect, side-effects and risks/damage related to drug use.

We may say that the "hard" use of soft drugs can be as risky as the "soft" use of hard drugs.

Conclusions

As a conclusion of this lesson, we must acknowledge that the whole range of natural and synthetic psychoactive substances, used or misused to influence the psychic functions, is very wide and varied. Only an objective study of effects, side-effects and dangers related to drug use can provide adequate information for the drug user and society as a whole. With this information it is possible to adopt a responsible attitude towards the use of these psychoactive substances or drugs.

As regards the "use of drugs" we already mentioned that some products are used as medicines and others are not and that the use of most of these substances can cause slight or serious problems at a certain moment.

In the next lesson we will deal with drug use, drug-related problems and drug dependence.

LESSON 2 : OVERVIEW

DRUG = a substance that influences its users in such a way that they experience themselves and their environment differently than when not using drugs.

= psychoactive or psychotropic substances

THE MOST IMPORTANT DRUGS USED BY YOUNG PEOPLE

Alcohol

Tobacco

Psychotropic medicines

- analgesics
- sedatives, tranquillizers
- hypnotics or sleeping-pills
- stimulants

Volatile substances

Illicit drugs

cannabis : marijuana and hashish

hallucinogens : LSD and others

cocaine and other illicit stimulants

opium, heroin and other illicit opiates

How to work out this information in a lesson

It is obvious that different ideas, prejudices and points of view are found among your students.

Not all ideas, conceptions, etc. will be accepted by all the students : discussion and criticism may arise.

Therefore it can be interesting to organize the following game.

The aim of the game is to differentiate prejudices.

You need :

- a blackboard;
- three cards of different colours (e.g. green, red and white).

Each student is given a set of 3 different coloured cards :

- green means "I agree"
- white means "I have no opinion"
- red means "I don't agree"

The teacher presents 5 propositions : you can write them on the blackboard.

For each proposition the students have to show their opinion with one of the coloured cards (they all have to raise the cards at the same time !)

One of the students acts as recorder :

he/she writes down the total number of green, white and red cards for each proposition. Give your students time to think about each proposition before they have to raise a card.

Then you can ask the students to give reasons for their standpoint. The easiest way of discussion is to start with the exceptions.

Then other students can clarify their opinion and the discussion will continue criticizing different opinions and the proposition itself.

If you have a lot of space in your classroom, you can conduct this game as follows.

Instead of using coloured cards, you use the four corners of your classroom :

- one for those who 'agree
- one for those who don't agree
- one for those who agree a bit
- one for those who are not completely against.

The students have to choose a position by standing in one corner.

The discussion can start between these four groups :

the students can change their position during the discussion and walk to another corner.

Some examples of propositions (stereotype ideas 1 and 2) :

- Adolescents are the only drug users.
- Children as well as adults have their specific "addictions".
- Drugs, when used moderately, are not harmful.
- Pop-music, motor-bikes and the latest fashions are also drugs for young people.
- ...

For other suggestions about how to handle the theoretical information in this lesson, see Chapter 3 "Other proposals as to how to work out your lessons."

As an illustration of this lesson, we discuss the issue of the drugs hauls because these official statistics are frequently used in an inappropriate way.

They are collected and published by official agencies on the basis of information derived from police and judicial records.

For all the EEC countries it seems that in the last decade drugs hauls have increased considerably.

Some countries talk about a fairly stable situation in the early eighties, while others mention a rapid increase since the early seventies.

Important criticisms can be levelled at them and at official statistics in general.

1. many of these statistics say more about police and customs activities and about drug traffic, than about the use and abuse of drugs.
2. these data represent only the tip of the iceberg; they provide only a partial view of the real situation.
Only a certain part of the drugs traded (perhaps a small part, maybe a large part) is covered by official statistics. It is difficult to assess how large this proportion is.
The population to which these statistics relate is a specific group and only part of the total population that comes into contact with drugs.
3. Drug traffickers are not necessarily drug users.

2.3. LESSON 3 – DRUG USE

DRUG – RELATED PROBLEMS

DRUG DEPENDENCE

Remember stereotype ideas 3 and 4 discussed in the first lesson.

Stereotype idea 3 : **Drug use** is almost automatically associated with **drug addiction**

Stereotype idea 4 : The association between **drug use** and **criminality** is exaggerated, especially in the field of illicit drugs.

We are already confronted with different forms of use :

drug use

drug addiction

criminality, as a problem related to drug use.

But, as we will find out, these kinds of use are not the only ones existing.

Drug use and drug-related problems are changing a lot over the years. Some years ago a hard drug user of 16 was an exception. Nowadays, drug use is not a new problem but the fact that the age of drug users is going down calls for urgent action.

Last but not least, there is widespread terminological confusion in the field of drugs and drug use. In the mass-media and in discussions among people in general, the same concepts are used to indicate very different situations.

However, inadequate use of terminology leads to inadequate problem assessment and intervention strategies.

For all these reasons it is important to discuss – at school with teachers and students; at home with parents, brothers and sisters; in youth movements, with friends – the different opinions about drug use, drug problems, dependence and addiction.

The aim of this lesson is : to provide a thorough insight into what "using drugs" means and to teach your students to adopt a critical and differentiated attitude in this field.

THE PROCESS OF DRUG USE

The use of drugs in an activity that is not necessarily bad or risky or related to problems.

One can use medicines, alcohol, morphine, etc. without problems. However depending on the frequency of use, the method of administration, the circumstances, etc. this use can become risky, dangerous and/or obviously problematic.

From this point of view, drug use can be considered as a process ranging from only one contact with some kind(s) of drug(s) to excessive use and resulting in serious problems.

This process of drug use can be presented as a pyramid with a wide base and a sharp apex.

The different steps in the process, starting at the base are (see figure) :

1. the first contact
2. experimenting
3. regular use
4. excessive use
5. dependence
6. addiction

Each step can give rise to problems, but the risks involved in using drugs increase accordingly as one goes through the process of drug use.

This development of drug-related problems is indicated in the second pyramid (see figure), which is the inverse of the first. It represents the scale of problems that can occur in the corresponding phases of drug use.

The further someone goes along this process, the more the social reaction towards drug use and the user becomes important.

This reaction determines whether a drug user will be seen as a dependent or addicted person or not. Young people especially are too easily labelled as addicts.

Bear this remark in mind when working through this chapter. The topic of interaction between subject - substances - society will be discussed in more detail in the next lesson.

Remember all the different kinds of substances described in the previous lesson. The use of all of them can be placed somewhere in the pyramid between use (the base) and abuse (the apex).

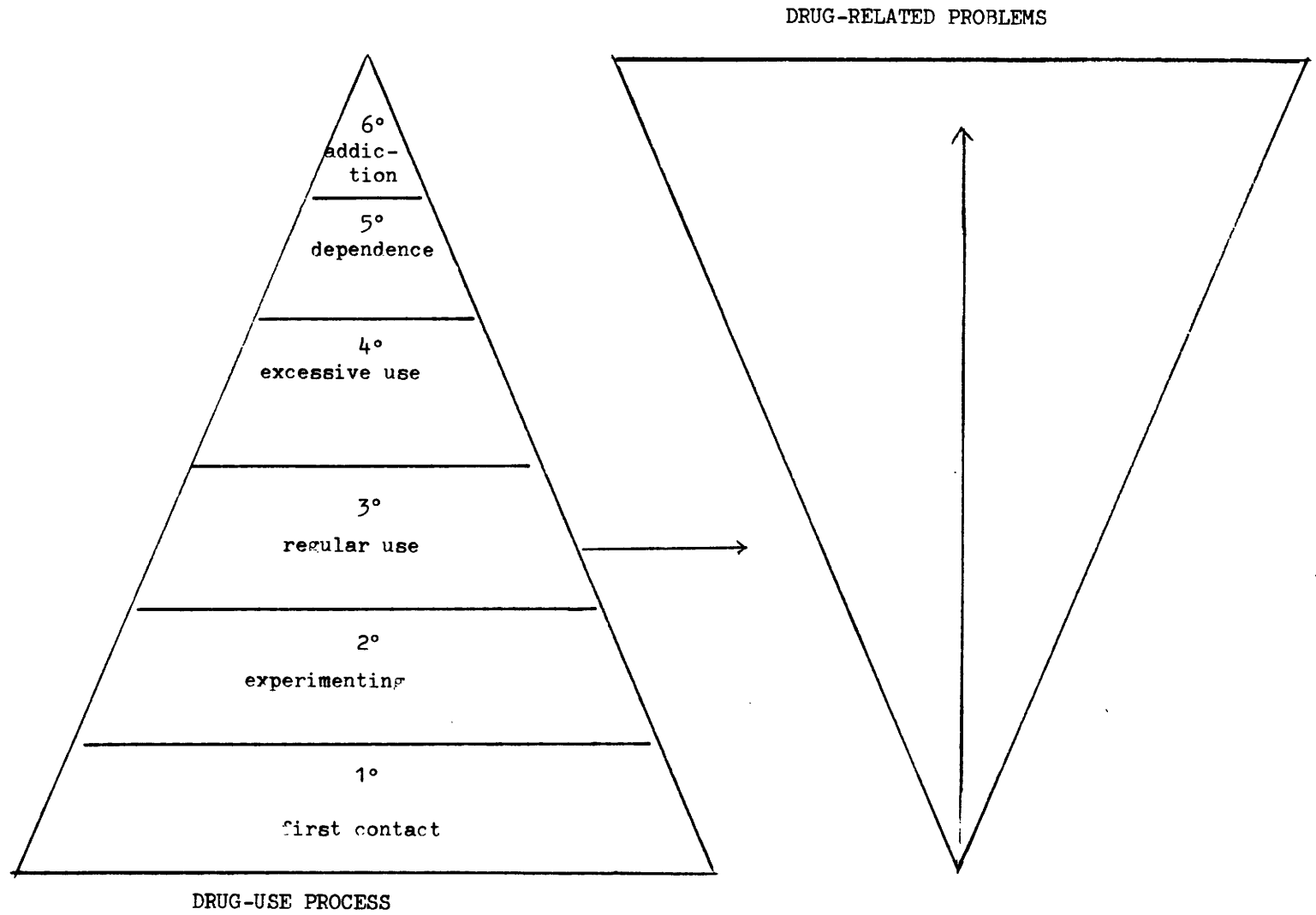
However, the following remark is important.

The process of drug use, as described in this lesson, is especially appropriate for illicit drugs. Many examples and descriptions deal with the socially non-accepted drugs.

However, licit drugs too (psychotropic medicines, alcohol, tobacco) have to be fitted into this scheme.

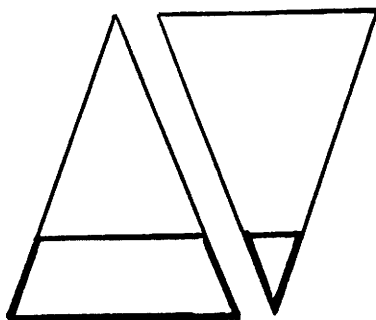
For the first three phases it is not so clear whether they are appropriate for licit drugs.

The last three phases are clearly relevant in the field of licit drugs. Therefore, for each step of the drug-use process we will indicate how illicit and licit drugs are involved.



We will now look in detail at the different parts of the pyramid.

1. FIRST CONTACT



The first contact with some kind of drug can happen at any age.

Small children are already familiar with medicines.

Everyone will use psychotropic medicines at some time in his life.

The first contact with marijuana, hashish and many other illicit drugs can also happen at different ages but mostly during adolescence.

Sitting together with friends, someone is smoking hashish and asks his friend to smoke too. This can be his first contact, because of curiousness or maybe because he wants to show off.

Many people leave this phase very soon.

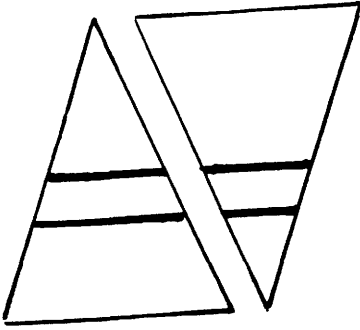
As you can see in the figure - a very wide base - this group of people coming into contact with drugs for the first time is relatively large. Most of them will not experience any problems, as indicated by the small apex of the second pyramid.

But an adverse reaction can occur also during a first contact.

Moreover, the mere fact that hashish is an illicit drug can cause trouble.

This kind of problem will not occur when using socially accepted drugs.

2. EXPERIMENTING



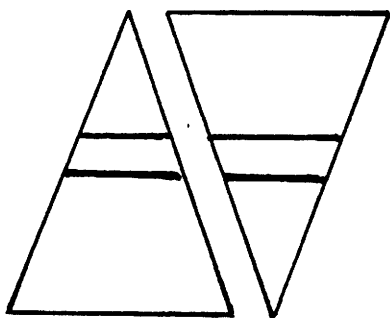
Some young people continue a period of experimenting with drugs, especially with illicit drugs. They enter a kind of trying-out period. Techniques of use are perfected; the user learns to experience different substances.

Again, many people stop using drugs after this period of experimenting.

As you can see in the figure, the risk of problems arising because of this increasing drug use is growing too.

40

3. REGULAR USE



A yet smaller group continues drug use after a period of experimenting.

Now drug use becomes a part of daily life, but in the meantime the users continue their studies, work, etc.

No fundamental changes appear because the drug use is still within limits.

In this phase, the social reaction towards the use of certain substances becomes very important.

We can only talk about regular use when this behaviour fits within the framework of prescribed requirements and habits of a certain social setting.

Example : The use of psychotropic medicines becomes part of life. People can use a lot of medicines regularly, accepted by their environment because it comes within the social standards.

Although the use of certain substances is accepted and although society does not react against this behaviour, this phase of the drug-use process will still cause several problems (see figure).

Example : someone taking a lot of sleeping-pills can have serious problems causing sleepless nights.

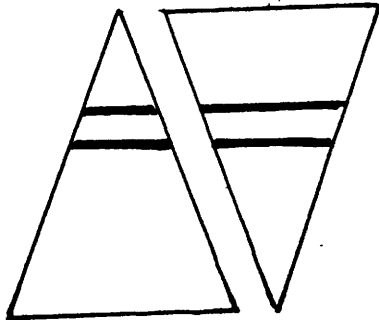
But that person's environment accepts that he takes a lot of medicines. As a consequence the problems lying behind this behaviour will not be tackled, except perhaps by the user himself.

Some people even succeed in stopping using drugs in this phase, but many others continue.

Drug use become increasingly problematic now (see the widening part in the second pyramid).

Personal problems and/or difficult living conditions determine more and more whether someone develops a problematic drug-use profile or not.

4. EXCESSIVE USE



This period is sometimes called the critical phase, because the danger of developing a real long-term problematic drug-use profile grows very quickly now.

Excessive use means : too many drugs are used with too many risks and/or too frequently; the dose is forced up steadily; substances involving more risks than others are used more continuously.

Physical, mental and/or social damage now appears increasingly. These users are coming to a state of dependence, not only on drugs (including psychotropics) but also on the whole drug-culture. However, some people can stop drug use in this phase, possibly with some help or assistance.

Those who continue enter the last and more problematic phases of the drug-use process.

Remember : only a small proportion of all drug users will become dependent or addicted.

5. DEPENDENCE

A distinction must be made between psychological dependence : a personal bond with the drug(s) resulting in limited freedom; can be caused by the use of all kinds of drugs (licit and illicit).

PHYSICAL DEPENDENCE :

a regular supply of drugs is necessary for the body because otherwise serious deprivation symptoms will occur. Physical dependence will not be caused by all drugs.

A specific problem, related to this phase of drug use, is that sometimes greater quantities of a product are needed in the course of time to have the same effects as before. This is known as **tolerance**.

A person can become tolerant when using or misusing illicit drugs as well as psychotropic medicines.

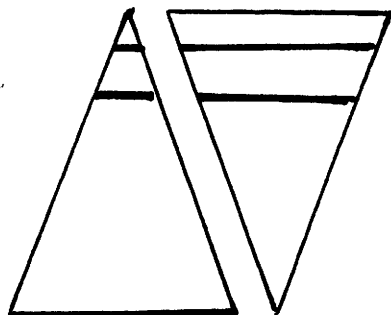
The onset of tolerance is not only a characteristic of the product but is also determined by the intensity of use or abuse and by individual biological differences between users.

An example :

When morphine and related substances, and stimulants such as amphetamines and their related products, are used daily, tolerance will appear very soon.

But when marijuana is used even regularly, the user will not develop tolerance.

When tranquillizers and hypnotics are used intermittently, there will hardly be any symptom of tolerance, but, when they are used increasingly, tolerance will appear.



Going through this phase of drug use step by step an irresistible craving becomes obvious.

A loss of control also develops : once a drug is used, the use is continued without being able to stop it.

Finally, the user enters a series of vicious circles : drug use has consequences that reinforce its causes.

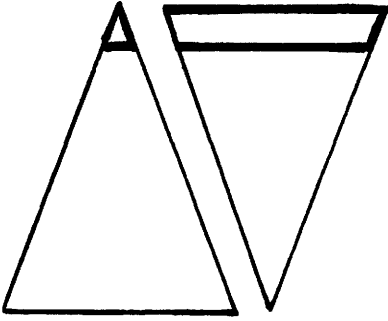
Examples :

Someone uses drugs to suppress a feeling of inferiority. But as a consequence of this behaviour (drug use), the user will be regarded as a drop out.

Someone who has become physically dependent will continue drug use to prevent deprivation symptoms.

Someone who also uses drugs as a solution for relational problems will be faced with more and more serious problems, causing further drug use.

6. ADDICTION



Addiction is an extreme form of dependence. The regular use of a drug or trying to get drugs becomes a central activity of one's life, dominating all other living conditions. The whole life is concentrated on drugs. Mentally and physically the user is going downhill and takes a dramatic life-style. Life loses all meaning.

For some, suicide is the only way out because in this phase it is very difficult for the user to change his drug-using habits spontaneously.

It is typical of an addicted user that he cannot alleviate this situation spontaneously. The user needs help because, when he stops taking drugs, serious deprivation symptoms will occur, sometimes resulting in death.

MINIMIZING AND DRAMATIZING DRUG PROBLEMS

In describing drug problems, we have neither to minimize nor to dramatize them. Risks of the use of socially accepted drugs (alcohol, tobacco and medicines) are easily minimized, until more serious problems occur. These are then stigmatized as deviant behaviour.

All use of socially non-accepted drugs (marijuana, hashish, LSD, cocaine, heroin) is labelled with the same stigma.

It is interesting to describe how people think about problems related to the use of the different groups of psychotropic substances.

The group of **psychotropic medicines** is a special one. These substances are medicines, prescribed by a physician or sometimes even available without a medical prescription.

Among a lot of adults, there is a mentality of taking pills for all kinds of problems. More and more young people are adopting this idea.

It also seems that a decreasing interest in or a decreasing availability of illicit drugs among young people is a stimulus for the use of psychotropics. However, problems related to the use of these medicines by young people, are minimized.

Volatile substances are less well-known. They are used by young people, sometimes children, as an alternative to illicit drugs. Therefore the association of these substances with illicit drugs is great, and the risks are also dramatized.

The use of these substances mostly has a short-term effect, although some short- and long-term risks cannot be denied.

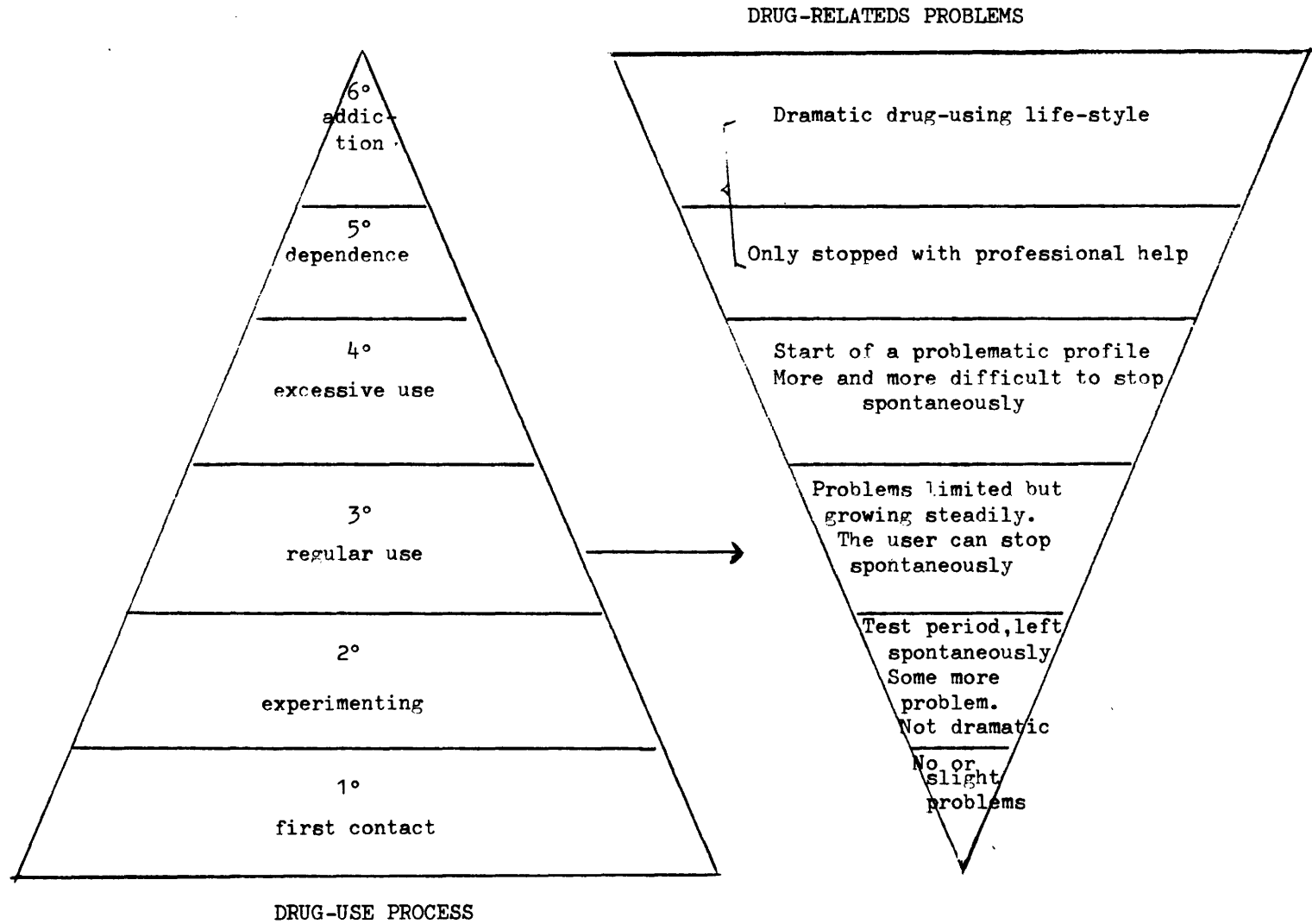
The use of **illicit drugs** is usually dramatized, because they are not accepted socially. Stereotype associations with overdose, criminality, addiction and impossibility of treatment are frequent.

The sporadic use of commonplace substances should not be overdramatized. In case of heavy use of heroin, for example, these associations may be realistic.

Before making a judgement on the use of drugs it is necessary to clarify some aspects, such as kind of drugs, dose, frequency, etc., and to gain an insight into what is really going on with the drug user. Drug use may be a sign of serious latent problems or of a temporary problem of young people who are building up their identity and trying to obtain more independence. We must not be obsessed by those drugs that represent the greatest risks (such as alcohol, morphine, barbiturates, LSD, cocaine, heroin, etc.). We have to take account of who is using what kind of drug in what kind of living conditions, of what phase of the drug-use process the user has reached and of the background to the use of drugs.

It is already obvious that ultimately the social reaction and, in general, medical and socio-cultural standards are important factors in determining what is called drug use or abuse or what is called a problem, whether serious or otherwise.

This specific relationship will be discussed in the next lesson.



How to work out this information in a lesson

As a starting-point there are different possibilities :

1. you can show a film or video;
2. the students can read a book about a drug-addict;
3. you can organize a discussion with an ex-addict.

- The choice of the film/book is very important.

There is already enough sensationalism in the mass-media.

You, as a teacher, have to clarify your criteria for finding a good and useful film/book.

This film/book is a kind of introduction to a discussion with your students about :

- personal stories from the students about drug users or drug-related problems they know in their own environment or from other films or books.
- who made the film/wrote the book and how, why?
- is it a true story?

- When you organize a discussion with an ex-addict, you have to prepare this contact thoroughly :

- discuss some questions with your students : this can be a starting-point for own questions and reactions from the students.
- take care that you know the speaker and that he is "qualified" for the job.
- a too large group of students is not efficient (max. 1 class).

Remember that it is more comfortable to have a discussion when everyone sits in a circle !

- After discussing a film, a book or a personal contact with an ex-addict, you can make - together with your students - a harm/benefit analysis.

As an example you can describe a certain type of behaviour discussed in the film/book/personal contact.

Each student makes a list of the harmful effects and the benefits in the short and long term for the kind of behaviour in question.

The teacher can write this list on the blackboard; discussion will follow.
Example : the use of amphetamines.

Harmful effects	Benefits
- money	- better physical and mental condition
- fear	- higher capacity
- quarrels at home	-forget troubles
- psychological dependency	-self-confidence in social relationships.

For other suggestions about how to handle the theoretical information in this lesson, see Chapter 3 "Other proposals as to how to work out your lessons".

To illustrate lesson 3 some survey data are provided about licit and illicit drug use among young people.

A recent survey among young people in the Netherlands was conducted in 1983. It concerns a national sample of 1306 persons between 15 and 24 years old.

Users of alcohol and other drugs in a national sample of young people (15 - 24 years old) - percentages.	
Have ever used (users and ex-users) - %	
Alcohol	75
Tobacco	49 (40 + 9)
Cannabis	12 (5 + 7)
Hypnotics and sleeping-pills	7
Cocaine	3
Amphetamines	1,5
LSD	1
Morphine	1
Heroin	1

Sijlbing, SWOAD (1984). (1)

An important point to remember about these data is that they only cover the use of certain substances (especially representing the base of the pyramid) but do not give any indication about the related problems (the upside-down pyramid). No conclusion in this area can be drawn from these table.

In general, some critical comments are necessary, as regards epidemiological data.

- Most of the surveys have been conducted among students in secondary schools. These surveys are conducted by different research teams, in different regions and at different times. Therefore, for the most part are hardly comparable.
- Only a few research data provide real indicators of the number and the characteristics of the users of illicit and licit drugs.
- The phenomenon of drug use is changing a lot over the years. It is therefore very important to bear in mind when certain data were collected.

These data concern the use of one of the substances mentioned in the table.

You have to bear in mind that many youngsters use or have used several substances at the same time, which is not indicated in this table.

2.4. LESSON 4 - SUBSTANCES

SUBJECTS

SOCIETY

Adolescents live in a transitional developmental stage. They are not children anymore but not yet adults. Some of them are grown-up and independent very quickly but because of the continuation of studies, increasing unemployment and leisure time, young people remain dependent on their parents for a longer period. This causes a state of tension between the feeling of independence and the material dependence on their parents.

In this situation adolescents can be very vulnerable both at home and at school. They very easily come into conflict with parents, teachers and other authorities.

When problems arise, the risk of entering a crisis situation is great. Difficulties at school, the loss of a girlfriend or other friends, etc. can have dramatic consequences.

Drug use can be the expression of serious problems of life or other problems. Sensible young people will talk about these problems with those who can help. Others use drugs to try to forget their problems, to change their mood, to get more selfconfidence. Some start using drugs intentionally, with the aim of becoming addicted or of challenging their parents or even the whole of society.

Others start using drugs because of the influence of their surroundings. Friends at their club use drugs and "to be one of them" they feel obliged to use drugs with them.

The prospective drug user mostly feels uncertain, often thinks that nobody likes him and feels very unhappy about that. Therefore especially - but not only - adolescents can be considered as a high-risk group.

In the previous chapter we stated that drug-related problems are very easily underestimated, primarily by the person involved, but also by those around him and even by professional agencies.

Once people become aware of the excessive use of certain substances, problems related to the use of illicit drugs will be dramatized while problems related to socially accepted drugs will be minimized.

This tolerance can change into rejection when grave consequences occur, such as a serious traffic-accident, aggression, etc.

To clarify this mechanism of minimizing and dramatizing drug-related problems, we will discuss the relation between :

the Subject

the Substance

the Society

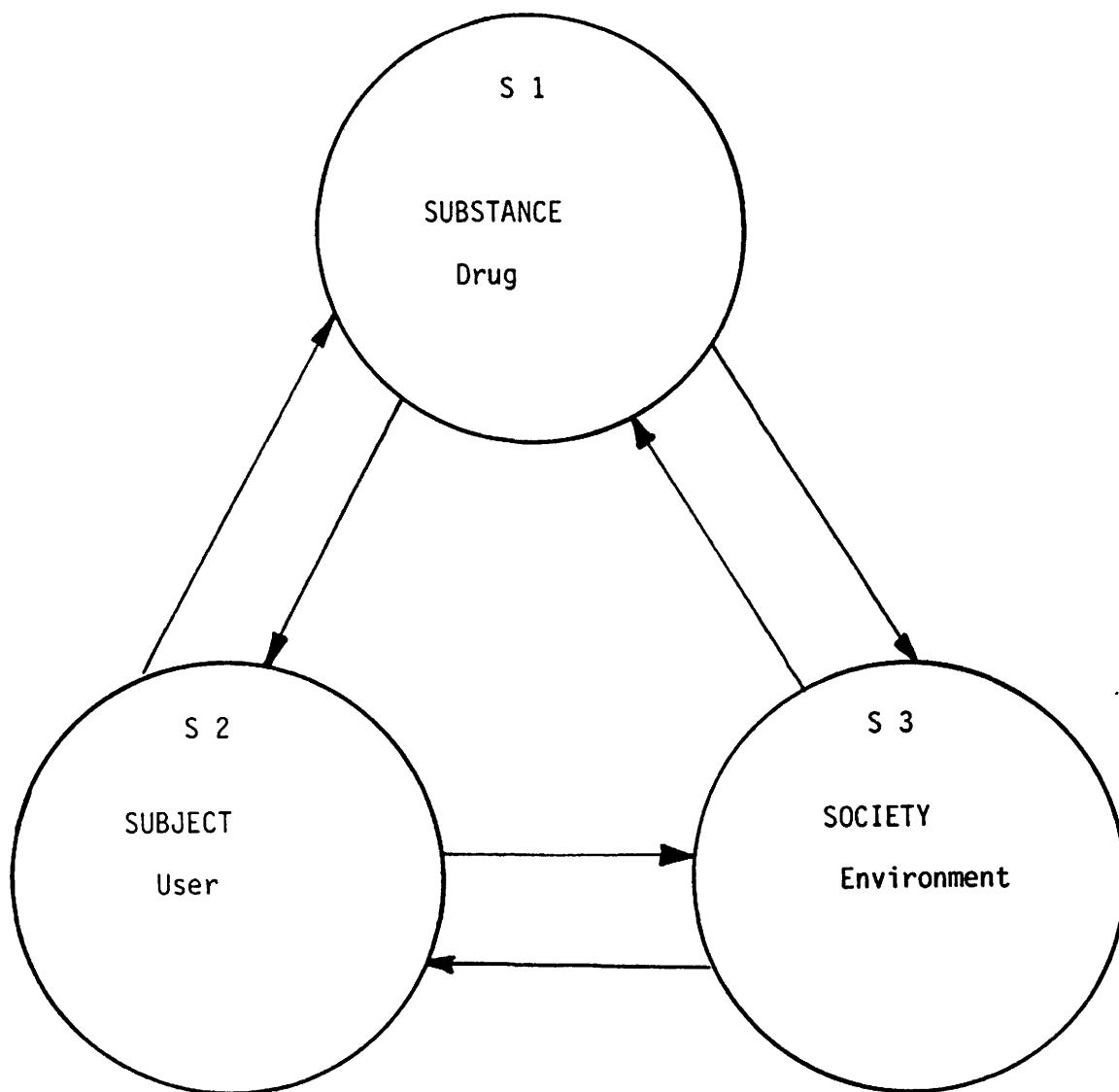
This will help us to argue against the second stereotype idea (see first lesson) : **"Drug problems are automatically related to young people"**.

Two of the 3 S's are discussed separately : the substance in Chapter 2 (What are drug ?); the behaviour of a subject in Chapter 3 (drug use, drug-related problems, drug dependence).

To understand the phenomenon of drug use in its entirety and complexity we have to study the interaction between the 3 S's, because the reasons behind drug use are based on a complex interaction between the effects of a certain drug and the individual in his organic, psychological and social totality.

THE 3 S's : SUBJECT - SUBSTANCE - SOCIETY

The 3 S's or fundamental components of the origin and development of drug-related problems.



Different factors determine the onset and development of drug-related problems. Three fundamental components are in permanent mutual interaction.

These are :

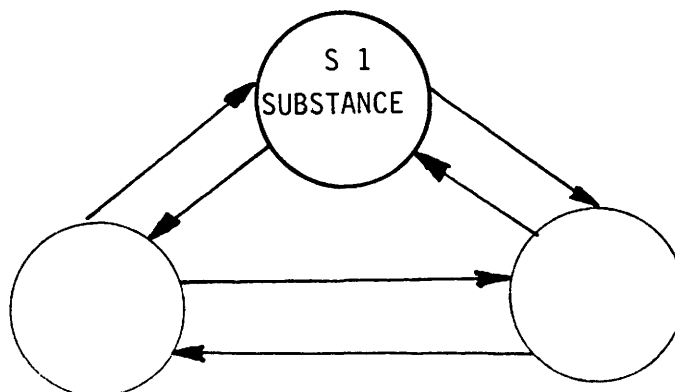
1. the specific drug with specific characteristics according to dose and method of administration;
2. the user with individual characteristics;
3. different social environments (the family, academic or professional environment, leisure time, situation in present-day society).

This aspect is fundamental to understanding the whole field of drug-related problems. It is called the 3 S's : Substance (drugs), Subject (user) and Society.

See figure.

As regards the onset of drug problems the real backgrounds are very easily forgotten. People are obsessed by the drug itself, especially when illicit drugs are concerned. But drug problems among adolescents are in the first place youth problems, related to the particular living conditions of these young people (see c below).

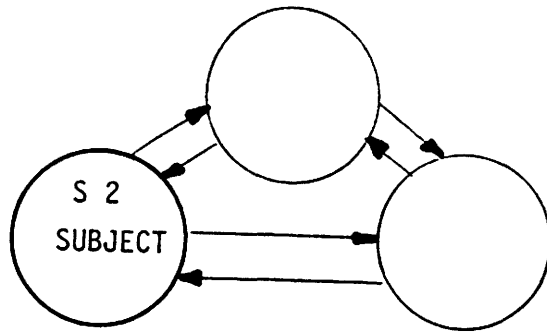
a) S1



Of course it is important to know what kind of substances are used : some drugs represent greater risks than others.

The following aspects are also very important : dose, frequency and length of use, the purity of the drug and possible combinations with other drugs.

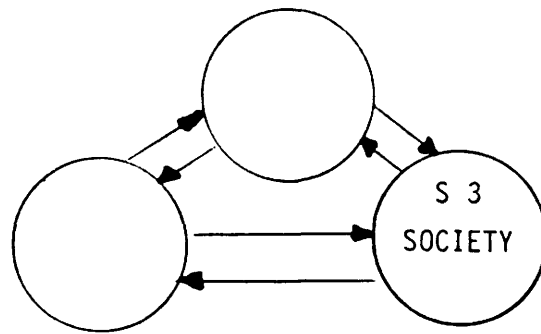
b) S2



In the user the risk of developing drug problems depends on physical and mental characteristics. Some youngsters are physically hypersensitive to certain drugs : the use of small amounts can cause problems. It is not true that there is a prototype personality among drug users but rather there is a certain vulnerability among several types of personality. Certain persons are more susceptible than others to developing excessive drug use or dependence.

As we mentioned in the introduction, secondary-school students pass through the adolescent period between childhood and adulthood. During this stage of their development, very pronounced changes occur in their physical, intellectual, emotional and social characteristics. These changes also determine whether drug problems can/will arise or not.

c) S3



The environment plays an important role in the onset of drug-related problems.

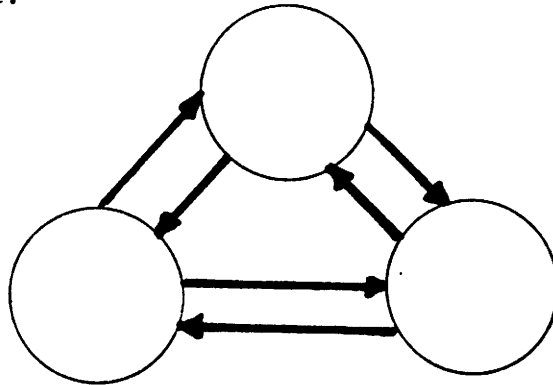
The pattern of use among parents or friends determines a young person's own pattern of use.

Other important factors are : the quality of relations within the family; the academic and professional situation (e.g. the problem of unemployment, although the association between drug problems and unemployment is too easily made).

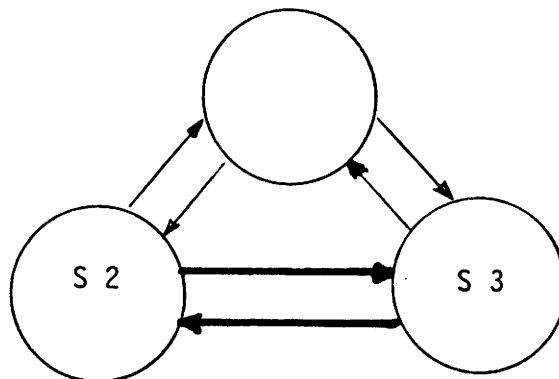
The relationship with friends during leisure time is fundamental for adolescents.

Some macro-social factors must also be mentioned : migration from the countryside to the city; tolerance of society about illicit drug use; the position of adolescents or sub-groups of young people in the present-day society-in-crisis.

d) The onset of drug problems will be determined by these three factors at any time. Therefore the interaction between the 3 S's is of fundamental importance.



We already mentioned (see b) that young people are on their way to independence. More recently, because of social and economic factors, the period of dependence of young people is becoming larger. For some of them, the tension between the wish to be independent and their real state of dependence increases. This situation can result in uncertainty of conduct, instability and increasing vulnerability among young people in the present social context.



These characteristics are reinforced by the general living-conditions of adolescents.

Recently, important changes have occurred in all basic living situations. A consequence is that the family, the professional environment, training-colleges, youth organizations, institutions for juveniles and other social systems meet to a lesser extent than before the typical requirements of youth development.

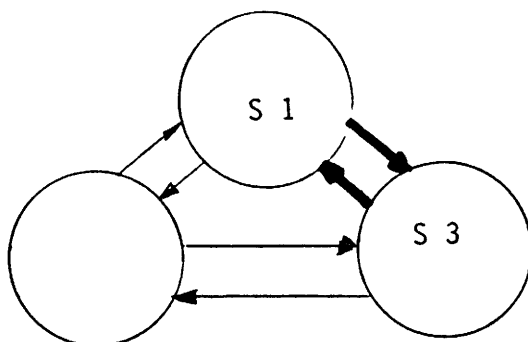
In our demanding society adolescents do not know any more what is expected of them and, on the other hand, adults often do not know any more what they can have to expect from the young. Therefore it is not

surprising that adolescents experiment with all kinds of new behaviour patterns within a continuous but slow maturing process. Some of them frequently enter serious crisis situations. Others cannot handle these crisis situations and develop dysfunctional behaviour; drug use is one possibility.

In particular, mild forms of dysfunctional behaviour are increasing rapidly.

Extreme forms of this conduct have become important among adolescents but are not increasing to the extent that many people may think.

Another important interaction is :



or how the different substances are accepted (or not) in our society. The use of tobacco, alcohol and psychotropic medicines is "normal" and "socially accepted". Before someone will react against this pattern of use and talk about abuse, very serious symptoms must occur. Other drugs such hashish, marijuana, LSD, etc. are not accepted in our society. The slightest use will be labelled as abuse.

The difference between use and abuse is not very clear because medical and socio-cultural standards, which can change, determine this demarcation line.

Even intensive use of tobacco, alcohol and coffee, and of psychotropic medicines such as sedatives and tranquillizers, will socially not be labelled as abuse, although this use can cause harm and should, from a medical point of view, be called abuse.

On the other hand, when marijuana, LSD, heroin - socially non-accepted drugs - are used only once or even occasionally, this will generally be referred to as abuse, although from a medical point of view it will not cause any harm and does not need to be labelled as abuse.

We can conclude that abuse is not a universal concept. From a pragmatic point of view we can say that drug use is abuse when the self-administration of one or several substances exceeds the medical and socio-cultural standards of a society.

Some examples of how "drugs" are used in other countries make it clear that socio-cultural standards determine the social reaction towards drug use.

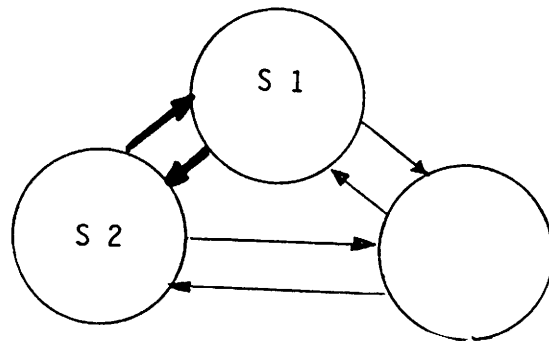
In some eastern countries, opium has traditionally been a socially accepted drug (contrast with Europe !).

It has been used to relax or to suppress the tensions of hard work, e.g. fishermen were sometimes at sea for 15 days or had to work 18 hours a day without a break.

In South America in the Andes the chewing of coca-leaves is a habit, as drinking coffee is a habit in many European countries. Coca gives "courage, power, persistence and energy" and these were basic attributes e.g. for the Incas.

Poor people in the Andes have only a very small income and cannot afford to buy a lot of food. They use coca in order to suppress feelings of hunger.

Last but not least, the substance itself, the effects of a drug within the user and the motives of the user will determine the further development of drug use.



The use of alcohol and tobacco is part of the status of "being grownup". To belong to a group is a very important motive. The use of marijuana and hashish is determined more by curiosity, the feeling of "being in", the influence of friends.

conclusion

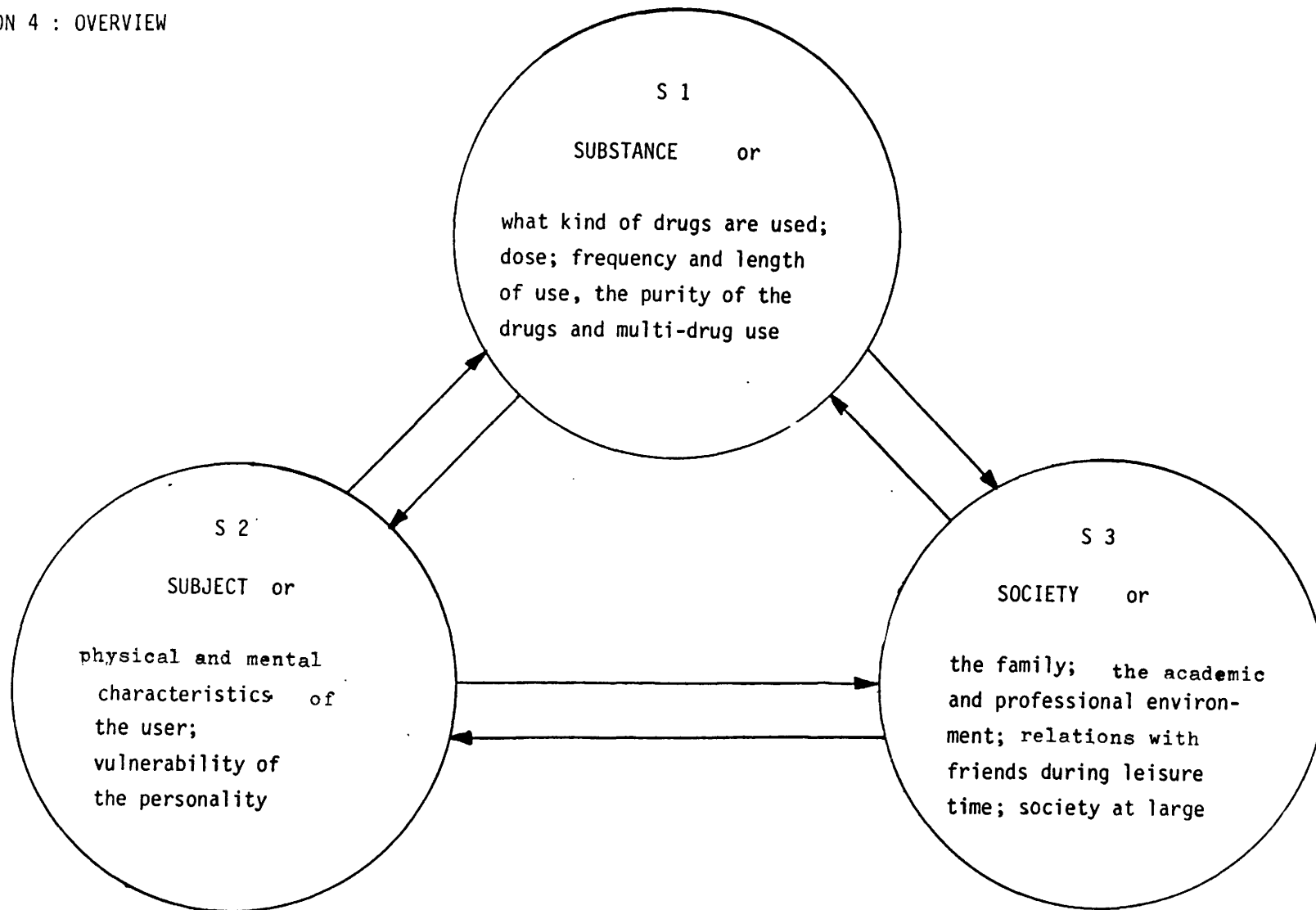
A first conclusion is that drug use is a very complex phenomenon of which the cause and effect are often difficult to distinguish.

Important is the knowledge that we live in a "drug-taking society" where people use all kinds of substances we can call "drugs", sometimes in a very risky way. Some of these substances have been accepted in our society, so that their use has become part of daily life (coffee, tobacco, alcohol, tranquillizers, sleeping-pills and stimulants).

Other products (such as marijuana, hashish, LSD, opium, heroin, etc.) are not accepted socially.

The fact of "being socially accepted or not" very often does not depend on their effect or possible damage but on the society with its specific standards.

LESSON 4 : OVERVIEW



How to work out this information in a lesson

Try to find a good, interesting story about a drug user.

The students have some time to read the text and to start analysing it for themselves.

Then, with the whole class, you analyse the case-history to find the different aspects of the behaviour and the user in his social setting. You rank these aspects as follows (write the categories on the blackboard) :

1. drug effects
2. personal factors : personality, physical condition, reasons
3. immediate environment : family, class, friends.
wider environment : school, neighbourhood, certain organizations, society as a whole.

You can analyse the text according to these three categories. However, it is very important to listen to students when they start talking about themselves or experiences in their surroundings. This can provide new aspects to be added to the three categories.

Provide a forum so that students are able to talk about themselves.

For other suggestions about how to handle the theoretical information in this lesson, see Chapter 3 "Other proposals as to how to work out your lessons."

To illustrate lesson 4 we give an overview of four Danish follow-up studies (see table).

Several factors have been found

on the one hand, as prognosis of possible drug abuse,

on the other hand, as determinant in the process of drug use and abuse.

Prognostic factors in four major Danish follow-up
studies of young drug abusers

Author	Pre-abuse factors	Factors applying during and after abuse
Groth 1978	<ul style="list-style-type: none"> - Sex - Supporter's social class - Broken home - Institutionalized - Schooling - Special education - Delinquency - In contact with Child Welfare 	<ul style="list-style-type: none"> - Age at starting abuse - Nature, intensity and length of drug abuse - Job at discharge - Length of hospitalization
Holstein & Jersild 1976	<ul style="list-style-type: none"> - Broken home - Mental disorders or "nerves" in childhood home - Schooling - In contact with Child Welfare - Institutionalized - Age at first psychiatric admission 	<ul style="list-style-type: none"> - Age at starting abuse - Length of abstinent periods - Number recorded delinquencies - Occupational and working factors
Haastrup 1973	<ul style="list-style-type: none"> - Broken home - Childhood home of lowest social class. Three months in institution during childhood - Maladjusted siblings 15 years of age when leaving school - 13 years of age when starting to smoke tobacco - 18 months' employment during the two years prior to admission 	<ul style="list-style-type: none"> - More than 100 injections
Eggert Petersen et al. 1974	<ul style="list-style-type: none"> - Childhood home of lowest social class - Broken home - Institutionalized - Number of "parents" 	<ul style="list-style-type: none"> - Extent of abuse - Therapeutic responsiveness - Social adjustment

Source : WHO Workshop on Prevention and Treatment of Drug Dependence. Brussel, 26 to 30 September 1983. Country report Denmark.

2.5. LESSON 5 – COMMUNITY RESPONSE :

PREVENTION AND TREATMENT

In the previous lessons we talked about the drug user, different kinds of drugs, drug-taking behaviour, etc.

In this last chapter, another very important aspect will be discussed : the reaction of society to the phenomenon of drug use, or how our society handles the drug use phenomenon.

The information provided here will help you to counter the last stereotype idea listed in the first lesson :

Stereotype idea 5 : Problems of drug use and addiction are hopeless and cannot be treated.

The "community response" can follow two main strategies :

- prevention
- treatment

We will discuss these two main strategies separately. But we have to bear in mind that interactions between them are a basic condition for making them efficient.

Prevention

The aim of preventive activities is not only

- to prevent people from becoming addicted (negative approach, e.g. anti-campaigns),
- but also
- to prevent people from having all kinds of problems related to drug use
 - to teach people to handle certain substances in an appropriate way (positive approach).

There are two main types of measures to be considered :

1. educative measures
2. restrictive measures (legislation : laws and regulations)

Educative measures are of special importance for those dealing with young people, professionally.

It is the task of the government to combine and coordinate both strategies. We will now discuss the educative measures in more detail.

Educative measures

Adequate information and prevention of the general population is important but not enough. Many people know that certain life-styles and habits are not healthy, but this knowledge usually is not enough to change their own attitudes.

The point is that at an early stage - already during primary education - health improving behaviour must be learnt and "health-damaging" or risky behaviour must be avoided.

This kind of prevention/education is called **health education**.

Health education is not only the fight against something negative (such as a certain disease, addiction, criminality, accidents, etc.) but is also - and essentially - a positive approach to health in general.

An example from daily life is the publicity for certain drugs.

Some substances cause positive effects in certain circumstances but a lot of risks in others.

In publicity, the positive aspects of substances are usually emphasized as a caricature; the traditional anti-campaigns emphasize the dangers in the same way.

A positively oriented health education needs to be much more differentiated and must be integrated into the broader context of health and safety promotion among young people.

A problem is that many people who deal with adolescents as part of their professional activities are not prepared to participate in the above-mentioned preventive measures.

Therefore specialized services organize training programmes for those who are interested.

Restrictive measures

The whole package of laws and regulations represents a set of restrictive measures. They control e.g. the availability of drugs (such as restrictions in the field of publicity; the compulsory medical prescription; the "fight" against the drug trade).

In most of the countries all these regulations are not consistent. Some socially accepted drugs are not regulated enough (e.g. many psychotropic medicines), whereas some socially non-accepted drugs are wrongly identified with the most risky and dangerous drugs (e.g. cannabis).

These kinds of measures can have an important preventive effect. But when they are not accompanied by educative activities, they will not be very efficient and can even cause the wrong effect. A problem is that many regulations are purely judicial : prevention and actual assistance become very difficult then.

With these critical comments as background, you can now discuss some aspects of the legislation in your country with your students (see also "How to work out this information in a lesson").

In Chapter 4 you find a list of addresses :

ask for detailed information about the legislation in your country from one of these services.

Treatment and assistance

The kind of assistance given to young people depends very much on the seriousness of their problems.

This help and assistance does not necessarily have to be organized by specialists : possible sources of help in the natural environment of the young are very important.

The starting-point of assistance to young people is the adolescent himself. Very often the person-in-trouble-because-of-drugs has no motivation to change his/her life-style.

To motivate this person to accept some kind of assistance is in most cases the first step in the process of assistance.

When the adolescent succeeds in stopping using drugs, the phenomenon of withdrawal can occur. Thereafter a period of intense support and assistance is necessary to enable him to continue a life without drugs. Relapse will often occur. This is not dramatic but must be interpreted as a new opportunity to start a period of intensive assistance.

At the start of an assistance process, friends, neighbours and professional workers, who belong to the natural environment of the drug user, can be involved (such as a general practitioner, a home-care nurse, a social worker, etc.).

The person concerned and/or his environment (such as parents, teachers) can be guided towards different services (such as a telephone service, a Youth Advice Centre) that handle all kinds of problems of life.

These services can refer those who ask for help to more specialized institutions. More specialized assistance is still possible as part of ambulatory care.

Only in the event of serious and urgent problems - and mostly referred by one of the aforementioned sources of assistance - will the drug user be admitted to a specialized institution. He/she will stay there for a certain length of time. After discharge a period of after-care will be organized.

We will now describe the different kinds of treatment and assistance according to different kinds of drugs (except alcohol and tobacco).

PSYCHOTROPIC MEDICINES

For some of these substances, such as barbiturates and narcotics, the risk of acute intoxication is high.

They are frequently use in suicide or attempted suicide.

When a person is acutely intoxicated, the help of a general practitioner or even urgent hospitalization will be necessary.

Many chronic users of these products are not addicted : they are used to a daily consumption and get the impression that they cannot live without it.

In these cases it is important to use other substances than psychotropics to influence positively the basic problems of the user.

When a user of psychotropics is dependent or addicted, an extra effort will be necessary to motivate the user to start a withdrawal process.

The deprivation syndrome needs lot of attention then. Often admission to a specialized service is necessary.

The psycho-social assistance following a period of treatment (aftercare) is still a complex step in the whole treatment process. This after-care needs to be organized with participation of family, friends, etc. and has to be continued for a sufficient lenght of time.

Relapse is very easily interpreted as a failure after treatment, but it can be a new basis for a more in-depth approach to the underlying problems.

VOLATILE SUBSTANCES

These substances can cause intoxication.

After a first-aid intervention there is a need for psycho-social care and assistance, to discuss possible risks of sniffing and to motivate the user to stop sniffing volatile substances.

Support and well-structured assistance to the user and his environment are very important if the real problems are to be influenced positively.

ILLICIT DRUGS

Treatment of illicit drug users is often associated only with the treatment of heroin addicts.

More frequently, young people who only sporadically use illicit drugs are in need of care because of the extremely negative social reaction.

Acute intoxication is not a rare phenomenon among users of illicit drugs.

Factors that make this situation more complex are : black-market illicit drugs are not pure; combinations of drugs, including alcohol; a poor physical condition. Deaths because of an overdose of heroin very often appear not to be caused by heroin alone, but by a mixture of several drugs.

The use of illicit drugs can cause risky deviant behaviour. Admission to a specialized service can be necessary in these cases.

Non-specialized volunteers and services in cooperation with the environment of potential drug users and self-help groups play an important role in the field of early detection of drug problems.

But when serious problems occur because of the use of illicit drugs, contact with specialized services will be necessary (e.g. ambulatory services, therapeutic communities (TC's), several hospital units specializing in drug problems).

LESSON 5 - OVERVIEW

COMMUNITY RESPONSE : PREVENTION AND TREATMENT

1. PREVENTION

- Educative measures
- Restrictive measures : legislation

2. TREATMENT AND ASSISTANCE

On the 0 level: the natural environment of the person asking for help
 e.g. home care, a welfare worker, a family worker, a
 general practitioner, a district-nurse.
 They all provide help and assistance at home.

On the 1st level : non-specialized services.
 e.g. Centres for Social Welfare, Youth Advice Centres,
 Crisis-intervention Centres, Youth Protection Committees,
 Telephone Services, general practitioners.
 They all meet the person asking for help at their office.

On the 2nd level : more specialized services than on the first level.
 e.g. Community Mental Health Centres, Consultation
 centres for alcohol and other drug problem.

On the 3rd level : residential services.
 e.g. general hospitals, psychiatric hospitals,
 therapeutic communities (TC's), treatment-centres for
 people with alcohol and drug problems, day and
 night-hospitals.

On the 4th level : services for long-stay care.

How to work out this information in a lesson

Invite several people who are working on one or more levels, as described in the overview.

E.g. a superintendent of police, a social worker from a public centre for social welfare, someone working in a therapeutic centre, etc.

Again, take care that all these people are "qualified" and are able to provide valuable information.

After an interview of and discussion with these people, you can analyse all the information with your students.

At the end, the students must have an insight into the different responses of our society to drug use and drug-related problems.

For other suggestions about how to handle the theoretical information in this lesson, see Chapter 3 "Other proposals as how to work out your lessons".

3. OTHER PROPOSALS AS TO HOW TO WORK OUT YOUR LESSONS.

LESSON 1

Instead of collecting newspaper articles, you divide your students into 2, 3 or 4 groups.

Each groupe has a list of propositions, formulated as multiple-choice questions.

Then the different groups have to interview several people at random (in their family, in the street, at school, etc.).

The students ask the people to answer all the questions and to give brief reasons for their answers.

In the class, the different groups report on their experiences. The teacher can write the results on the blackboard.

A discussion can follow about why some people hold stereotype opinions about drugs and drug use.

LESSON 2

You ask your students to collect information about the different substances defined as "drugs" (they can consult a doctor, an encyclopaedia, a pharmacist; they can collect information leaflets on medicines; etc.).

The most efficient way is to divide the class into small groups : each group deals with some substances or certain aspects of some drugs, etc. When all the information is collected, you can - perhaps in conjunction with the students - prepare a series of slides.

Each group comments upon those slides for which they have collected the information. After projecting the slides, you could provide an illustrated text with a description of the different licit and illicit drugs.

To obtain **valuable information and material**, consult one of the addresses mentioned in the next chapter "Contact Addresses".

To avoid the disadvantages of slides (a dark classroom, some students pay no attention, etc.), you can also work with an epidiascope if one is available in your school.

LESSON 3

- The teacher writes down several questions on the blackboard and asks the students to give a ranking order.

e.g. 1. What is the most dangerous substance for our society ?

Alcohol

Sleeping-pills

Marijuana

2. What is the most serious drug-related problem at school ?

alcohol use

use of psychotropic medicines

use of cannabis

After each question, a short discussion can follow about the different answers.

- A comparative collage

Together with your students, you list

- the interests of a young drug-user
- the interests of youth in general.

These two topics are the headings of a comparative collage, composed from magazines, newspaper articles, etc.

LESSON 4

Before you start this lesson, the student are given a text they have to read at home.

At the start of lesson 4 you give your students a crossword puzzle with the most important concepts in this lesson.

You can use the results as an evaluation of the knowledge among your students.

LESSON 5

- The students visit different services to interview people working in these services (they are informed about this visit by the teacher)

e.g. juvenile court

police office

therapeutic community (TC)

psychiatric hospital

Again, take care that your students can interview qualified people, who do not hold stereotype opinions.

These interviews must be prepared in small groups of a maximum of 5 students.

Each group reports on its own experiences to the whole class.

- With the people class you write to different services who are working in the field of prevention, to collect informations and brochures about prevention.

Then you analyse all the information collected.

- Are the brochures efficient ? Why ? Why not ?
- What is missing ? What is superfluous ?
- What information is provided by certain posters ?
- What material, technique, etc. are used ?

You can perhaps start making your own prevention brochure or poster.

The students can use pictures, etc. from magazines or newspapers, or they can draw something themselves.

They can even make parodies of existing posters, representing stereotype information.

- When you have gone through all these lessons with your students and if your students have got the ability to develop their own activity, there will probably be a lot of information, documentation, posters, brochures, etc. collected.

All this material can be worked into an exhibition.

If possible, set up this exhibition in a kind of recreation room at the school.

In this way, other students can see what is going on in other classes.



4. REFERENCES

This is only a very restrictive list of references of direct importance to the manual text.

Please make use of the contact addresses mentioned in Chapter 5 in order to get documents adapted to your own country and your drug education programme.

Baro, F., Casselman, J., Pelc, I. (eds.), Drug related-problems in Europe. Proceedings of a WHO workshop on the Prevention and Treatment of Drug Dependence. Brussels, 1983 (In Press).

Casselmann, J., Moorthamer, L., Baro, F., Abuse of psychoactive drugs. National policies and programmes in 17 European countries. Study Report prepared on behalf of the WHO Regional Office for Europe. Copenhagen, 1984.

Kohlberg, L., The child as a moral philosopher. In : Kirschenbaum, H., Simon, S.B. (eds.), Readings in values clarification. Minneapolis, Wiston Press, 1973, 49-61.

Sijlbing, G., Use of drugs, alcohol and tobacco. SWOAD, Amsterdam, 1984.

Vuylsteek, K., Health education : smoking, alcoholism, drugs. Review of selected programmes for schoolchildren and parents. Euro Reports and Studies 10, WHO, Copenhagen, 1979.

WHO Workshop on Prevention and Treatment of Drug Dependence, Brussels, 26-30 September 1983. Country paper, Denmark.

5. CONTACT ADDRESSES.

BELGIUM

CPAD. Comité de Concertation sur l'Alcool et les autres Drogues

Rue des Prêtres, 15

B-1000 Bruxelles

VAD Vereniging voor Alcohol - en andere Drugproblemen.

Päpenvest, 78

B-1000 Bruxelles

SPZ Sozial- Psychologisches Zentrum

Beratung und Lebenshilfe

Schnellewindgasse, 2

B-4700 Eupen

DENMARK

Alkohol og Narkotikaradet

Hovedvagtsgade 6, 4.sal

DK-1105 Copenhagen K

France

Mission permanente interministerielle de la lutte contre les
toxicomanies.

Rue Saint-Dominique, 71

F-75007 Paris

Germany

DHS. Deutsche Hauptstelle gegen die Suchtgefahren.

Westring, 2 - Postfach 109

D-4700 Hamm 1

Bundeszentrale für gesundheitliche Aufklärung

Ostermerheimer Strasse, 200 - Postf.910152

D-5000 Köln 91

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ITALY

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Viale Regina Elena, 299
00161 Roma

LUXEMBOURG

Direction de la Santé
Boulevard de la Pétrusse
Luxembourg

NETHERLANDS

FIA. Federatie van Instellingen voor Alcohol en Drugs
Rembrandtlaan, 2a
3720 AD Bilthoven

NCA. Nationale Commissie tegen het Alcoholisme
en andere verslavingen.
W. Barentszstraat, 39
3572 PC Utrecht

Volksbond tegen Drankmisbruik
le Sweelinckstraat, 25
2517 GA 's-Gravenhage

PORTUGAL

Bureau de planification er de coördination
de la lutte contre la drogue
Rue de Alcolena, 1
Lisboa 14000

Universit  de Co mbra
Dr. Carlos Amaral-Dias
Rue Mascado Castro, 62
Co mbra

SPAIN

Ministry of Health and Consumers Affairs
Government delegate of the National Plan on Drugs
and Alcohol and Addictions Unit
Paseo des Prado, 18
Madrid 28002

UNITED KINGDOM

SCODA. Standing Committee on Drug Addiction

ISDD. Institute for the Study of Drug Dependence

(both at the same address)

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Hatton Garden

London EC1N 8ND

Health Education Council

New Oxford Street, 78

London WC1A 1AH

Scottish Health Education Group

Landsdowne Crescent

Edinburgh EH12 5EH

TACADE Teachers' Advisory Council on Alcohol

and Drug Education

Mount Street, 2

Manchester M2 5NG

European Communities — Commission

EUR 10594 — A drug education manual concerning illicit drugs and psychotropics — For teachers in secondary schools in the Member States of the European Community

F. Baro, J. Casselman, L. Moorthamer, L. Van Hende

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Faced with the challenge presented by licit and illicit drugs and the problems connected with their use by young people, it is essential not only to keep abreast of recent developments but also to adopt the right approach, to show a sense of understanding and open-mindedness and to avoid acting in a tactless manner.

This manual serves as a response to the need to inform teachers as fully as possible, in particular those working in secondary education, of the complex aspects of the problems connected with the use of licit and illicit drugs. It tackles questions such as how to give advance warning, how to detect their use, how to 'contain' them, how to come to terms with the problems and how to give advice to families.

Emphasis is placed, in particular, on the kind of information which is suited to passing on to young people as part of a health education adapted to fit the educational programme in its broadest sense. In addition, the reader will find in the manual a first-rate reference methodology which is presented in a lively and practical format.

This manual does not, of course, claim to be a theological treatise. There must always remain a dividing line between the role of the teacher and that of the doctor. This publication, therefore, which is uncomplicated and easy to read, provides an answer to all the practical questions being asked by teachers. It will enable them to tackle the problems, which, unfortunately, will tend to become more pressing in the next five years.

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