



E.M.C.D.D.A.

European Monitoring Centre
for Drugs and Drug Addiction



Guidelines for the evaluation of drug prevention

A manual for programme-planners and evaluators







E.M.C.D.D.A.

European Monitoring Centre
for Drugs and Drug Addiction

Guidelines for the evaluation of drug prevention

A manual for programme-planners and evaluators

1

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 1998

ISBN 92-9168-052-4

© EMCDDA, 1998

Reproduction is authorised provided the source is acknowledged.

Printed in Belgium



Preface

In the last few years, a growing number of drug-prevention activities have been carried out in all the Member States of the European Union (EU). Most of these projects, however, have not been effectively evaluated. As a result, there is an urgent need to increase current knowledge about the process of 'prevention evaluation' and to pool experiences and results.

The Lisbon-based European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is now promoting scientific evaluation methods in the field of drug prevention to help improve the quality of prevention interventions. To this end, it contracted Munich's Institut für Therapieforschung (IFT) to develop some practical guidelines. It is these guidelines that make up this manual. They are designed to help those working in the field to evaluate a wide range of prevention interventions in many different settings. They will help to make the results of such activities more comparable and should therefore strengthen the exchange and discussion of 'good practice' in the field of drug prevention between EU Member States. The adoption of scientific evaluation methods will also help all project planners interpret the results of any prevention intervention and develop future lines of enquiry.

In addition to these *Guidelines for the evaluation of drug prevention*, five other European drug-prevention projects have been carried out. Each of these projects focuses on different aspects of drug prevention and, taken together, they complement one another.

The first project of the COST A6 Working Group 2 is coordinated by Alfred Uhl of the Ludwig Boltzmann Institute in Vienna⁽¹⁾. Its aims are summed up by its title, 'Evaluation of primary prevention in the field of illicit drugs — Definitions — Concepts — Problems', and its primary goal is to reach a consensus among European experts on theoretical issues such as definitions and methodology.

(1) COST A6 is a programme run by the European Commission's Directorate-General XII (Science, Research and Development) to gain valid information concerning the impact of various drug policies and measures on the extent, nature and consequences of drug abuse.



The second project is the publication of the *Drug prevention handbook*, developed by the Jellinek Consultancy in Amsterdam for the Pompidou Group of the Council of Europe. The handbook is designed to help practitioners develop and implement drug-prevention interventions. It is a comprehensive source of detailed information, and includes checklists of the issues to be considered when planning, implementing and evaluating prevention activities.

Three further projects, intended to complete the task of promoting scientific evaluation methods and to improve the quality of prevention interventions, have also been initiated by the EMCDDA.

- An Evaluation Instrument Bank — providing a comprehensive overview of tested and established measures to evaluate prevention — has been set up by Mark Morgan of St Patrick's College in Dublin. It will be available on the Internet via the EMCDDA website (<http://www.emcdda.org>) by the end of 1998.
- A database of European prevention interventions is also being set up and tested in a feasibility study involving all the focal points of the Reitox network. This project is being coordinated by the Centro de Estudios sobre la Promoción de la Salud (CEPS), Madrid.
- A companion volume to these guidelines, entitled *Evaluating drug prevention in the European Union*, has been published in the EMCDDA 'Scientific monograph' series. This monograph is based on papers and workshop discussions from the first Conference on the Evaluation of Drug Prevention held in March 1997 at the EMCDDA headquarters in Lisbon.

The *Guidelines for the evaluation of drug prevention* were developed in three stages.

- First, current European prevention interventions were analysed. The current state of knowledge and examples of good evaluative practice were assessed, and 22 separate prevention interventions were examined.
- Second, the text of the guidelines was drafted based on the results of this assessment and a literature review. A first draft was discussed in an expert workshop at the IFT in August 1996, and a revised text was presented at the March 1997 conference in Lisbon. This draft was discussed in three parallel workshops and

assessed by a questionnaire. It was also tested in a feasibility study by 20 European prevention interventions in 13 EU Member States. Each of these projects was required to write an evaluation report using the guidelines, as well as rating their quality and practicability.

- ▶ Third, those participating in the feasibility study assessed the quality of the guidelines during a two-day workshop in June 1997.

Given all this preparatory work, we believe that this manual will be of great value to all those involved in evaluating drug-prevention interventions.

We would like to thank the many experts who contributed their time and comments to the successful development of the guidelines: Wim Buisman (Jellinek Centre, Amsterdam); Mark Morgan (Education Research Centre, Dublin); Alice Mostriou (Athens University Medical School, Athens); Jorge Negreiros (Universidade do Porto, Porto); Teresa Salvador (Centro de Estudios sobre la Promoción de la Salud, Madrid); Anne-Marie Sindballe (Sundhedsstyrelsen, Copenhagen); Zili Sloboda (National Institute on Drug Abuse, Rockville, MA); and Alfred Springer (Ludwig Boltzmann Institute, Vienna). We would also like to acknowledge the contribution of Alfred Uhl (Ludwig Boltzmann Institute, Vienna), and Jürgen Töppich and Gerhard Christiansen (Federal Centre for Health Education, Cologne) whose input into the discussion of specific topics was invaluable.

Finally, we would like to thank all those who participated in the feasibility phase for devoting so much time, patience and energy to 'road-testing' the second draft of the guidelines. On behalf of everyone involved in the respective projects, our thanks go to Christian Fazekas (Austria), Peer van der Kreeft (Belgium), Matthy Balthau (Belgium), Tuukka Tammi (Finland), Françoise Baranne (France), Cecile Gendre (France), Josef Mast (Germany), Vasso Boukouvala (Greece), Mark Morgan (Ireland), Cristina Sorio (Italy), Han Kuipers (Netherlands), Sonia Po and Rui Castro Rodrigues (Portugal), Dulcinea Gil (Portugal), Francisco Javier Corpas (Spain), Ulla Isaksson and Harriet Gilberg (Sweden) and Willm Mistral (United Kingdom). As a result of their expertise and feedback, these guidelines will make an invaluable contribution to drug-prevention intervention.





Contents

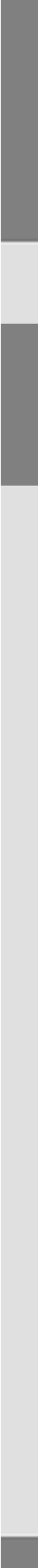
Preface		3
Introduction		11
	▶ What is evaluation?	11
	▶ Theoretical background of the guidelines	12
	▶ Who can use the guidelines?	12
	▶ Applying the guidelines	12
	▶ When can the guidelines be used?	13
	▶ Structure of the manual	13
	▶ How to use the manual	14
Part 1	Guidelines for planning and realising evaluation	
Chapter 1	Evaluating programme planning	16
	▶ The phenomenon	16
	▶ The conceptual background	17
	▶ The need for a prevention intervention	17
	▶ The target group	18
	▶ Objectives	19
	▶ Methods	19
	▶ Resources	20
	▶ Planning the process evaluation	20
	▶ Planning the outcome evaluation	21
	▶ Reflecting on the planning phase	21
	▶ Planning checklist	21
Chapter 2	Process evaluation	23
	▶ Planning the process evaluation	23
	▶ Implementing the prevention intervention	24



	▶ The target group revisited	24
	▶ Exposure	25
	▶ Quality of the prevention intervention	25
	▶ Discussing the results of the process evaluation	25
	▶ Process checklist	26
Chapter 3	Outcome evaluation	27
	▶ Planning the outcome evaluation	27
	▶ Achieving the outcome evaluation	28
	▶ The sample	28
	▶ The outcomes	29
	▶ Discussing the results of the outcome evaluation	29
	▶ Outcome checklist	30
Chapter 4	Communicating the results	31
	▶ Developing a communication plan	31
Part 2	Examples	
Chapter 5	Evaluating programme planning	35
	▶ The phenomenon	35
	▶ The conceptual background	37
	▶ The need for a prevention intervention	38
	▶ The target group	41
	▶ Objectives	44
	▶ Methods	46
	▶ Resources	49
	▶ Planning the process evaluation	50
	▶ Planning the outcome evaluation	51
	▶ Reflecting on the planning phase	52



Chapter 6	Process evaluation	53
	▶ Planning the process evaluation	53
	▶ Implementing the prevention intervention	56
	▶ The target group revisited	58
	▶ Exposure	59
	▶ Quality of the prevention intervention	61
	▶ Discussing the results of the process evaluation	62
Chapter 7	Outcome evaluation	65
	▶ Planning the outcome evaluation	65
	▶ Achieving the outcome evaluation	67
	▶ The sample	68
	▶ The outcomes	69
	▶ Discussing the results of the outcome evaluation	71
Chapter 8	Communicating the results	74
	▶ Developing a communication plan	74
Part 3	Glossary	77
	Bibliography	94





Introduction

What is evaluation?

Evaluating a \Rightarrow prevention intervention, project or programme means systematically collecting, analysing and interpreting information about how the intervention operates and what effects it might have ⁽²⁾. The information collected can then be used to decide how to improve an intervention, whether to expand it or to reject it altogether.

Essentially, evaluation should answer the following questions:

- ▶ What is the nature and scope of the problem?
- ▶ Which interventions can affect the problem?
- ▶ Which group will the intervention target?
- ▶ Does the intervention actually reach the \Rightarrow target group?
- ▶ Is the intervention being implemented as planned?
- ▶ Is the intervention effective?

Answers to these questions help to distinguish useful prevention interventions from ineffective, inefficient ones. This is not only important in terms of improving the level of knowledge about prevention, but it can also be the basis on which policy-makers and funders decide which projects to support and which to ignore.

But despite the widely accepted need for and use of evaluation in theory, very few prevention interventions have actually been evaluated in Europe. One of the reasons for this lack of evaluation may be that there is insufficient knowledge and lack of confidence about how to tackle evaluating prevention interventions in the field of substance misuse.

(2) Throughout these guidelines, the term ' \Rightarrow prevention intervention' is preferred to 'project' or 'programme', as these other terms can mean different things to different people. The symbol ' \Rightarrow ' indicates terms explained in the Glossary (Part III).



This is the gap that these guidelines aim to fill. They are intended as a 'hands-on' manual, specifying how to carry out valid, scientific evaluations of different kinds of prevention interventions in different settings.

Theoretical background of the guidelines

These guidelines take a structured, empirical, \Rightarrow quantitative approach. While some users may prefer more in-depth information on \Rightarrow qualitative methodology, it would not be possible to combine these two different approaches in a satisfactory way in the space available. For more information on the theory and methodology of evaluation procedures, see the companion volume to this manual, *Evaluating drug prevention in the European Union*, EMCDDA 'Scientific monograph' No 2. This monograph provides in-depth information on many different aspects of evaluation (for instance, the state of play in Europe and the USA, different types of evaluation, measuring outcomes, intermediate variables, cost-effectiveness, and the \Rightarrow barriers to and challenges of evaluation).

Who can use the guidelines?

These guidelines are intended to help people from a variety of backgrounds plan and evaluate drug-prevention interventions. They are designed especially for those with more practical experience and less knowledge of evaluation, but they can also be helpful for more practised evaluators.

In order to address the needs of both these target groups, the manual is divided into three parts. This division is based on the assumption that the more experience the reader has of evaluation the less he or she will need to read, and vice versa.

Applying the guidelines

First and foremost, the guidelines are intended to help people working in the drug-prevention field evaluate their intervention. But the guidelines can also be used in other ways, for example, as a teaching aid in evaluation training or in drawing up and evaluating funding proposals, reports and even other guidelines.



When can the guidelines be used?

The guidelines focus on evaluating prevention interventions. They do not provide information on how to design a specific prevention intervention. Instead, they can be applied as soon as the concept of a prevention intervention begins to be discussed. At this stage, they can help reflect how the intervention was planned, while later on they can be used to evaluate its implementation and results. They are suitable not only for untested interventions, but also for those that have already been conducted and that are routinely applied.

Structure of the manual

There are three parts to this manual: the first concise section contains the basic guidelines themselves; the second provides more detailed background information and practical examples; and the third is a glossary of the terms used.

Part 1: The guidelines

This section provides the framework for the manual, covering all the steps and issues that should be considered during an evaluation. It covers four main areas:

- the planning phase;
- the quality and process evaluation;
- the outcome evaluation; and
- communicating the evaluation's results.

Part 2: Examples

This section contains background information on the issues covered by the guidelines, as well as practical examples suggested by the feasibility study. Part 2 will be especially helpful for those less experienced in project planning and evaluation.



Part 3: Glossary

The Glossary contains more detailed descriptions, definitions and explanations of the technical and methodological terms used in the guidelines. As with Part 2, this will help those who are less familiar with methodological issues to understand and use the manual.

How to use the manual

These guidelines attempt to incorporate the most important elements for consideration when planning and evaluating prevention activities. While many other issues could have been included, for practical reasons the manual has been limited to the bare essentials.

Many of those working in the prevention field may not have access to the financial and personnel resources necessary to evaluate a prevention intervention fully. The reader is nevertheless strongly encouraged to follow systematically the basic steps laid out in these guidelines, to ensure the quality of the prevention intervention.

It is recommended that all the questions in Part 1 be read, even though in many cases not all of them will need to be answered. In general, project evaluators should try to answer all the questions about the planning phase (Chapter 1), and — depending on their particular evaluation plan — proceed to the process and outcome evaluations (Chapters 2 and 3). Outcome evaluation is very important, although it is not always feasible for smaller prevention interventions. Planning an outcome evaluation requires at least basic statistical knowledge which cannot be conveyed in a manual such as this. Chapter 4, on the use of the results, is relevant for all kinds of evaluation.

This manual will guide the reader through the complex, costly and time-consuming procedure of evaluating drug-prevention interventions. Evaluation allows services to be planned more effectively, and these guidelines will, in turn, enable evaluations to be planned more effectively.

Part 1

Guidelines for planning and realising evaluation





Chapter 1

Evaluating programme planning

Evaluating programme planning is undertaken when the \Rightarrow prevention intervention is planned and designed and when its goals and methods are chosen. Evaluating this phase reflects the process of defining both the problem and the \Rightarrow ultimate target group (which is not necessarily the intervention's actual \Rightarrow target group). This stage requires a \Rightarrow needs assessment and evaluates the resources available.

The evaluation can be carried out either by an external \Rightarrow evaluator or by the person in charge of the intervention. Information should be gathered from the planners and the team that will actually carry out the intervention. This can be obtained through personal \Rightarrow interviews, \Rightarrow questionnaires, checklists or written reports. Other useful sources of data are national or local surveys and scientific or popular publications which deal with the issues to be addressed during the programme-planning phase. The results should be written up.

The phenomenon

The starting point for the planning phase should be a description of the nature, extent and location of the phenomenon to be addressed by the intervention (!). This phenomenon should always be defined as a \Rightarrow substance-use behaviour which the planned intervention aims to prevent. The characteristics of those affected by the phenomenon should also be set out.

The following questions need to be answered. For each one, the sources of information should be described and the quality of the information assessed.

- ▶ What phenomenon is the intervention designed to prevent?

(!) The term 'phenomenon' is preferred in these guidelines, because the term 'drug problem', which could also be used, has a more negative connotation.



- ▶ What are the socio-demographic characteristics of those affected by the phenomenon compared to those who are not?
- ▶ Where does the phenomenon occur, and where does it not?
- ▶ How long has the phenomenon been known? Have its size, impact and relevance changed over time?

The conceptual background

After defining the phenomenon, the theory behind any impressions the practitioner may have of the cause, modification and control of the phenomenon should be outlined. This should clarify why he or she chose those particular objectives and methods for the intervention (see below).

The following questions need to be answered, as well as examples of strategies and activities which could change (or which have changed) the phenomenon.

- ▶ Which explanation best describes the origin of the phenomenon?
- ▶ What factors are responsible for the continuation of the phenomenon?

The need for a prevention intervention

That the phenomenon exists to a degree that warrants an intervention must also be verified. This analysis of the need for a particular intervention must calculate the number of people affected by the phenomenon, make the case for this particular intervention as opposed to any other, and describe how (and if) it fits in with other activities.

The following questions need to be answered:

- ▶ How many people are affected by the phenomenon? How many new cases are there and how often do they appear (⇒prevalence, ⇒incidence)?
- ▶ How is the phenomenon likely to develop if nothing is done? On what grounds?
- ▶ How should the need for the intervention be described?



- ▶ Are there different opinions as to the need for an intervention (⇒varying perspectives on need)?
- ▶ How was the need for the intervention assessed (needs assessment)?
- ▶ Are any related interventions being carried out or planned?
- ▶ Will the current intervention cooperate with these activities?

The target group

Next, the group to whom the specific intervention is addressed (target group) should be defined. Two kinds of target group can be differentiated: an *ultimate* target group, which is most at risk from the drug phenomenon; and an *intermediate* target group, such as parents, teachers and the general population. If the intervention addresses an intermediate target group, this group should be described as the target group. If there is more than one target group, they should be described separately. How the target group is to be approached and motivated to participate in the intervention should also be outlined.

The following questions need to be answered:

- ▶ Is the target group the ultimate target group or an intermediate target group?
- ▶ What are the socio-demographic characteristics of the target group, the scale of the phenomenon and the size of the group?
- ▶ Why was this target group chosen?
- ▶ How many people will the intervention reach?
- ▶ Where and how will the target group be contacted, recruited and motivated (⇒selection effects, ⇒coverage, ⇒bias)?
- ▶ How can it be guaranteed that the target group will stick with the intervention (⇒attrition)?
- ▶ Even if the planned intervention exclusively addresses an intermediate target group, what are the characteristics of the ultimate target group?



Objectives

The intervention's objectives need to be totally clear, with its expected effects on both substance-use behaviour and on \Rightarrow mediating variables defined. What effects it is hoped the intervention will achieve for any intermediate target group should also be described.

The following questions need to be answered:

- ▶ How will the intervention affect substance-use behaviour in the ultimate target group?
- ▶ How will the intervention affect mediating variables directly related to substance-use behaviour in the ultimate target group (\Rightarrow knowledge about substance use, \Rightarrow attitudes towards drugs, \Rightarrow intention to use drugs, \Rightarrow norms)?
- ▶ What objectives are considered for other mediating variables (\Rightarrow life skills, \Rightarrow risk factors, \Rightarrow protective factors, \Rightarrow problem behaviour, \Rightarrow structural changes, changes in \Rightarrow lifestyle and \Rightarrow cultural habits)?
- ▶ What is the relationship between these mediating variables and substance-use behaviour?
- ▶ What are the objectives concerning the intermediate target group?
- ▶ How are the objectives for the intermediate target group and the ultimate target group related?

Methods

It is also essential to be clear about the methods and strategies that will be employed to meet the objectives. The empirical evidence for these strategies should be described, as should the timetable and overall timescale required for the intervention.

The following questions need to be answered:

- ▶ What strategies, components and methods will be used in the intervention?
- ▶ Who will be involved in the intervention?



- ▶ Is there any empirical evidence for the success of the methods chosen (e.g. scientific literature, research papers)?
- ▶ How long will the intervention last?
- ▶ What is the planned timetable of the intervention (number of activities, duration and frequency of each activity, etc.)?
- ▶ Will the feasibility of the intervention be tested?

Resources

Having clarified the objectives and methods, the resources available (including staff time) must be examined to ensure there are no ⇒barriers that might affect implementation or evaluation.

The following questions need to be answered:

- ▶ Which staff members will carry out the intervention, and what qualifications are required?
- ▶ How time-consuming will the intervention be for each of these staff members?
- ▶ What is the budget and who is providing it?
- ▶ What additional resources are available (e.g. people, organisations, rooms, materials, etc.)?
- ▶ What could hinder the implementation or evaluation (barriers)?

Planning the process evaluation

When evaluating the planning phase, the subsequent stages must also be borne in mind. At this point, it should be decided whether a process evaluation will be undertaken, and if so, who will carry it out.

Chapter 2 deals with process evaluation more fully, but if planning to carry out such an evaluation, the following questions should be answered:

- ▶ Is a process evaluation planned?
- ▶ What resources are available to undertake such a process evaluation?
- ▶ Who will carry out the process evaluation?



Planning the outcome evaluation

As well as deciding whether or not to carry out a process evaluation, it should be decided whether or not to carry out an outcome evaluation. Chapter 3 deals with outcome evaluation more fully, but if such an evaluation is planned the following questions should be answered:

- ▶ Is an outcome evaluation planned?
- ▶ What resources are available to undertake the outcome evaluation?
- ▶ Who will carry out the outcome evaluation?

Reflecting on the planning phase

When the planning phase has been evaluated, the whole process of information-gathering and the lines of communication involved should be examined.

The following questions need to be answered:

- ▶ Who was involved in the planning phase?
- ▶ What is the overall assessment of the planning phase process?

Planning checklist

The evaluation of the intervention's planning phase will now be complete and the following points clarified:

- ▶ what is to be tackled;
- ▶ how to explain the phenomenon;
- ▶ why the intervention is necessary;
- ▶ whom the intervention is intended to help;
- ▶ what the objectives are;
- ▶ how the intervention will be carried out; and
- ▶ what resources the intervention will use.



Part 1 Guidelines for planning and realising evaluation

The review of the whole planning process will illustrate how decisions were made. The following chapters will help in monitoring the intervention's process and outcomes.



Chapter 2

Process evaluation

Process evaluation assesses the implementation of an intervention and the reactions of the participants. It describes how and if the \Rightarrow prevention intervention took place, whether its \Rightarrow design was successful and whether the designated \Rightarrow target group was reached. It is also concerned with the \Rightarrow quality of the intervention. As process evaluation collects all the relevant data about an intervention's success or otherwise, it provides useful information that can be used to improve future interventions.

Planning the process evaluation

In planning the process evaluation, it needs to be decided which variables and \Rightarrow indicators should be measured. In answering the following questions, it should be noted what has been measured, how and when.

- 🕒 What variables and indicators will provide useful information on how the intervention was accomplished?
- 🕒 What kind of information (\Rightarrow qualitative or \Rightarrow quantitative) will the process evaluation assess?
- 🕒 What methods and \Rightarrow instruments will be used (\Rightarrow interviews, \Rightarrow questionnaires, \Rightarrow observation instruments)?
- 🕒 Where, when and how often will the process data be collected (\Rightarrow design)?
- 🕒 Who will provide the information needed for the process evaluation?
- 🕒 How will the data be analysed?



Implementing the prevention intervention

This is perhaps the most important point in the life of the intervention. The description of its implementation and development should cover all the activities that were actually undertaken. This allows the intervention to be assessed, whether or not it was implemented as originally planned (\Rightarrow adherence, \Rightarrow fidelity, \Rightarrow reinvention, \Rightarrow unexpected changes, \Rightarrow intentional changes).

The following questions need to be answered:

- What strategies, components and methods were actually implemented? Compare the answers with the original plan (see Chapter 1, 'Methods').
- What data sources and instruments were used to measure the intervention's implementation? Compare the answers with the original plan (see 'Planning the process evaluation', above).
- What resources were actually used? Compare the answers with the original plan (see Chapter 1, 'Resources').

The target group revisited

Whether or not the desired target group was reached should also be examined.

The following questions need to be answered, and information on the number of participants, their age, gender, education and other relevant variables should also be given. As with the previous subsection, the answers should be compared with the original plans, in this case the target group as envisaged in Chapter 1.

- How many people did the intervention actually reach?
- What were their socio-demographic characteristics?
- How was this information collected?



Exposure

Next, how much of the prevention intervention actually reached the target group should be identified (\Rightarrow exposure).

The following questions need to be answered:

- How was exposure measured? Which data sources, instruments or indicators were used?
- How long did the prevention intervention actually last and how many prevention activities took place? Compare these answers with the original plan (see Chapter 1, 'Methods').
- To what extent was the target group actually reached? Compare these answers with the original plan (see Chapter 1, 'The target group').

Quality of the prevention intervention

As well as examining how the intervention was carried out, how well it was carried out must also be assessed. The quality of the intervention can be identified in terms of the reactions and attitudes of the target group towards it (e.g. acceptance, degree of identification, involvement, personal benefit, etc.).

The following questions need to be answered. The answers should be compared with the original views on process evaluation envisaged at the start of this chapter.

- Who provided the information on the quality of the intervention?
- What indicators and instruments were actually used to evaluate the quality of the intervention?
- What are the results of the quality measurements?

Discussing the results of the process evaluation

As when evaluating the planning of an intervention, the results of the process evaluation should be analysed and interpreted. These results should be compared with



those obtained by other evaluations and relevant studies, and the analysis should also include suggestions for the future.

The following questions need to be answered:

- ▶ How do the plans for the intervention compare with its actual implementation and the current evaluation? Are there any discrepancies and what are the possible reasons for them?
- ▶ What is the impact of any discrepancies on the intervention?
- ▶ What are the strengths and weaknesses of the way the intervention has been implemented? Compare these with results from other interventions.
- ▶ What suggestions can be made for the future implementation of a similar prevention intervention?
- ▶ What suggestions can be made for future process evaluations of this kind of prevention intervention?

Process checklist

The intervention's process evaluation is now complete. By now, the following should be clear:

- ▶ how the 'process' will be measured;
- ▶ what actually happened during the intervention;
- ▶ how many people were actually reached;
- ▶ how much of the target group was reached; and
- ▶ how 'good' the intervention was.

The actual implementation of the intervention should also have been reviewed alongside the original plans to see how much changed in practice. The next chapter will help in evaluating the intervention's outcomes — in other words, whether it really did what was required.



Chapter 3

Outcome evaluation

Outcome evaluation looks at the effects of the intervention. It deals with whether it actually achieved its intended goals and is thus an essential tool for judging whether a particular intervention is worth continuing, adapting or discarding.

The \Rightarrow design of an outcome evaluation has a very strong influence on the quality of the results. This chapter therefore begins by describing outcome-evaluation planning before asking how the results of the outcome evaluation can be presented.

Planning the outcome evaluation

Planning any outcome evaluation must begin before the intervention starts, as the decisions made in this phase may influence the intervention's timetable and data collection.

To ensure that an effective outcome evaluation is planned, the following questions need to be answered:

- ▶ What are the \Rightarrow indicators for outcome and how will they be measured?
- ▶ Will the information on outcome be collected following a \Rightarrow quantitative or a \Rightarrow qualitative approach? What indicators and \Rightarrow instruments will be used to collect information? The following classification may prove useful:
 1. indicators and instruments to measure \Rightarrow substance-use behaviour for the \Rightarrow ultimate target group;
 2. indicators and instruments to measure \Rightarrow mediating variables related to substance-use behaviour for the ultimate target group;



3. indicators and instruments to measure other mediating variables for the ultimate target group;

4. indicators and instruments to measure \Rightarrow objectives for the \Rightarrow intermediate target group.

- **►** What is known about the quality of the instruments (\Rightarrow objectivity, \Rightarrow reliability, \Rightarrow validity)? Will the feasibility of the instruments be tested?
- **►** From whom, when and how often will information on outcome be collected (design)?
- **►** How will the information gathered be analysed? Which \Rightarrow statistical methods are adequate for the quality of the data and the design?

Achieving the outcome evaluation

Armed with this plan, the actual outcome evaluation should then be described. This should focus on changes or adaptations not only in the sample, but also in the design and the use of instruments. Unexpected and \Rightarrow intentional changes should also be distinguished.

When answering the following questions, the previous subsection should be considered at all times.

- **►** What was the design of the outcome evaluation?
- **►** What instruments were applied?
- **►** How were data collected, by whom, when and under what circumstances?
- **►** How were data processed and what statistical analyses were performed?

The sample

Information on the sample used to provide the data for the outcome evaluation should be produced. If the sample corresponds to everyone reached by the intervention, or even to the \Rightarrow target group, then one should simply refer to the description in subsections 'The target group' (Chapter 1) and 'The target group revisited' (Chapter 2). If not, then the sample's characteristics need to be outlined, as well as the recruitment process and the \Rightarrow attrition level.



The following questions need to be answered:

- ▶ How was the sample recruited?
- ▶ What were the sample's socio-demographic characteristics, size and so on?
- ▶ How do these characteristics compare with those of the whole target group?
- ▶ Was it possible to identify drop-outs? If so, what were their characteristics?

The outcomes

At some point in outcome evaluation, the outcome of the intervention must be examined. The results can be presented in tabular form, as complex statistical analyses or as a written statement.

The following questions need to be answered:

- ▶ How did the intervention affect the ultimate target group's substance-use behaviour?
- ▶ How did the intervention affect mediating variables related to substance use in the ultimate target group?
- ▶ How did the intervention affect other mediating variables in the ultimate target group?
- ▶ How did the intervention affect objectives in the intermediate target group?
- ▶ Are different subgroups (e.g. men/women, age groups, risk groups, etc.) affected differently by the intervention?

Discussing the results of the outcome evaluation

Finally, the outcome evaluation's results need to be analysed and interpreted. As with process evaluation, these results should be compared with those obtained from other evaluations and relevant studies, and suggestions for the future should be made.



The following questions need to be answered:

- ▶ Did the intervention achieve the expected outcomes? Discuss any discrepancies between expectations and results, addressing possible reasons for them and their impact on the study.
- ▶ What are the most relevant and significant results? Compare these with results from other studies.
- ▶ Is it certain that the intervention caused the results? Are there any alternative explanations for them?
- ▶ What explanation is there for negative results?
- ▶ What suggestions can be made for the future use of similar interventions?
- ▶ What suggestions can be made for future outcome evaluations of this kind of ⇒prevention intervention?

Outcome checklist

The outcome evaluation is now complete and the entire evaluative process is nearly finished. By now, the following should be clear:

- ▶ how it was planned to measure 'outcome';
- ▶ how the outcome evaluation was actually conducted;
- ▶ from whom the outcome information was gathered;
- ▶ whether the intervention had any effect on target-group behaviour; and
- ▶ whether the intervention actually achieved its purpose.

The intervention has now been evaluated. The next stage is to publicise that fact and share the experiences gained.



Chapter 4

Communicating the results

The evaluation is now complete, but the work is not yet over. The use to which the conclusions will be put must now be considered.

Developing a communication plan

Evaluations can be conducted for many different reasons, but one of them should always be to provide a basis for future decision-making. Certain steps should be considered to ensure maximum use of the evaluation.

The following questions must therefore be answered:

- ▶ Who should be 'in the know'?
- ▶ When do they need the information?
- ▶ What information will interest different people?
- ▶ Which forms of written communication should be used?
- ▶ Which forms of oral communication should be used?



Part 2

Examples





Part 2 Examples

The following section provides background information on all the questions asked by the guidelines, as well as examples of how to answer these questions. Most of the examples are taken from the \Rightarrow prevention interventions in which the guidelines were applied during the feasibility phase, and most have been summarised or shortened because of space considerations. Given the diversity of possible interventions, these examples cannot be truly representative. Instead, they are used here to highlight the wide range of possibilities that may be encountered when evaluating a project.



Chapter 5

Evaluating programme planning

The phenomenon

🔗 What phenomenon is the intervention designed to prevent?

The phenomenon that should ultimately be addressed by a drug-prevention intervention is that of \Rightarrow substance-use behaviour in the \Rightarrow ultimate target group. This can refer to legal as well as illegal drugs, and holds true even if the phenomenon is only addressed indirectly, as in life-skills training or mass-media campaigns.

'We want to prevent the use of drugs — with a major focus on alcohol as a legal drug and heroin as an illegal drug among people aged between 10 and 18.'

'We want to prevent alcohol consumption at the workplace in a company with 750 employees.'

🔗 What are the socio-demographic characteristics of those affected by the phenomenon compared to those who are not?

The most important socio-demographic characteristics are gender, age, race, socio-economic status and area of residence. Depending on the planned intervention, other relevant characteristics could be \Rightarrow risk factors, \Rightarrow protective factors, personality traits and so on, and characteristics may vary for different drugs or different localities. It is crucial to know what these characteristics are as only then can the intervention be adequately focused on the \Rightarrow target group. However, as there could be dozens of group characteristics, it is best to focus on those that appear most relevant and are the best documented.



'According to a regional survey, there are four male drug users to every one female. The average age of all drug users is 27.6: 77 % are unmarried, 21 % have a high-school diploma and 45 % have a stable job.'

'Clubbers who regularly use ecstasy are between 18 and 23 years' old. They either tend to be in regular employment or they go to school or university (over 80 % of them are students).'

► Where does the phenomenon occur, and where does it not?

Exactly where the substance-use behaviour which the intervention aims to address takes place must be described. Does it happen, for example, at home alone, with friends, at nightclubs, on the street or in the countryside? It is equally important to know where it does not happen, so that the intervention can be correctly targeted. The answers to these questions are as essential as knowing who is affected by the phenomenon as, without them, the intervention will be unfocused.

'Alcohol consumption in our community occurs in private as well as public places (bars, discos, streets). Heroin is consumed mainly in private, but also in public parks. Both seldom occur in school.'

'In general, non-urban areas have lower levels of drug use.'

► How long has the phenomenon been known? Have its size, impact and relevance changed over time?

It is important to be able to make predictions about the future development of the phenomenon. Furthermore, an increase in the phenomenon justifies a more rigorous prevention intervention.

'After increasing rapidly in the last decade, heroin consumption seems to be stabilising. There is also a considerable increase in the use of ecstasy at clubs and "raves". Drug use is no longer an essentially urban phenomenon and, according to recent field research, poverty and insecurity are more concentrated among drug addicts.'



Finally, throughout, sources of information should be described and the quality both of the information and of the information sources noted. National surveys, literature reviews, other journal articles, personal surveys and so on can all be used.

'UK national survey of schoolchildren's drug use, and local surveys in the UK. These findings are broadly supported by research from other similar cultures, especially the USA and Australia.'

The conceptual background

► Which explanation best describes the origin of the phenomenon?

There might be more than one possible theory or explanation for a phenomenon, so the one that appears most relevant to the planned intervention should be outlined. Why this is the preferred theory should also be explained.

'There are many theories to explain teenage substance misuse. Although all of them have some merit, the most widely accepted are the theories of social learning and interaction. The main assumption is that teenage behaviour is heavily influenced by parents and peer groups, and from this viewpoint, the first experience with drugs is the result both of ⇒exposure to consumption-favouring models and of a vulnerability to social pressure.'

► What factors are responsible for the continuation of the phenomenon?

In some cases, the factors that cause a phenomenon are different from those that maintain and exacerbate it. It can sometimes, therefore, be more important to focus on these maintaining factors, especially as it will often be too late to affect the causal factors.

'The attitudes, habits and ⇒norms among adults towards alcohol and drug consumption are influencing factors for young people. They are also affected by the media.'



'There is an attitude of "no future" among young people in our area, which results partly from high unemployment. This negative self-image as a community is also affected by society's permissive social norms towards drug use.'

Examples of strategies and activities which could change (or which have changed) the phenomenon should also be described. Any specific successful interventions that have been conducted should be described in as much detail as possible. Even without knowledge of a similar successful intervention, the elements and features considered necessary for a particular type of intervention can still be mapped out.

'The implementation of primary prevention activities on a regional or national level is expected to influence the development of the phenomenon. Activities which could slow down the increase in drug use include: public-information campaigns; school-based prevention programmes; the provision of information to pre-existing and especially established parent groups; and programmes aimed at school leavers.'

'If an action programme is to have any value, it must be tailored to local conditions. Broad-based, intersectoral and interdisciplinary cooperation is needed. Other projects may also be able to help change the phenomenon, such as conferences and cultural events organised by young people themselves.'

The need for a prevention intervention

- **How many people are affected by the phenomenon? How many new cases are there and how often do they appear (⇒prevalence, ⇒incidence)?**

In order to estimate the relevance of the phenomenon, it is necessary to gauge its size and the number of people affected by it. This estimate can either be a general, national one, or on the more specific community level, depending on the scale of the proposed intervention. See ⇒needs assessment for more on how to obtain the necessary information.



'A British national survey in 1991 showed that more than 30 % of 15 to 16-year-olds admitted having used illicit drugs, especially cannabis and LSD.'

'Community estimates of the prevalence of regular alcohol use (at least once a week) among people aged 13 to 18: 30 to 50 % of a total of 540 people. Estimated incidence: 50 to 60 people in this age range each year.'

► **How is the phenomenon likely to develop if nothing is done? On what grounds?**

It is important to have a well-founded idea of the future development of the phenomenon if the intervention were not to take place. Essentially, this means ascertaining whether the phenomenon would get better or worse and whether consumption patterns or the user group would change if nothing were done. Without such answers, the relevance of the planned intervention remains unproved.

'Young people's substance misuse is likely to continue to rise. Alcoholic "soft" drinks are now widely available and it is generally believed that under-age drinkers are the target of this marketing exercise. Research has indicated that the use of a substance from a young age predicts the future use of other drugs.'

► **How should the need for the intervention be described?**

Apart from the number of people affected by the phenomenon, the reasons for undertaking the planned prevention intervention must be identified.

'The "great ecstasy debate" continues unabated. The increase both in use and seizures over the last few years has been dramatic (police report), while politicians and other public figures have expressed the urgent need for preventive activities.'

'Teenage girls with low self-esteem and little support from school are a high-risk group for drug and alcohol use.'



► **Are there different opinions as to the need for an intervention (⇒varying perspectives on need)?**

Different sources may have differing views on whether or not a prevention intervention is needed. These differing perspectives can cause problems. In each case, the target group, policy-makers and professionals must all agree on the need for the prevention activity. Without full agreement, a particular group with a particular agenda — a local politician, for instance, coming up for re-election — could 'hijack' the intervention for their own purposes.

'Local project workers, other prevention and treatment experts and policy-makers all agree on the need for this prevention intervention.'

'During the planning phase, the project planner identified varying perspectives on the need for a prevention intervention. These differences are due to the particular field (alcohol misuse) and the national profile of some of the experts. ⇒Cultural habits differ with regard to the use of alcohol in social situations and the amount and frequency of consumption.'

► **How was the need for the intervention assessed (needs assessment)?**

As different techniques can yield different results, the methods must be specified carefully.

'We consulted key people with many years' experience in drug-prevention work, education and teacher training. Other than themed discussions, no formal needs analysis was carried out.'

► **Are any related interventions being carried out or planned? Will the current intervention cooperate with these activities?**

In order to avoid unnecessary overlap and duplication, it is useful to find out about existing or planned prevention activities in the same area. Of course, this could also be helpful for exchanging ideas and experiences.



'There have been some attempts to use the Internet for prevention, but our planned intervention will be the first systematic effort in the country.'

'There are two other mass-media drug campaigns, one targeting the general population and the other, teachers. As our prevention campaign addresses young people, there is no overlap.'

The target group

- **Is the target group the ultimate target group or an \Rightarrow intermediate target group?**

This needs to be clarified or the intervention will not be clear.

'We are focusing on an intermediate target group (teachers).'

'The project target groups are pupils (ultimate target group) as well as teachers and parents (intermediate target groups).'

- **What are the socio-demographic characteristics of the target group, the scale of the phenomenon and the size of the group?**

These characteristics include age, gender and race, as well as socioeconomic status and living environment. Any other target group characteristics relevant to the intervention should also be identified, the phenomenon located within the group itself and the size of the group indicated. If there is more than one target group, this exercise should be undertaken separately for each.

'The target groups live in a socially and economically deprived area — a community with almost no infrastructure, on the outskirts of a small town, and separated from green and open space by a motorway. Some 150 families live in this so-called "social residential quarter" and drug misuse is rife.'



► **Why was this target group chosen?**

The choice of a particular target group might be influenced by theoretical considerations (it could be a high-risk group), more practical considerations (it was an easy group to reach or it was highly motivated) or a combination of the two.

'This target group was chosen because the incidence of drug use is high and because the presence of a village hall gave the opportunity of reaching the families via the community channel.'

'We chose fourth and eighth graders as the ultimate target group because of their high levels of heroin use. The intermediate target group (the local media) was chosen because it wanted to participate and because of its role as opinion-former.'

► **How many people will the intervention reach?**

The answer to this question is crucial. Goals for the intervention must be set, and they need to be realistic. If the potential target group is very large, as for example in a regional or national intervention, it is better to give a rough estimate of the number of people that will probably be reached, and then attempt to fulfil that estimate, than simply to say 'we want to reach as many as possible'.

'All 150 families in the community, about 500 people.'

'We expect to reach between 500 and 5 000 people in the first six months. Due to the nature of the Internet however, predicting the exact number of people visiting our site is difficult.'

► **Where and how will the target group be contacted, recruited and motivated (⇒selection effects, ⇒coverage, ⇒bias)?**

An intervention which no one notices is a waste of time and money. It must be recognised that a target group does not necessarily have any more motivation to participate in an intervention than a non-target group, and so — above all else — one should be



concerned with how to motivate potential targets to seek out the intervention and participate in it. Possible selection effects, bias and under-coverage (or even over-coverage) should also be taken into account.

'In our workplace programme, the director will contact all employees directly by letter as well as by placing a notice on the bulletin board. They will be entitled to time off work for the duration of the programme.'

'Children and young people (the ultimate target group) will be approached in school, leisure centres, youth clubs, police stations and voluntary organisations. Parents (the intermediate target group) will be approached through the school, at work and through information in the media.'

❶ How can it be guaranteed that the target group will stick with the intervention (⇒attrition)?

As with initial motivation, continued participation cannot be guaranteed — it is unlikely that contracts of obligation will have been signed with all participants, and so there is nothing to stop people walking out of the intervention. The risk of a high attrition rate has to be borne in mind and some attempt should be made to address it or to encourage people to stay with the intervention.

'Teachers will be offered an accredited certificate in drug-prevention education upon satisfactory completion of the course.'

'The school programme is mandatory for all girls in ninth grade.'

❷ Even if the planned intervention exclusively addresses an intermediate target group, what are the characteristics of the ultimate target group?

This is important if substance-use behaviour is not being addressed directly, as it can help keep the final aim of all prevention in sight.



'The prevention intervention addresses secondary-school teachers as an intermediate target group. Their target group are pupils in sixth grade (aged 11 and 12), most of whom do not yet consume illegal drugs, although they are at risk from doing so.'

Objectives

❶ How will the intervention affect substance-use behaviour in the ultimate target group?

An idea of how the intervention will affect substance-use behaviour is necessary. Even if it does not directly target such behaviour, it should ultimately affect it. In this case, it is more important to describe the \Rightarrow objectives that are expected to affect the \Rightarrow mediating variables or the intermediate target group. Even if an outcome evaluation of the intervention is not planned, there should still be some objectives.

These objectives might include preventing children from using drugs, postponing the age of onset of drug use, reducing the amount and/or frequency of substance use, and so on.

'The intervention's objectives are: to decrease regular/excessive consumption of alcohol; to decrease the number of young people regularly smoking tobacco; and to postpone first experimentation with drugs.'

'The indirect objective of the project (which is aimed at improving family functioning) is to reduce substance misuse and related risks.'

❷ How will the intervention affect mediating variables directly related to substance-use behaviour in the ultimate target group (\Rightarrow knowledge about substance use, \Rightarrow attitudes towards drugs, \Rightarrow intention to use drugs, norms)?

Apart from the direct influence on substance-use behaviour itself, the intervention might also aim to change mediating variables related to substance-use behaviour.



Primary prevention interventions will often focus more on these mediating variables than on substance-use behaviour itself.

'The intervention aims to increase knowledge about substance use (e.g. individual and social consequences of alcoholism).'

- ❶ **What objectives are considered for other mediating variables (⇒life skills, risk factors, protective factors, ⇒problem behaviour, ⇒structural changes, changes in ⇒lifestyle and cultural habits)?**

As well as mediating variables that are directly related to substance use (knowledge, attitudes, etc.) any intervention can also have profound effects on more general variables. This should be remembered at the start of the planning phase.

'The intervention will improve problem-solving, enhance communication skills, strengthen self-esteem and encourage creativity.'

- ❷ **What is the relationship between these mediating variables and substance-use behaviour?**

In order to affect mediating variables, the relationship between these variables and substance-use behaviour must be explained. The question everyone will be asking is how can giving someone a leaflet about drugs change substance-use behaviour or make an individual more self-confident?

'Autonomy, good affective relationships and social support from family and friends are considered to be protective factors against substance misuse.'

- ❸ **What are the objectives concerning the intermediate target group?**

If the intervention covers an intermediate target group, this section should effectively recapitulate the last four questions, but for this group, not for the ultimate target group.



'For teachers, the intervention's objectives are as follows: to increase awareness and understanding of substance use; to develop understanding of effective prevention and educational strategies; and to develop appropriate skills for working in this field (e.g. teaching, communication and counselling skills).'

'Improve the relationship between parents and their children.'

● How are the objectives for the intermediate target group and the ultimate target group related?

The relationship between the objectives for all the target groups must be identified. The essential is to understand how changes in the intermediate target group will affect the ultimate target group. Without a clear rationale for the choice of these objectives, their implications for drug prevention will remain unclear.

'Parents play an important role as models for the behaviour of adolescents. To affect smoking behaviour in this ultimate target group, parents' behaviour must be influenced as well.'

Methods

● What strategies, components and methods will be used in the intervention?

This is the core of the plan — the detailed description of the proposed prevention activities.

'The educational method used by the health education programme is that of "active learning" which aims to support and enable the development of a student's basic skills. It will be implemented in the three grades of elementary school and will cover three topics (tobacco, alcohol, illegal drugs). Methods include class discussions, group discussions, ⇒interviews, research/surveys, writing, dramatisation, role play, films, etc.'

'The intervention is designed for school teachers and drug educators to increase their knowledge of the most commonly misused substances, to improve their



communication skills and to enhance small group teaching and counselling skills. It is a four-module programme resulting in a certificate in drug prevention and education. The modules are based on the relevant literature and research.'

► Who will be involved in the intervention?

This refers not only to the people who will carry out the intervention, but also to those who will communicate the intervention's message to the ultimate target group. If the intervention is aimed specifically at the ultimate target group (schoolchildren, for example) then perhaps — although by no means always — the people who are conducting the intervention will be the only ones involved in it. However, if an intermediate group is targeted, it is likely that they will in turn become involved in communicating the intervention's lessons (local radio stations, for instance, running features on substance use, teachers giving drug-education lessons). All those expected to be involved in the intervention should therefore be covered.

'Teachers and parents will act as the main agents for change/intermediate target group.'

► Is there any empirical evidence for the success of the methods chosen (e.g. scientific literature, research papers)?

If similar interventions (or elements of them) have already been tested in another country or another setting, this should be pointed out and the relevant results summarised.

'There is no direct empirical support for the success of prevention via the Internet, but in some related areas, especially "telemedicine", studies on client satisfaction have been conducted. These studies show that in some cases the patients even prefer communicating with a computer than with a practitioner.'

► How long will the intervention last?

As well as knowing the who, how and where, it is equally important to know *how long* an intervention is expected to last.



'The programme director and policy-makers have agreed on five years with the option of extending it for another five.'

❶ **What is the planned timetable of the intervention (number of activities, duration and frequency of each activity, etc.)?**

The duration of each of the intervention's elements should also be described in more detail.

'Three community group meetings for two hours each; 12 working-group meetings for two hours each; five to eight additional seminars for parents. For the ultimate target group: fourth-graders — eight one-hour lessons each year; eighth-graders — four one-hour lessons each year.'

'Weekly classes (one hour each) for one year, making a total of about 40 weekly classes.'

❷ **Will the feasibility of the intervention be tested?**

Before starting a new intervention or a tried-and-tested old one in a new field, whether the intervention will be accepted by the target group and whether it is likely to achieve the expected results should be examined. In a mass-media campaign, for example, the materials that are to be used may be 'test-driven' within a 'focus group' to discover their reactions. Alternatively, some teachers might be asked for their views on a manual for a school project, or a full 'dry-run' of the intervention may even be undertaken.

'We plan to use a "drug-information suitcase" filled with material related in some way to drugs or drug-use behaviour, such as brochures, texts about drug use, and so on. We plan to test out this suitcase with several people without any prompting and to ask them for their opinions.'

'We want to ask 25 people about a poster on risk-taking behaviour which we have designed to be distributed to schools. People will be asked to describe what they



see on the poster, what they think the most important message is, and whether they think it suitable for this purpose.'

Resources

- ▶ **Which staff members will carry out the intervention, and what qualifications are required?**

Only the people directly involved in the prevention project should be listed. All additional resources should be described in the following sections.

'Project director — formal characteristics: MD, psychotherapeutic training, minimum of five years' experience in carrying out and evaluating prevention programmes. Informal characteristics: credibility, acceptance by the community pressure group. Major project implementer — formal characteristics: psychotherapeutic training, professional experience in working with adolescents. Informal characteristics: credibility, grew up in community where prevention intervention takes place, able to identify with young people.'

- ▶ **How time-consuming will the intervention be for each of these staff members?**

It is important to plan realistically to avoid overloading those involved in the intervention. One should always be aware of the pitfalls of underestimating the time needed to carry out the intervention.

'Project leader: two hours per day over a period of two years. Project implementer: 100 %, i.e. 40 hours per week.'

- ▶ **What is the budget and who is providing it?**

The overall budget, as well as the source(s) of funding, should be given.

'Between ECU 200 000 and 300 000. Funded by National Institute of Health.'



- ▶ **What additional resources are available (e.g. people, organisations, rooms, materials, etc.)?**

These resources should be identified, as they can provide invaluable support.

'An office is available for drug prevention and counselling, fully equipped with personal computer, telephone and fax machine.'

'Audiovisual and projection tools (television displays), computer.'

- ▶ **What could hinder the implementation or evaluation (⇒barriers)?**

It is important to anticipate potential obstacles in order to find ways to avoid them if and when they occur.

'Potential barriers: language difficulties, time-consuming travel, lack of financial support and the difficulties professionals may have in finding enough time to participate fully.'

Planning the process evaluation

- ▶ **Is a process evaluation planned?**

A simple 'yes' or 'no' answer will suffice. If the answer is 'yes', more in-depth answers will be needed at a later date (see Chapter 2).

- ▶ **What resources are available to undertake such a process evaluation?**

Whether the necessary financial and personnel resources are available to perform the process evaluation adequately must be assessed. The costs in terms of time and money are often underestimated. It is advisable to reserve 10 to 30 % of the financial resources available for a prevention intervention for process and outcome evaluation.

'The evaluation will be performed by our unit's research team.'



► Who will carry out the process evaluation?

The name of the organisation or individuals who are likely to carry out the evaluation should be given. Their role (internal or external to the intervention) and their formal and informal characteristics (member of staff, qualifications, etc.) should be described.

'Psychologist — a member of our staff will assist him. An external ⇒evaluator will carry out the process evaluation. Contacts already exist at the Mental Health Research Institute of the local university.'

Planning the outcome evaluation

► Is an outcome evaluation planned?

A simple 'yes' or 'no' answer will suffice here too. If the answer is 'yes', more in-depth answers will be needed at a later date (see Chapter 3).

► What resources are available to undertake the outcome evaluation?

Whether the necessary financial and personnel resources are available to perform the process evaluation adequately must be assessed. The costs in terms of time and money are often underestimated. It is advisable to reserve 10 to 30 % of the financial resources available for a prevention intervention for process and outcome evaluation.

'The outcome evaluation will be performed by the research team of the co-operating local university.'

► Who will carry out the outcome evaluation?

The name of the organisation or individuals who are likely to carry out the evaluation should be given. Their role (internal or external to the intervention) and their formal and informal characteristics (member of staff, qualifications, etc.) should be described.

'There will be an external evaluator from the university research team.'



Reflecting on the planning phase

Who was involved in the planning phase?

Whose ideas and wishes were taken into account when planning the intervention should be considered. This could include the team implementing the prevention intervention, the target group (intermediate/ultimate), policy-makers and researchers.

'The project was set up as an "action research model". The first step was to assess the need for a prevention intervention among the target group. To this end, we interviewed families in the community, asking them where they expected to see interventions (in the school, family, community, etc.), how effective they expected these interventions to be, and what they felt the key areas of an intervention should be. Thus, the target group was directly involved in the planning phase, along with the research team itself, consisting of two psychologists and two social workers.'

What is the overall assessment of the planning phase process?

If any difficulties arose which should be addressed differently in the future, they should be noted now.

'Some aspects of the planned intervention were not sufficiently thought through. During planning it became apparent that we had to have more concrete ideas on how to transfer the benefit of the intervention from our intermediate target group (teachers and social workers) to the ultimate target group (schoolchildren).'



Chapter 6

Process evaluation

Planning the process evaluation

- **What variables and indicators will provide useful information on how the intervention was accomplished? What kind of information (qualitative or quantitative) will the process evaluation assess?**

There are four ways of conceptualising helpful variables and indicators:

1. Will the intervention be implemented as designed? This could be backed up by, for example, teachers' reports on the use of an intervention manual.
2. How much of the intervention will the target group receive? This can be answered with information on the number of training sessions and their duration.
3. Will the prevention intervention be changed during implementation? Self-reports from trainers about any adaptation during the intervention's implementation are helpful here.
4. What is the quality of the intervention? This could be assessed by schoolchildren's satisfaction with the intervention.

The distinction between quantitative and qualitative information refers to whether the information can be expressed in numbers (quantitative) or in verbal descriptions (qualitative). An example of a quantitative approach is the use of a questionnaire; an example of a qualitative approach is an unstructured interview about an individual's experience of the intervention.



'Variables that will be used to assess the realisation of the prevention intervention: observation and report on whether the intervention has been delivered; the number and duration of the training sessions; teacher and pupil satisfaction. As well as these quantitative measures, group interviews on the implementation process will be conducted with all teachers.'

► **What methods and ⇒instruments will be used (interviews, questionnaires, ⇒observation instruments)?**

Questionnaires, interviews, reports, checklists and written records can all be used to measure the process. Another possibility might be the use of observation during the intervention's implementation.

'Questionnaires, semi-structured interviews and informal telephone interviews with the leader of the team will all be undertaken. Semi-structured interviews will be carried out with the course tutors and participants, as well as observation of a number of training sessions and focus groups with evaluation personnel.'

'The students' interest, behaviour and attitudes during the intervention are quality indicators. They will be observed by the trainers and described in a protocol.'

► **Where, when and how often will the process data be collected (⇒design)?**

This is as important as the evaluative tools.

'During dance events, and after each intervention.'

'Classroom questionnaires will be distributed after each training session, and observations will take place during the third, sixth and ninth sessions. Teacher interviews will also be conducted after the fifth training session.'



❶ Who will provide the information needed for the process evaluation?

It must also be decided who will be asked or examined (e.g. intervention participants, trainers, teachers, independent ⇒observers, etc.).

'We will obtain information from the schoolteachers who will implement the programme, the head teachers in the schools where the programme will be implemented and students who will attend the programme.'

❷ How will the data be analysed?

At this point, whether to apply any special statistical procedures or merely to describe the data should be decided. For the former, the necessary preconditions for complex data analysis (statistical knowledge and technical equipment) must be available.

'The questionnaire data will be analysed by the statistics programme entitled "Statistical package for the social sciences" (SPSS). The statistical procedure that will be used is Manova.'

'Student interviews (satisfaction with the intervention, interest in the training, personal benefit, increased knowledge, etc.) will be analysed and the results will be proportionally described.'

'The data will be analysed qualitatively to give a "three-dimensional" description of the whole process of planning, setting up, delivering and sustaining a fully accredited certificate course in drug education. As part of an action research strategy, the research team will regularly feed back findings to the drug-prevention team leader so that modifications may be made to improve the course on an ongoing basis.'



Implementing the prevention intervention

- What strategies, components and methods were actually implemented? Compare the answers with the original plan (see Chapter 1, 'Methods').

What actually happened must now be described in detail.

Components

The educational materials used by the health education programme are divided into three parts. The first deals with smoking ("counter attack on smoking", "the language of persuasion", "the first offer", "giving up the habit"). The second deals with alcohol ("the general picture", "in between", "one among many", "ask yourself"). The third deals with drugs ("pictures", "a pill for every patient", "why not try"). The appendix has three sections ("drugs — general information", "self awareness", "how we breathe").

All components have been implemented in the three secondary-school grades. For example, parts one and two of the first section dealing with smoking are implemented in the first and second grades, part three in the second grade and the remainder in the third grade. In other words, the appropriate materials have been chosen according to the students' age.

Methods

The educational method used by the intervention is that of "active learning", which aims to support and enable the students' basic skills to develop. The activities include: class discussion; group discussion; interviews; research/survey; attitudes; classification; debate; writing; role play; the media; posters; community involvement; reflection; etc.

⇒ Intermediate target groups

The secondary-school teachers were trained by the scientific team in a three-day seminar on the intervention's principles and methods. This training was approved by the Department of Education and the teachers' participation was voluntary. Alongside the permission required from the Department of Education, the consent



of the head teacher and the Association of Teachers has been indispensable. The training was carried out according to the original plan.

Parents were also told about the goals of the health education programme. They could join a special “parent group” and, throughout, the programme has tried to promote close cooperation between schools and the local community.’

- ▶ **What data sources and instruments were used to measure the intervention’s implementation? Compare the answers with the original plan (see Chapter 2, ‘Planning the process evaluation’).**

These sources could include participants, trainers, the evaluator, an independent observer, or anyone else involved in the implementation process. Instruments can include questionnaires, reports, checklists, interviews or discussion groups.

‘The people involved in this measurement exercise were: the teachers who took part in the programme; the head teachers of the schools that implemented the programme; and the students who attended the programme.’

‘Municipal teams for community prevention of drug addiction were entrusted with organising the implementation of the programme in their regions, and thus gave invaluable information. Teachers, parents and schoolchildren were also sources of data.’

‘The “Notebook for teachers”, as well as allowing for personal comments from every teacher who implemented the programme, included questions such as: Which element of the intervention has been implemented? How helpful have the manual’s instructions been? Can these instructions be improved? Were there any difficulties during implementation?’



- **What resources were actually used? Compare the answers with the original plan (see Chapter 1, 'Resources').**

It is vital to determine whether the resources were used as planned or whether changes occurred. Knowing this will be extremely helpful in any future application of the intervention.

'The resources were used as planned with the following exception. The fact that 20 % of the pupils had moved away from the area meant that the administrator needed to spend more time chasing up the new addresses in order to send the follow-up questionnaire. Instead of 20 hours a week, she needed to work 30 hours for a period of three months.'

The target group revisited

- **How many people did the intervention actually reach?**

This is an obvious question, but a crucial one for making any headway in understanding the overlap between the actual and the planned interventions.

'Some 450 pupils were contacted.'

- **What were their socio-demographic characteristics?**

This is just as important as the number of people reached. The answer will allow the planned target group to be matched with the actual target group. It will also help to detect ⇒selection effects.

'Gender: 45 female and 75 male participants. This is a gender ratio of 1:1.7. Education: 10 junior high-school students, 35 high-school students, 75 college students.'

'Primary school: 10 % of participants. Secondary school: 90 % of participants. The annual income of the families reached: < USD 15 000 — 10 %; USD 15 001 to USD 35 000 — 60 %; > USD 35 000 — 30 %.'



'Other relevant information: the participants belong to an ethnic minority (Moroccan woman, Muslims).'

🕒 How was this information collected?

As different methods yield different results, it is important to know how the information was collected. Different methods of data collection can lead to possible distortions in the answers, for example, participants may over-estimate their income in group discussions.

'The socio-demographic data were collected using an anonymous questionnaire. This questionnaire was handed out after the first session and collected at the next session.'

Throughout, the answers should be compared with the original plans, in this case the target group as envisaged in Chapter 1, 'The target group'. Deviations concerning the target group when setting up the intervention may lead to differences in its implementation and in the final results.

'The target group was reached as planned.'

'We planned to reach young people aged between 15 and 17 visiting "raves". The actual participants were older (mean age: 18.3 years).'

'The gender ratio and the ratio of German to other nationalities was supposed to be the same in all three experimental groups. In fact, in the ⇒control group there were 10 % more Turkish pupils than in the other two groups.'

Exposure

🕒 How was ⇒exposure measured? Which data sources, instruments or indicators were used?

A crucial element for understanding whether the intervention reached the proposed target group is to estimate how prominent the intervention actually was. For instance,



in a public-information campaign, how widely information leaflets have been distributed will need to be known. Who was asked must also be clarified in order to gather the relevant data. These data sources could be all those involved in the intervention or just a select few. Once again, what data-gathering instruments were used must be spelled out.

'The teachers in the schools implementing the programme were the main data source. The "Notebook for teachers" asked for comments on the programme's implementation, as well as for information on the number of teaching hours actually carried out in each class.'

- **How long did the prevention intervention actually last and how many prevention activities took place? Compare the answers with the original plan (see Chapter 1, 'Methods').**

This description of the duration and the number of activities carried out will help in assessing the level of exposure.

'In the first two years of implementation, each class had 12 lessons of 45 minutes each.'

'The number of sessions ranged from three to 10, with a mean of 8.76 sessions. The average length of each session ranged from less than 30 to over 50 minutes, with a mean of 40 minutes. Time differences were mostly due to variations in the length of the classes, which ranged from 45 to 55 minutes. The whole programme consisted of 10 sessions.'

- **To what extent was the target group actually reached? Compare the answers with the original plan (see Chapter 1, 'The target group').**

This is a key question, because even if a prevention intervention is fully delivered to the target group, some of that group may not receive the intervention because of absence, illness or truancy.



'In total, 1 500 students took part in the programme. Some 85 % took part in all 12 lessons, 93 % took part in 10.'

Quality of the prevention intervention

► Who provided the information on the ⇒ quality of the intervention?

These sources could include participants, trainers, the evaluator, an independent observer, or anyone else involved in the implementation process.

'Teachers and students were the source of information on the quality of the actions developed.'

► What indicators and instruments were actually used to evaluate the quality of the intervention?

Indicators can include active participation, attitudes towards the intervention, personal benefit or degree of identification. Instruments could include questionnaires, reports, checklists, interviews or discussion groups.

'Teacher indicators used: perceived efficiency, degree of satisfaction, participation experience, versatility of the programme, curricular integration, attractiveness of supporting material. Pupil indicators used: recognition of the programme, linguistic adaptation, personal experience of the time dedicated to the programme, perceived efficiency.'

'Teachers received a questionnaire that included questions about class participation in the programme, class disruption and achievement. A global rating of how well the programme was implemented was also assessed (1 = very poorly to 4 = very well).

In addition, the research staff observer conducted random observations of implementations in each school, as well as periodic telephone calls and meetings with teachers and head teachers. Criteria for rating implementation were discussed among research and programme staff prior to actual observation, until a



consensus (using hypothetical examples) was reached. Items included observed class participation, interest and teachers' completion of session activities, as well as an overall rating of implementation (1 = very poorly to 4 = very well). The observer's overall rating was compared to the teachers' report of overall intervention implementation.'

● **What are the results of the quality measurements?**

This is one of the most crucial questions if the results of the particular intervention are to be used to inform future interventions.

'The assessment of teaching methods, attainment of objectives and involvement of students revealed the following: for 8.6 %, teaching methods were inefficient; for 10.4 %, objectives were not achieved; and for 13.4 %, student involvement was low. However, overall quality ratings show 52.7 % of the ratings to be excellent, 46.7 % to be good and only 0.6 % to be poor.'

Discussing the results of the process evaluation

● **How do the plans for the intervention compare to its actual implementation and the current evaluation? Are there any discrepancies and what are the possible reasons for them?**

Any deviations and discrepancies in the intervention's implementation, its target group and its exposure should be summarised. Doing so will help in discussing and interpreting the intervention's results.

'The intervention was implemented as planned — no discrepancies were found. The target group was also reached as planned. However, due to ill health among staff, the exposure rate was lower than planned. In two classes, only six of the 10 lessons were conducted.'



► **What is the impact of any discrepancies on the intervention?**

If there were any discrepancies, their implications for the intervention should be discussed. This will help in understanding their significance for the intervention's implementation.

'Due to the lowered exposure rate, it is difficult to draw conclusions as to the intervention's effects. The negative results may be related to this fact.'

► **What are the strengths and weaknesses of the way the intervention has been implemented? Compare these with results from other interventions.**

Answering this question will help avoid similar problems and improve implementation in the future. If possible, compare the results of the intervention with similar interventions reported in the literature. This is very important, as it forms the basis for any judgment about the worth of the intervention.

'Results of this study indicated a high quality of programme realisation, as measured by the level of exposure and overall judgment of the quality of implementation. One problem concerning generalisation of the results is the assistance the teachers received from the project staff. Teachers were contacted by telephone and could talk over any problems. This assistance probably contributed to the high motivation of the teachers. Whether similar results can be gained when teachers do not receive special treatment is still to be ascertained. The findings of process evaluation are consistent with the results of other school-based life-skills programmes.'

► **What suggestions can be made for the future implementation of a similar prevention intervention?**

Having completed the prevention intervention, the implementer is well placed to make suggestions for other planners.



'In the future, we envisage increased involvement from teachers, a further analysis of attitudes and ⇒lifestyle, and a modification of the videotape to include a specific section on new drugs.'

- **What suggestions can be made for future process evaluations of this kind of prevention intervention?**

The implementer is also in a good position to make recommendations about process evaluation.

'After each session, we asked the pupils to fill out a questionnaire on the session. We used the same questionnaire after each session and noticed that pupils became less and less careful when answering. We would therefore suggest the inclusion of specific questions relating to each session in order to make answering them more interesting for the pupils.'



Chapter 7

Outcome evaluation

Planning the outcome evaluation

● What are the \Rightarrow indicators for outcome and how will they be measured?

Deciding how to measure outcome is not always easy, but it is a crucial decision. Given the constraints of money and time, a good outcome measure is one that is not only feasible to use, but also more or less directly related to the goals of the intervention. In order to know whether the intervention has achieved its aims, the criterion for those goals must be clearly defined. In other words, it must be 'operationalised' and defined in measurable terms. This is especially important with \Rightarrow mediating variables, which are often not easily observable.

'The main outcome indicator will be the self-report WHO \Rightarrow questionnaire, "Survey on the student population". Questions concern tobacco and alcohol use, medicine and illegal drugs, knowledge about substances, attitudes towards substances, intentions to use substances, and antisocial behaviour.'

● Will the information on outcome be collected following a \Rightarrow quantitative or a \Rightarrow qualitative approach? What indicators and \Rightarrow instruments will be used to collect information?

Assessing the outcome of an intervention in a scientifically plausible and efficient way requires the data to be quantifiable. If outcome information is to be collected following a qualitative approach (for example, using an unstructured \Rightarrow interview), the answers should be analysed in a quantitative way.



'The intervention is planned to increase the knowledge and skills of drug educators. Knowledge will be measured by a written test after the intervention with 50 questions on drug-related topics. Education skills will be measured by asking the participants to produce an outline drug-education programme for a named client group within a specified educational setting; to create a lesson plan; and to present the lesson plan. The participants will evaluate the content and presentation of each other's lesson plans.'

'We will apply a sub-scale ("locus-of-control") of the "Life-skills training student questionnaire".'

● **What is known about the quality of the instruments (⇒objectivity, ⇒reliability, ⇒validity)? Will the feasibility of the instruments be tested?**

In order to assess the results of any evaluation correctly, it is important to give information on the quality of the instruments used. For instruments that are already well established, it is usually sufficient to refer to the handbook or manual. If instruments have been specially constructed for the intervention, however, it may be useful to study their reliability and validity. Testing the feasibility of an instrument is obviously advisable in such a case, but this should also be carried out when using an instrument constructed for another language, cultural background, area, and so on. In such situations, it might be more suitable to have the instrument rated externally for comprehensibility and logic.

'We plan to use the "Children's self-concept attitudinal inventory". As a paper-and-pencil test, it is objective. As evidence for reliability, the scales in the inventory have an average Cronbach alpha of 0.80. There is also evidence for validity of the scales based on the "know-group-method" of comparing high- and low-performance students in school. We had to translate the questionnaire into our own language, and so we plan to conduct a small feasibility study. We will ask 10 pupils to fill out the inventory and to indicate for each question whether they understand what we mean by it.'



- **From whom, when and how often will information on outcome be collected (⇒design)?**

It is also important to understand how recent and how widespread the outcome information is.

'Using a quasi-experimental design, data will be collected from an experimental group and not a randomly assigned ⇒control group. The data collection will take place twice (one week before and one week after the intervention).'

- **How will the information gathered be analysed? Which ⇒statistical methods are adequate for the quality of the data and the design?**

If those implementing the intervention will be analysing the data, the statistical procedures and technical equipment to be used should be described. It may, however, be advisable to hand data analysis to an experienced researcher. Who will process the data should also be indicated.

'Questionnaire data will be analysed by the computer package SPSS PC+. Processing entails frequencies, multiple variable tables, mean values and comparisons between means per group (⇒Chi-square and students T).'

'Data filing and processing will be carried out by the research team working for our institute.'

Achieving the outcome evaluation

If the outcome evaluation has been accomplished as planned, refer to the respective questions in Chapter 3, 'Planning the outcome evaluation'. If any changes have occurred, describe the evaluation as it was actually conducted.



The sample

► How was the sample recruited?

How the sample was approached (i.e. via a notice board, a newspaper advert, word of mouth, etc.) is as important as how the whole \Rightarrow target group was recruited. Whether the sample participated voluntarily or compulsorily is also significant, as is the issue of reimbursement.

'The questionnaire was distributed to classes in the first grade of secondary schools before the implementation of the health education programme, as well as to the classes of two control schools. The completion of the questionnaire was compulsory and took place over two consecutive teaching hours.'

'The experimental group was made up of all those who took part in the intervention. The control group was recruited from students of the same age, sex and socio-demographic characteristics, attending the same school levels in the same geographical area. Both groups chose to participate in the outcome evaluation.'

► What were the sample's socio-demographic characteristics, size and so on?

The characteristics of the sample and — if applicable — the control group should be described separately and compared for any significant differences. Any such differences lessen the degree of comparability between the two groups.

*'**Experimental group** (n = 120): 60 (50 %) female, 60 (50 %) male. Average age 10.8 years; standard deviation 2.4; range 5.5 to 17.3.'*

*'**Control group** (n = 110): 80 (73 %) female, 30 (27 %) male. Average age 11.0 years; standard deviation 2.3; range 6.5 to 17.6.'*

' \Rightarrow Intermediate target group: five schoolteachers, two youth and community police officers, four drug educators. The participants ranged in age from 21 to 55 years. Ethnic groups: three black, eight white. Six female, five male.'



🔗 **How do these characteristics compare with those of the whole target group?**

It is, of course, vital to know whether the sample is representative of the whole target group.

'As planned, we gathered results on outcome from a subgroup (20 %) of the target group. Since we had administered the first questionnaire on ⇒substance-use behaviour to all participants in the intervention, we were able to compare socio-demographic characteristics between the sample and the whole target group. There were no significant differences in age, gender or other characteristics.'

🔗 **Was it possible to identify drop-outs? If so, what were their characteristics?**

If those that do not stay in the sample until the end of the data collection differ significantly from the others, for example in age or gender, it is likely that the sample is no longer representative.

'All stayed in the sample. There were no drop-outs.'

'We made a statistical comparison of the differences between the drop-outs and the remaining sample (age, gender, socioeconomic status, etc.). There were no significant differences between the two groups. The groups are therefore comparable.'

The outcomes

This crucial section should follow the same format as the earlier description of the intervention's ⇒objectives (Chapter 5, 'Objectives'). The first three questions refer to outcome variables in the ⇒ultimate target group, the rest to outcomes in the intermediate target group.



- ▶ **How did the intervention affect the ultimate target group's substance-use behaviour?**

'The life-skills training had a significant primary-prevention effect. Thirty-day ⇒prevalence of smoking at post-test (one year after ⇒pre-test and the beginning of the intervention) was significantly lower in the experimental group (6.4 % both post- and pre-test) than in the control group (11.4 % post-test compared with 5.5 % pre-test).'

- ▶ **How did the intervention affect mediating variables related to substance use in the ultimate target group?**

'There was a significant difference between the experimental group and the control group concerning ⇒knowledge about substance use. Knowledge was higher in the group that had received the intervention. None of the other variables yielded significant results. No group differences were found for positive attitude towards taking drugs, ⇒intention to use drugs, or positive ⇒norms concerning drug use.'

- ▶ **How did the intervention affect other mediating variables in the ultimate target group?**

'So far, significant differences were found only for one mediating variable. Mean values for social competence were significantly higher in the experimental group than in the control group ($p < 0.05$).'

- ▶ **How did the intervention affect objectives in the intermediate target group?**

'Our mass-media campaign had a positive influence on the intermediate target groups (parents and teachers): 80 % said they now think more about their responsibility for children and adolescents; 61 % said they had learned a lot about substance misuse; and 45 % said they now think more about their own consumption of alcohol and tobacco.'



- Are different subgroups affected differently by the intervention (e.g. men/women, age groups, risk groups, etc.)?

'After the intervention, girls showed an enhanced knowledge of drug-use behaviour compared with boys (T-test $p < 0.05$).'

Discussing the results of the outcome evaluation

- Did the intervention achieve the expected outcomes? Discuss any discrepancies between expectations and results, addressing possible reasons for them and their impact on the study.

At this point, any arguments against how the outcome results were interpreted should be anticipated.

'One of the objectives of the intervention was the enhancement of \Rightarrow life skills. At present, only one mediating variable was significantly different at post-test — a scale measuring social competence. Children in the experimental group showed significantly greater improvement between measurements than the children of the control group. Since the scale measuring social competence contains some behaviour that is an important element of the \Rightarrow prevention intervention (e.g. learning to say no), the improvement of the experimental group can be seen as confirmation of the success of the programme. Together with a lower prevalence of smoking in this group, it is also an indirect confirmation of the theoretical assumption that improvement of life skills is an important primary-prevention intervention.'

- What are the most relevant and significant results? Compare these with results from other studies.

'A similar primary-prevention effect on smoking (namely, the delay of initiation into smoking) has frequently been reported as a result of life-skills training.'



► **Is it certain that the intervention caused the results? Are there any alternative explanations for them?**

Without an answer to these questions, doubt can always be cast on an intervention. It is extremely important, therefore, to address the issue of cause and effect.

'Since we did not have a control group, we cannot say for certain that the effects are really caused by our intervention. An important influence to be considered is the maturing of the participants over the course of the year.'

► **What explanation is there for negative results?**

It can be very discouraging if an outcome evaluation does not show the expected result. However, there could well be a number of explanations for negative results, such as deficiencies in the intervention itself, its implementation (the process evaluation can be useful here to highlight relevant aspects), flaws in the design, inadequate measurement instruments (some could be too insensitive), or perhaps external problems out of the intervention's control (a fire in a school, for instance). Whatever the reason for unexpected results, an explanation for them should always be found to enable conclusions to be drawn for the future.

'Contrary to our expectations, there were no effects on alcohol consumption. This might be due to the fact that the prevalence of alcohol consumption is very low in this age group, and so it is possible that effects will occur later. A second follow-up will therefore be conducted after one year. It can also be argued that the topic of alcohol consumption is irrelevant for this age group.'

► **What suggestions can be made for the future use of similar interventions?**

It is now time to look to the future. Should other people copy this intervention, and if so, what modifications should be made?

'The positive outcome results justify an implementation on a much broader basis. However, the results of process evaluation should also be taken into account and



changes in the structure of the training should be made according to the teacher comments.'

❶ **What suggestions can be made for future outcome evaluations of this kind of prevention intervention?**

The experiences and suggestions of the intervention's implementers can be of crucial importance for other ⇒evaluators and practitioners. They can profit from positive results, but also from negative ones, by avoiding making the same mistakes. As a result, complete honesty is essential.

'One reason for the lack of positive results may be the lack of high-quality instruments for pupils aged 10 to 12. Future research should therefore focus on the development and use of sensitive instruments for this age group.'



Chapter 8

Communicating the results

Developing a communication plan

► Who should be 'in the know'?

Potential audiences include funding agencies, policy-makers, administrators, the intervention's ⇒target group, service providers, community groups and the media.

'We have made our evaluation available to the partners in the project, the authorities and the public.'

'First, we will inform the planning committee, as it is a primary user of information. We will give special attention to the committee chairperson, who has vast experience and is a respected opinion leader. We will inform her individually before the general committee meeting and discuss potentially controversial findings.'

► When do they need the information?

If the results of the evaluation are to be useful, the timing of an evaluation report can be critical. The results should be reported before too long, as changes are more likely to occur soon after an evaluation and while the intervention is still vivid in people's memory. On the other hand, the results should not be reported too early. ⇒Evaluators are often pressed to give a 'first impression' of effectiveness, but such impressions have limited use, as insufficient data will have been collected to allow for any valid conclusions. First impressions also tend to mean that 'last impressions' go unnoticed.

'There will be two intermediate reports and one final report to the funding agency. Teachers will be informed about results continuously in the meetings taking place every two months.'



❶ What information will interest different people?

The message should be tailored to the specific audience. Different audiences will need different information. Staff, for instance, will probably be more interested than funders in the details of the implementation. The latter may also be too busy to read a full report, and so an executive summary is more important for them. Such a summary should contain a brief overview of the evaluation, an explanation as to why it was conducted, as well as the major findings, conclusions and recommendations.

'We will carry out team discussions with teachers as the main ⇒intermediate target group throughout the period of process evaluation and continually feed back the information we receive. The primary user of the outcome evaluation is the funding organisation, which expects a comprehensive written report on the findings at the end of the evaluation.'

❷ Which forms of written communication should be used?

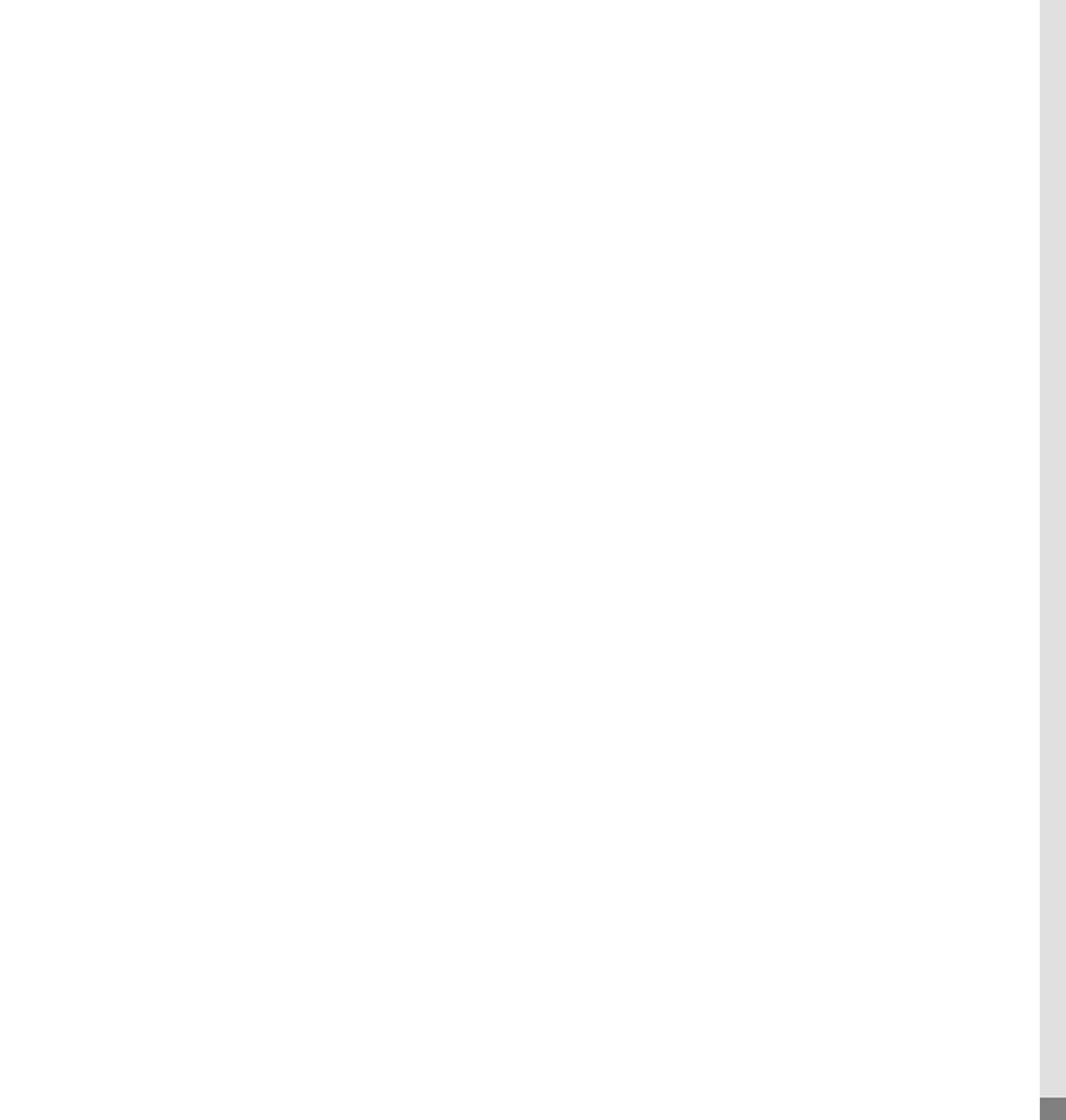
Evaluation results can be communicated in a variety of forms, which again have to be chosen according to the relevant audience. Examples of written communication include the evaluation report itself, an executive summary, memos, press releases, articles in scientific journals or newspapers, posters and leaflets.

'We will produce a research report to be distributed to schools and other public and private agencies working in the field of youth problems and their prevention.'

❸ Which forms of oral communication should be used?

Paper is not everything. In fact, many findings can best be disseminated through personal discussions, presentations at conferences or public hearings, and media appearances.

'Results of the programme will be presented at a National Association for Addiction conference, as well as during European Drug Prevention Week.'



Part 3

Glossary





Adherence

Adherence describes one aspect of an intervention's implementation, along with fidelity and reinvention. It usually measures whether a programme was implemented in the experimental group rather than in the control group and whether both groups adhered to their respective experimental conditions. Indicators of adherence in the experimental group can include whether the programme was implemented sufficiently rigorously to conclude that it was delivered, or whether the programme lasted long enough for the target group to notice it.

Attitudes towards drugs

Attitudes towards drugs comprise all opinions, beliefs and norms that people have about drugs. Examples include 'drinking alcohol makes people act stupidly', 'people who use cannabis have more fun', and so on. Attitudes towards drugs are mediating variables and are often used as indicators in outcome evaluation, although a causal relationship to drug-use behaviour cannot always be found. It is, however, believed that positive attitudes towards drugs will lead to an increase in drug-use behaviour, whereas negative attitudes will decrease such behaviour.

Attrition

The investigation of drop-outs is crucial for medium and long-term prevention interventions. A drop-out is an intervention participant who took part in the initial data collection(s), but who did not remain in the sample for the full duration of the intervention or the data collection. A large number of drop-outs can threaten the validity of the outcome results by building in bias. Drop-outs may also create problems for statistical analysis by decreasing the size of the sample.

Barriers

The financial situation, staffing, politics, administrative difficulties and many other conditions can hinder the evaluation of any prevention intervention. Barriers can include a loss of funding, negative staff attitudes, a decision not to publish the evaluation report or a school's refusal to allow a survey of its students.

**Bias**

Bias refers to all kinds of unplanned and often unnoticed variations which occur during the data-collection process and which can prejudice the results of the evaluation. An example of bias is the extent to which only specific subgroups of the designated target group participate in the intervention (only highly motivated children, for instance). Such a sample is 'skewed' and the results could be invalid. Bias can also be introduced via attrition and logical mistakes in the evaluation ⇒design.

Control group

The control group is a group of people who do not participate in the prevention intervention that is being evaluated. Instead, this group receives either no intervention, or one that is not related to the prevention activity.

Control-group design

The control-group design (or 'experimental design') compares the data obtained from the control group with the results from the experimental group to identify any differences in the variables which the intervention is supposed to change. There are two types of control-group design: the 'true' experimental design; and the quasi-experimental design. Under the first, participants are randomly assigned to groups. To ensure random allocation, each person or each group of people in a target population must have the same chance of being selected for either the experimental or the control groups. This is considered to be the optimal approach because it avoids systematic differences (e.g. selection effect, bias) between the groups and it increases the validity of outcome results. However, it is expensive and in the evaluation of prevention interventions, randomisation is rarely accomplished. Instead, quasi-experimental designs tend to be used, under which people are assigned to groups by other procedures, such as matching (when a control group is selected that most closely resembles the experimental group).

Coverage

Coverage means the extent to which an intervention reaches its intended target group. It can be defined as the ratio of the number of actual participants to the number of intended participants, and low coverage may increase the bias.



Cultural habits

In this context, cultural habits are substance-use behaviours influenced by the cultural or social norms of a specific society. Examples include the consumption of wine with a meal in southern Europe or the consumption of beer after work in Germany. Cultural habits determine the use or non-use of drugs in social situations, the amount and frequency of consumption, and can influence the perception of drug-use behaviour. One objective of a prevention intervention might be to change these cultural habits to make drug-free alternatives more acceptable.

Data quality

The quality of the data determines how an evaluation will proceed and what statistical procedures can be used. These statistical procedures are grouped as 'scales'.

The most primitive scale is the 'nominal'. In a nominal scale, objects and events are merely classified, such as male/female, smoker/non-smoker, and so on. Nominal data can be analysed by techniques such as the Chi-square test.

The next level is the 'ordinal scale' which ranks objects and events (e.g. 1 = very poor, 2 = poor, 3 = good, 4 = very good). It is not, however, possible to add, subtract, multiply or divide numbers in an ordinal scale. Hence, the measurement for central tendency in ordinal data is, for example, the mode rather than the mean. Ordinal data can be analysed by techniques such as the Mann-Whitney U-test or the Wilcoxon test.

The next level is the 'interval scale'. An interval scale identifies how far apart the scores are because each unit on the scale is of a fixed size (such as degrees Celsius). Interval data can be analysed by the T-test or by analysis of variance.

The highest level is the 'ratio scale'. This incorporates the concept of a 'true zero', which means that relationships between two scores are the same, such as in height or weight. Data in the social sciences are most frequently on the nominal or ordinal level, sometimes on an interval level and almost never on a ratio level.



Design

A design is a plan which indicates how often, when and from whom information will be gathered during the course of an evaluation. A good design is essential if the results of an evaluation are to have any future use. A design with at least one experimental group and one control group is known as a control-group design; a time-series design uses only one experimental group, but at least three data collections; and designs that do not use a control group or time-series analysis are the pre- and post-test designs.

Evaluator

The person who acts as the evaluator should be familiar with evaluation planning, social-research methodology, statistical designs and related problems. They should have sufficient statistical knowledge to analyse the data gathered during the intervention's implementation, and should be familiar with specific computer packages (such as SPSS, SAS). Since systematic evaluation is based on social science research, many evaluation specialists also have a basic social science training.

There are two fundamental models for the evaluator's relationship with the organisation carrying out the intervention — they can perform an 'internal evaluation' (when they are part of the implementing organisation) or an 'external evaluation' (when they work for a research institute, consultancy or university). There are pros and cons to both options. Since internal evaluators have better access to the programme staff and administration, they may be more familiar with the intervention than an external evaluator. A lot of information that is gained informally will not be available to an external evaluator. Being well known and trusted, an internal evaluator usually finds the staff more willing to devote time to the evaluation, to admit problems and to share confidences. The results of the evaluation may also be fed back to the project staff more easily and more informally. The clear disadvantage to an internal evaluator may be a lack of objectivity imposed, first, by their dependence on the organisation and, second, by their personal relationships with the programme staff.

Internal and external evaluators can perform all three types of evaluation — planning, process and outcome. However, certain situations are better suited to one or other type of evaluator. It may be more appropriate for planning and process evaluation to



be undertaken by an internal evaluator, whereas outcome evaluation may be better served by an external evaluator.

Exposure

- Exposure measures how much of an intervention the target group actually experienced. This includes the number and length of intervention sessions and the materials used. The degree of exposure also relates to levels of participation and whether participants were actually reached by the intervention.

Fidelity

Along with adherence and reinvention, fidelity is an aspect of programme implementation. Fidelity measures whether the programme was implemented as originally designed — that is, how true it stayed to plan. It can be measured either by an evaluator's subjective judgment or by more objectively documenting procedures, such as whether the required number of programme sessions were delivered.

Incidence

Incidence is defined as the number of new cases displaying a particular phenomenon arising in a specific geographical area during a specific timescale.

Indicator

An indicator is a measure that reflects a particular problem or condition. Indicators are used to substitute an objective or concept which cannot be measured directly or which will only be observed in the future. The selection of appropriate indicators has to be founded in the literature, theories or previous research. Indicators are used to measure the quality of implementation or the outcome of an intervention.

Instruments

Instruments refer to all the methods used to collect information on the target group, the evaluation, and so on. The most widely used instruments in evaluation are self-report questionnaires, tests, ratings, interviews and observation instruments. It is advisable to use instruments with well-founded objectivity, validity and reliability. The feasibility of the instruments should be pre-tested before using them on a wider scale.

**Intentional changes**

Intentional changes are initiated deliberately to improve the intervention or evaluation.

Intention to use drugs

The intention to use drugs is a mediating variable and is often used as an indicator in outcome evaluation. It deals with whether an individual believes that he or she will use drugs in the future. It is especially useful in primary-prevention programmes which target young children, when it does not make sense to ask if they have already used drugs.

Intermediate target group

An intermediate target group is a group of people targeted by an intervention who play a mediating role. It is hoped that they will be able to influence the future substance-use behaviour of the ultimate target group by passing on the contents of the intervention. Multiplier-centred approaches, peer-group approaches and family-oriented approaches all address an intermediate target group.

Interview

In evaluation research, interviews are used to assess data on the implementation process and outcome. Interviews can differ in their degree of standardisation (whether structured, semi-structured or unstructured interviews), the type of contact (face-to-face, telephone or written) or the number of people interviewed at the same time (individual or groups).

Knowledge about substance use

This refers to the factual knowledge participants have about substance use. On the basis that 'knowledge is power', it is assumed that a lack of knowledge leaves people exposed to substance use, while an awareness of the relevant facts allows them to choose healthy lifestyle patterns. Knowledge about substance use is a mediating variable and is often used as an indicator in outcome evaluation.



Life skills

Life skills enable people to deal effectively with the demands and challenges of everyday life through teaching adaptive and positive behaviour. These skills enhance individual competence, reduce susceptibility to drug use and promote the health and well-being of children and adolescents. The following life skills are often targeted in prevention interventions: decision-making; problem-solving; creative thinking; critical thinking; effective communication; interpersonal-relationship skills; self-awareness; empathy; coping with emotions; coping with stress; and resilience.

Lifestyle

Lifestyle relates to specific attitudes towards drugs among certain groups and in specific social or environmental conditions. The dance scene is an example of a lifestyle, where clubbing is associated with the use of synthetic drugs. A prevention intervention can have lifestyle change as one of its goals.

Mediating variables

Mediating variables are supposed to be linked to substance-use behaviour by encouraging the changes in substance-use behaviour brought about by the prevention intervention.

Two kinds of mediating variables can be distinguished:

- ▶ mediating variables that are directly related to substance use, such as knowledge about substance use, attitudes towards drugs, intention to use drugs and norms;
- ▶ mediating variables that are only indirectly related to substance use, such as life skills, risk factors, protective factors, structural changes, lifestyle, cultural habits and problem behaviour.

Needs assessment

Needs assessment (or needs analysis) is the systematic appraisal of the perceived phenomenon and the appropriateness of the proposed intervention. It is essential in order to avoid misjudging the size and character of the specific problem and therefore the need for the specific intervention. Different techniques can be used in needs assessment.



The 'key-informant approach' involves identifying, selecting and consulting experts working in the field. The value of this technique is that a broad impression can be gained of the needs and services required for the target group. The limitation is that this impression could be based upon the experts' pre-existing prejudices or biased information. It is therefore a good strategy to draw up a question structure to be used with all the experts. This will allow the answers given by different experts to be compared. The questions should address specific and concrete information (who, where, what and how) as another check against biased information.

The 'community-forum approach' is based on an open meeting of community members. It can be used to gather information about the prevalence and incidence of a problem and about the characteristics of the target population. As in the key-informant approach, there is still the chance of biased information, either because of an under-representation or an over-representation of individuals affected by the problem within the community forum. Best results can therefore be obtained if the evaluator draws on a cross-section of the community. Again, it is helpful to ask specific questions to ensure the validity of the information.

The 'rate-under-treatment approach' estimates the target population by analysing the experience of a similar prevention activity in another community. The assumption underlying this approach is that the characteristics and size of the two groups will be similar.

The 'indicators approach' estimates the target population on the basis of epidemiological data from national statistical sources. These statistics are normally generated by various government agencies. Often, data are available on the populations of cities, towns and counties.

Finally, specially commissioned surveys to assess the nature and extent of the problem are among the most direct and often most accurate way of estimating the need for an intervention.



Norms

Norms are unwritten rules of behaviour that are cognitively represented as beliefs or opinions. In the context of substance use, normative beliefs have been identified in empirical research as strong mediating variables for initiating substance-use behaviour. One objective of a prevention intervention can be to influence or to change these normative beliefs.

Objectives

Objectives are specific and measurable statements regarding the desired outcome of the prevention intervention. For evaluation purposes, the formulation of objectives must specify the variables to be changed and establish measurable success criteria. A plausible, testable assumption must link programme activities to objectives, and objectives to intended outcomes. Unless vague goals are formulated into specific objectives, it will not be possible to implement an intervention or to assess the effectiveness of the intervention.

Objectivity

Objectivity is, along with reliability and validity, an important indicator for the quality of an instrument. It refers to the fact that the results yielded by the instrument must be independent of the person measuring the data — different people using the same instrument should achieve the same results.

Observation instruments

Observation instruments are used to assess a specific situation or condition. In the case of prevention evaluation, observation is usually used to measure the implementation of an intervention, especially its fidelity. It is used either as the sole source of information or as an additional source to validate other measures of implementation. Observation by research staff or independent observers is considered the most objective measurement. It can be carried out either in narrative detail or by using standardised question structures or rating schemes.



Observer

An observer attends a prevention-intervention activity to listen to and see the verbal and non-verbal behaviour and interaction of the participants and project organisers. In contrast to everyday observation, this empirical observation requires a plan which specifies the behaviours to be viewed, whether an interpretation of the observation is allowed, and where, when and how the observation takes place and is recorded.

The observer should be introduced to the concept of the specific prevention intervention in order better to understand the observation's meaning, without explaining the specific evaluation hypothesis to avoid observer bias. Additionally, observers should be trained in the use of observation instruments.

Pre- and post-test

The pre- and post-test design is a simple way to plan an outcome evaluation without the benefits of a control group. In this design, the only people measured are those who receive the intervention. They are tested (for example, on their knowledge, attitudes or intentions) before and after the intervention. The differences between the two measurements are then checked for statistical significance. The advantage of this design is its simplicity and the fact that it is not very time-consuming. The major drawback is that without a control group, it is not clear whether the results are really due to the intervention or to some other confounding factors.

Prevalence

Prevalence is the number of cases with a given condition or characteristic in the population of a particular geographic area at a certain time (e.g. the number of people who have taken cannabis in the last year).

Prevention intervention

A prevention intervention describes an activity carried out to prevent a substance-use behaviour. Prevention interventions can be realised in different settings and with different methods and contents. The duration can vary between one-off activities and long-term projects running for several months or more.



Problem behaviour

Certain problem behaviours can be considered risk factors for drug use. These can include inappropriately shy or aggressive behaviour, lying, stealing, truancy, anxiety, and so on.

Protective factors

Protective factors are a personal or social condition assumed to decrease the probability — in this case — of substance misuse. They are therefore the mirror image of risk factors. They may alter, or even reverse, predictors of negative developments and enable individuals to cope with negative life events. Individual protective factors that are consistently identified in the literature include social competence, problem-solving skills, autonomy and self-efficacy, sense of purpose and managing the future. Examples of protective factors within the family are care and support, boundary setting, high consideration of children and encouraging children's participation and involvement. More general protective factors include success in school and strong bonds with pro-social institutions.

Qualitative approach

Qualitative approaches to evaluation aim to understand a programme or particular aspects of it as a whole. Instead of entering the study with a pre-existing set of expectations for examining or measuring processes and outcomes (quantitative approach), the emphasis is on detailed description and in-depth understanding as it emerges from direct contact and experience with the programme and its participants. Qualitative techniques rely on observation, interviews, case studies and other means of fieldwork. This approach can be appropriate alone or in combination with quantitative approaches, for example when a programme emphasises individualised outcomes, when there is concern for programme quality, or when the goals of a programme are rather vague. Qualitative data cannot easily be summarised in numerical terms, but they may be transformed into quantitative data.

Quality of intervention implementation

The quality of implementation refers to how the participants or the practitioners rate the intervention and its quality. Indicators relating to perceptions of the intervention could include the acceptance of its contents, the degree of identification with or



credibility of those contents, satisfaction with the intervention, personal benefit and relevance to the problem. Indicators which relate to perceptions of the intervention's quality could include the persuasiveness of the practitioners, their motivation and the interaction between practitioners and participants.

Quantitative approach

Quantitative data are observations that can easily be represented numerically, such as answers to structured questionnaires. Quantitative approaches to evaluation are concerned primarily with measuring a finite number of specified outcomes. The emphasis is on measuring, summarising, aggregating and comparing measurements and on deriving meaning from quantitative analyses. Techniques often used in quantitative approaches are experimental designs and employment of control groups. They are particularly important when the primary aim of the evaluation is to establish programme effectiveness (qualitative approach).

Questionnaire

A questionnaire is a list of questions, the answers to which can be systematically assessed. Depending on the answering mode, questionnaires may have open answers (where the respondents have to formulate the answers themselves) or closed answers (where they have to choose between several possible answers).

Reinvention

Reinvention is an aspect of implementation along with adherence and fidelity. It refers to alterations in programme contents and implementation from the originally developed standard. It differs from lack of adherence by involving intentional and planned changes which were initiated in order to enhance the programme's effectiveness (as opposed to lack of acceptance, non-cooperation or unplanned change). Reinvention is especially important when programme effects could be boosted by tailoring its content to certain environments or populations.

Reliability

Reliability, validity and objectivity are important indicators for the quality of an instrument. The reliability of an instrument is defined as the degree to which identical scores or values would be obtained in repeated data collections with the same



subjects. Reliability ratings show whether the instrument yields consistent results. The effect of unreliability is to dilute or obscure real differences when they exist. If, for example, the outcome of an effective intervention is measured with an unreliable instrument, it may appear to be less effective than it actually is and vice versa.

Risk factors

Risk factors are personal or social conditions that are assumed to increase the probability of — in this case — substance misuse. They therefore mirror protective factors. Evidence suggests that children who are socially incompetent and aggressive are at greater risk of developing drug problems than those who are better integrated. A number of studies have shown that antisocial behaviour such as aggressiveness can predict — as early as the first grade — an early initiation into substance use and later substance misuse. The literature differentiates between early childhood risk factors (such as lack of social competence, lack of social support in the family), late childhood risk factors (lack of problem-solving skills, detrimental family norms, lack of self-esteem) and adolescent risk factors (negative influence of peers, reduced self-esteem due to adolescence).

Selection effects

Selection effects reduce the representative nature of a sample. They can refer to the fact that the participants that are easiest to reach are also the most likely to change. Projects relying on voluntary cooperation are therefore most often affected by selection effects. (See also bias.)

Statistical methods

Depending on the kind of data, a number of different statistical procedures have to be followed when making group comparisons. Examples of procedures for group comparison of two variables include the Chi-square test, the T-test and analysis of variance (ANOVA). Procedures for more than two dependent variables are called 'multivariate comparisons'. An example of this is the multivariate analysis of variance.

For the analysis of repeated measures (e.g. pre- and post-test), statistical procedures have to be used that are suitable for dependent samples. This rules out Chi-square tests.



In order to compare outcome data with process data, 'regression analysis' has to be used. This procedure determines, for example, whether and to what extent the effects of an intervention are due to the way it was implemented.

► ***Analysis of variance***

ANOVA is used to examine differences in the means of two or more independent groups, analysing how unlikely any observed difference would be in a set of random samples from a single population.

► ***Chi-square test***

The Chi-square test is used to compare data from two or more different groups. It can be used for categorical variables such as gender (as opposed to continuous variables such as age). The test converts a variable into categories and computes a Chi-square statistic. The statistic thus calculated provides information on whether the groups are comparable or whether they are significantly different.

► ***T-test***

The T-test checks whether the mean of a variable for subjects in one group differs significantly from that in a control group. It can be used on samples which are independent from, or dependent on, one another.

Structural changes

The structural approach aims to change the environment — including the social environment — so that individuals are more likely to behave in a desired way. Structural approaches include projects that address drug-related social problems, counselling centres for partner problems, and drug-free alternatives like youth centres and sports facilities.

Substance-use behaviour

Substance-use behaviour refers to the consumption of a substance. Substance-use behaviour can be described in terms of the substances used (alcohol, heroin, cocaine, cannabis, etc.), the patterns of use (occasional use, regular use, recreational use, misuse, addictive use, etc.) and the frequency of use.



Target group

The target group is the group of people, households, organisations, communities or any other identifiable unit towards which a prevention intervention is directed. Two kinds of target group can be identified: ultimate target groups; and intermediate target groups. A careful analysis and estimation of the size and nature of the target group are essential preconditions when documenting the need for a prevention activity. It will also increase the quality and effectiveness of the project.

Ultimate target group

The ultimate target group is the group of people who will finally profit from the intervention. These individuals can be addressed directly by the intervention or indirectly via the intermediate target group. Two concepts may be used to identify the ultimate target group: population at risk; and population in need. The first covers a segment of the population with a high probability of developing the substance-use behaviour (e.g. children from broken homes, children with drug-dependent parents or siblings). In contrast, the term 'population in need' defines the target population as a unit with specific characteristics (e.g. all fifth graders).

Unexpected changes

Unexpected changes in the programme implementation or evaluation are changes or deviations from the programme plan that were unplanned and unforeseen. They can be negative in their consequences (lack of programme acceptance, school-district changes, budget cuts, etc.). But they can also be positive, such as unexpectedly high participation rates and additional sponsors.

Validity

Validity, reliability and objectivity are important indicators of the quality of an instrument. Judgments of validity answer the question of whether an instrument really measures what you want to know and whether it is appropriate.



Varying perspectives on need

Potentially, professionals, policy-makers and target groups all have different perspectives on what constitutes a problem. What appears as a problem in one group may not be perceived as such by another. Research obviously cannot settle the issue of which perspective is the 'right' one, but it can eliminate conflicts that might arise from approaching drug phenomena from different perspectives. Part of the planning evaluation may include needs assessment from the several perspectives that may be involved in the intervention.



Bibliography

The publications listed below do not represent a comprehensive overview of evaluation literature. Rather, these are the articles and books which were helpful sources when designing the guidelines. Those marked with an asterisk (*) are deemed to be especially useful when conducting an evaluation.

Braverman, M., *Evaluating health promotion programs*. San Francisco, CA: Jossey-Bass Inc., 1989.

Bruvold, W., 'A meta-analysis of adolescent smoking prevention programs', *American journal of public health*, 83(6), 1993, pp. 872-880.

Card, J., et al., 'Planning an evaluation and estimating its cost', *Evaluation and the professionals*, 15(4), 1992, pp. 75-89.

Collins, L., and Seitz, L., *Advances in data analysis for prevention intervention*, National Institute on Drug Abuse (NIDA) research monograph, Rockville, MD: NIDA, 1994.

Conrad, K., et al., 'Threats to internal validity in work site health promotion programme research: common problems and possible solutions', *American journal of health promotion*, 6(2), 1991, pp. 112-122.

Dryfoos, J., 'Lessons from the evaluation of prevention programs', *Prevention evaluation report*, 1(1), 1993, pp. 2-3.

Elder, J., et al., 'CATCH: Process evaluation of environmental factors and programs', *Health education quarterly*, 2, 1994, pp. 107-127.

*Fitz-Gibbon, C., and Morris, L., *How to analyse data*, second edition, Beverly Hills, CA: Sage, 1988.

*Fitz-Gibbon, C., and Morris, L., *How to design a program evaluation*, third edition, Beverly Hills, CA: Sage, 1989.

Hansen, W., 'Pilot test results comparing the All stars program with seventh grade DARE: program integrity and mediating variable analysis', *Substance use and misuse*, 31(10), 1996, pp. 1359-1377.



- Hansen, W., et al., 'Program integrity as a moderator of prevention programme effectiveness: results for fifth-grade students in the adolescent alcohol prevention trial', *Journal of studies on alcohol*, 52(6), 1991, pp. 568-579.
- *Henerson, M., et al. *How to measure attitudes*, second edition, Beverly Hills, CA: Sage, 1988.
- *Herman, J., et al., *Evaluator's handbook*, third edition, Beverly Hills, CA: Sage, 1989.
- Hughes, J., and Sullivan, K., 'Critical reviews, outcome assessment in social skills training with children', *Journal of school psychology*, 26, 1988, pp. 167-183.
- *King, J., et al., *How to assess program implementation*, second edition, Beverly Hills, CA: Sage, 1988.
- Klepp, K., et al., 'Ten-year follow-up of the Oslo youth study smoking prevention programme', *Preventive medicine*, 22, 1993, pp. 453-462.
- Meyer, A., et al., 'Balancing the priorities of evaluation with the priorities of the setting: a focus on positive youth development programmes in school settings', *Journal of primary prevention*, 14(2), 1993, pp. 95-113.
- Morgan, M. (in press), *Towards the development of an instrument bank for the evaluation of prevention*, Lisbon: EMCDDA.
- *Morris, L.I., et al., *How to measure performance and use tests*, second edition, Beverly Hills, CA: Sage, 1988.
- *Morris, L., et al., *How to communicate evaluation findings*, second edition, Beverly Hills, CA: Sage, 1988.
- Muthen, B., and Jöreskog, K., 'Selectivity problems in quasi-experimental studies', *Evaluation quarterly*, 7(2), 1983, pp. 139-174.
- NIDA, *Preventing drug use among children and adolescents — a research-based guide*, Rockville, MD: NIDA, 1997.
- *Patton, M., *How to use qualitative methods in evaluation*, third edition, Beverly Hills, CA: Sage, 1989.
- Pentz, M., et al., 'Effects of program implementation on adolescent drug use behavior', *Evaluation review*, 14(3), 1990, pp. 264-289.
- Pentz, M., and Trebow, E., 'Implementation issues in drug abuse prevention research', in Leukefeld, D., and Bukoski, W., (Eds) *Drug abuse prevention intervention research: methodological issues*, Rockville, MD: NIDA, 1991.



bibliography

- *Rossi, P., and Freeman, H., *Evaluation — a systematic approach*, second edition, Beverly Hills, CA: Sage, 1982.
- Scheirer, M., and Rezmovic, E., 'Measuring the degree of programme implementation', *Evaluation review*, 7(5), 1983, pp. 599-633.
- Schinke, S., et al., *Substance abuse in children and adolescents*, Beverly Hills, CA: Sage, 1991.
- Scriven, M., *Evaluation thesaurus*, fourth edition, Beverly Hills, CA: Sage, 1991.
- *Stecher, B., and Davis, W., *How to focus an evaluation*, second edition, Beverly Hills, CA: Sage, 1988.
- Sloboda, Z., and David, S., *Preventing drug use among children and adolescents. A research based guide*, Rockville, MD: NIDA, 1997.
- Steckler, A., et al., 'Toward integrating qualitative and quantitative methods: an introduction', *Health education quarterly*, 19(1), 1992, pp. 1-8.
- Stufflebeam, D., *The personal evaluation standards. How to assess systems for evaluation educators*, sixth edition, Newbury Park: Corwin, 1995.
- Tobler, N., 'Meta-analysis of 143 adolescent drug prevention programmes: quantitative outcome results of programme participants compared to a control or comparison group', *Journal of drug abuse*, 16(4), 1986, pp. 537-567.
- Torabi, M., 'General standards for educational evaluations', *Health values*, 17(4), 1993, pp. 57-59.
- Uhl, A., 'Probleme bei der Evaluation von Präventionsmaßnahmen im Suchtbereich', *Wiener Zeitschrift für Suchtforschung*, 20(3/4), 1997a.
- Uhl, A., 'Evaluation of primary prevention in the field of illicit drugs: Definitions — Concepts — Problems', in Springer, A., and Uhl, A., (Eds) *Evaluation research in regard to primary prevention of drug abuse*, Brussels: European Commission, 1997b.
- Vaeth, P., et al., 'Examining the link between provider roles and program development: findings from a process evaluation of a community-based prevention program', *Journal of primary prevention*, 16(1), 1995, pp. 55-73.
- Van der Stel, J. (Ed.), *Handbook prevention: Alcohol, drugs and tobacco*, Strasbourg: Pompidou Group, Council of Europe, 1998.
- Wagner, E., and Guild, P. A., 'Primer on evaluation methods: choosing a strategy', *American journal of health promotion*, 4(2), 1989, pp. 134-139.

Feedback sheet

Please send or fax this sheet to:

Gregor Burkhardt
European Monitoring Centre for Drugs and Drug Addiction
Rua da Cruz de Santa Apolónia 23-25
P-1100 Lisbon
Fax (351-1) 813 79 43 or 813 17 11

Name of programme _____

Address of the centre responsible _____

.....
ADDRESS

.....
POSTCODE

.....
CITY

.....
COUNTRY

Name of contact person, department or service _____

.....
NAME

.....
TELEPHONE

.....
FAX

.....
E-MAIL

Programme approach/setting _____

- first childhood intervention
- school programme
- youth leisure time
- mass-media campaign

- telephone help-line
- community programme
- outreach work
- other:
.....

Coverage _____

- local
- regional
- national

- European Union
- international (outside EU)
- other:
.....

When will you start to use the guidelines?.....

Will you report your experience of the guidelines to the EMCDDA? YES NO





European Monitoring Centre for Drugs and Drug Addiction

**Guidelines for the evaluation of drug prevention
A manual for programme-planners and evaluators**

*Christoph Kröger, Heike Winter, Rose Shaw
Institut für Therapieforschung (IFT), Munich*

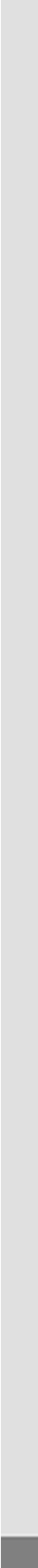
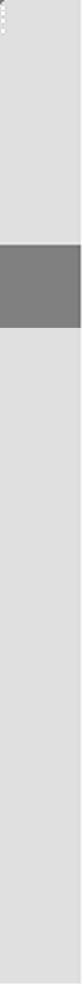
Luxembourg: Office for Official Publications of the European Communities

1998 — 96 pp. — 20 x 21 cm

ISBN 92-9168-052-4

Price (excluding VAT) in Luxembourg: ECU 7





Price (excluding VAT) in Luxembourg: ECU 7



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-9168-052-4



9 789291 680528 >