EVALUATING TOBACCO CONTROL ACTIVITIES

EXPERIENCES AND GUIDING PRINCIPLES

C. CHOLLAT-TRAQUET

WORLD HEALTH ORGANIZATION
GENEVA

Evaluating tobacco control activities

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Claire Chollat-Traquet
Director, Division of Development of Policy, Programme and Evaluation
World Health Organization
Geneva, Switzerland

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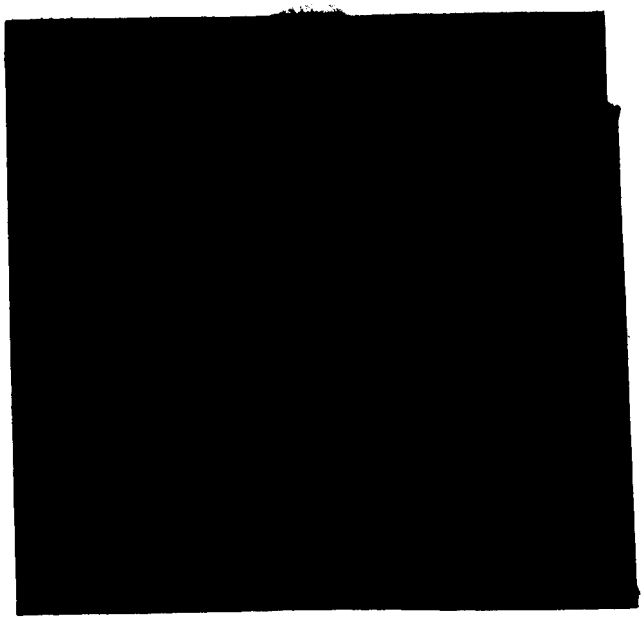

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Preface

In a global context of budget restrictions and deflationary policies, public expenditure is more carefully scrutinized than ever. Public and private funds for health promotion, health protection and disease prevention are becoming increasingly scarce and their utilization is closely watched; this is reflected in the search for added efficiency and value for money. Simultaneously, global demands for, and public expectation of, health action are placing added burdens on public and private health systems and on health-oriented nongovernmental organizations.

Against this sombre background, tobacco control programmes have had to establish their niche within political and health systems. Probably more than for other major health problems, the lack of resources for preventing the use of tobacco is striking, especially when compared with the financial turnover of the tobacco industry and related advertising. Indeed, the gross revenue from the international tobacco operations of the largest company is equal to the gross domestic product of Bangladesh, a country of 115 million inhabitants, and represents a hundred times the total health budget of Ecuador. The lack of resources is striking also because tobacco control programmes are different from other health programmes in that they do not work to protect human beings against natural forces such as disease or catastrophe but rather against the ravages of a dangerous drug purveyed by other human beings. Tobacco control activities have to be re-evaluated regularly for effectiveness since the adaptive capacities of the tobacco industry constantly threaten their effectiveness.

Tobacco control efforts in a growing number of countries have to contend with forces such as the rise in tobacco production by an average of 2% each year and the legal and social acceptability of tobacco use which leads to public indifference regarding the need to curb tobacco consumption. To explain this lack of public interest, some have given the excuse of the apparent novelty of the problem since, prior to the publication of the first epidemiological studies on smoking and health at the beginning of the 1950s, smoking and other forms of tobacco use had not been identified as a major cause of death and disease. Yet the massive financial support that can be mustered in a few months to campaign against other diseases shows that the social acceptance of the use of tobacco, the dependence it engenders and the economic power of the multi-

national tobacco companies are major contributing factors to the difficulty in properly funding tobacco control activities.

Against this background, the need for the careful selection of tobacco control activities and the evaluation of their relevance, efficiency, effectiveness and impact has been recognized. Resolution WHA43.16 adopted by the Forty-third World Health Assembly in May 1990 required the Director-General of WHO to monitor and report biennially to the Health Assembly on the progress and effectiveness of Member States' tobacco control programmes.

As one step in the implementation of resolution WHA43.16, this publication provides general principles and tools for the evaluation of public health programmes aimed at controlling tobacco use. For the first time, an attempt is made to bring together in a single publication guidelines for evaluation of all the major tobacco control measures that have been adopted by countries. Some of the elements of the book, such as the suggested indicators, are generally applicable and can be integrated into the design of tobacco control programmes or activities at an early stage. Other aspects will need to be adapted to local circumstances.

The book is intended to help policy-makers, public health specialists and others in the public and private sectors of developed and developing countries to develop tobacco control programmes and activities. It is thus meant for use in a variety of national and regional situations, whatever the socioeconomic, political or cultural background. The fact that many examples are taken from industrialized countries reflects the amount of research done in this area. Nevertheless, many of these examples could be adapted to suit a variety of situations and countries. Such models will facilitate the development of expertise in countries where human resources for health programme evaluation are still scarce and where, consequently, evaluative efforts have so far been limited.

Acknowledgements

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It is often difficult to cross the final hurdle. In this regard, I am grateful to Dr Dulce P. Estrella-Gust of the Philippines and to Neil Collishaw of WHO who provided technical support in the last stages by ensuring that the comments of external reviewers were reflected in the text.

Introduction

This book has four parts. The methodological information and recommendations in Parts 1, 2 and 3 include examples selected for the variety of evaluation approaches and techniques they offer. For those using the book for reference, it is possible to concentrate on the guidance given for the evaluation of specific types of tobacco control activities. Nevertheless, such readers are recommended to consult the definitions given in Part 1 since they provide general background information for the use of the monograph.

Part 1 deals with the general principles of evaluation of tobacco control programmes. The first chapter summarizes the essential "tobacco-or-health" issues and the reasons for adoption of certain policies. Chapters 2 and 3 outline the main principles of evaluation and consider methodological concepts and practical constraints. In addition, Chapter 2 provides general indications on the design and timing of evaluation, and the procedures to be used, while Chapter 3 deals with the complex issues of measuring outcome and making use of the results.

The evaluation of measures addressing the protection of general populations is dealt with in Part 2, which examines first the impact of tobacco on national economies and the validity of the use of economic measures such as price policy, taxation, and distribution controls. Age restrictions and measures to limit places where tobacco can be used are then analysed. Importance is given to the evaluation of bans on advertising and sponsorship and restrictions on tar and nicotine content. Finally, essential elements are given for the evaluation of the use of health warnings.

Health promotion and education programmes are described in Part 3, in particular evaluation of the effectiveness of the use of mass media, the role of tobacco prevention programmes in schools and within the community, action by health personnel and the role of smoking cessation programmes.

Within Parts 2 and 3, as far as possible, each type of tobacco control activity has been presented in a standard way:

- After a short definition of what the activity may encompass, examples are provided of evaluations conducted in different national settings. Examples have been selected for their interest and because they demonstrate different evaluation methods and approaches with varying degrees of sophistication. Brief comments are then offered on the examples.

- The next section of each chapter focuses on the methods to be applied in an evaluation, the type of information needed and the process for evaluating the relevance, adequacy, efficiency, effectiveness, progress and impact of each activity. Emphasis is placed on simple approaches that can be applied in most countries. Whenever possible, indications are given on how to extend the evaluations and on where to find complementary methodological information.
- Finally, indicators are established for the evaluations. These may be used not only for the evaluation of activities but also as a checklist by people developing tobacco control programmes at national level.

Part 4 discusses how control measures could be strengthened by appropriate legislative provisions together with advocacy for tobacco control — such as contact with politicians, political promotion and lobbying — that has brought about changes in policies in a number of countries. The role of political leaders and their advisers in the development of national tobacco control policies and programmes and the steps that lead to the adoption of legislation do not easily lend themselves to evaluation. However, as these are often linked to legislative action, some criteria and information on this subject have been included in Chapter 18. Chapter 19 assesses the value of tobacco litigation in furthering the tobacco control movement.

The art of evaluation is to be able to give the right judgement — not a verdict — on the basis of careful assessment and critical appraisal of given situations. It should lead to useful conclusions and proposals for future action. In this context, the guidance given in this publication should also be regarded as providing support for asking the right questions in order to make an enlightened judgement. For more detailed information on application of techniques, reference should be made to the lists of suggested reading at the end of each chapter.

Contents

Part 1

General principles for evaluation of tobacco control programmes

Evaluation is a systematic way of learning from experience, using the lessons learned to improve current activities and to promote better planning and allocation of resources by the careful selection of choices for further action. Evaluation is the key to better use of the scarce resources available for tobacco control.

Part 1 provides the general background to the issues of "tobacco or health" and related control programmes and gives an overview of principles and methods that can be used for their evaluation. There is considerable potential in all countries for formulating simple evaluations based on sound design, adequate theoretical and empirical data, and objective measurement of outcome. To encourage evaluation and to make the publication useful to the widest group of persons involved in tobacco control, a number of concepts have been summarized or rapidly reviewed.

Evaluation of tobacco control programmes requires input from a large number of disciplines such as behavioural and political sciences, sociology, economics, epidemiology, statistics and medicine. Furthermore, as for any policy evaluation, it requires a global vision of political, social, economic and human issues. As a number of situations may call for original approaches and methods, it is important to develop evaluations without preconceived ideas.

Theory is one thing but its application generally calls for a number of adaptations. By giving specific examples of tobacco control programmes and activities it is hoped to encourage varied approaches to evaluation in all countries and all types of programme. It is also hoped that the general description of tobacco control measures and some of the indicators developed as essential tools in the evaluation process will find application as planning tools.

Chapter 1

Tobacco or health: background information

Tobacco use, diseases and deaths

Though precise data on tobacco consumption and behaviour are available to governments only for a certain number of countries (mostly industrialized ones), reasonable estimates can now be given for most countries.

In industrialized countries, between 20% and 40% of women smoke, particularly young women, among whom smoking is on the increase; 30–40% of men smoke, and this figure is generally on the decrease. In developing countries, between 2% and 10% of women and between 40% and 60% of men use tobacco. However, there are exceptions to this general pattern and WHO has found it helpful to propose a classification of countries according to their stage in the development of the tobacco epidemic. This classification will also be fundamental in the selection of means for controlling the epidemic. The four stages are described in Box 1.

In the 1990s, a world total of 3 million people will die each year from tobacco-induced diseases. About 2 million of them will be in industrialized countries and about 1 million in developing countries (Fig. 1). In industrialized countries as a whole, the annual number of smoking-attributable deaths has risen from about 700 000 in 1965 to around 1.5 million today for men, and from about 100 000 to 500 000 for women.

In populations where cigarette smoking has been common for several decades, about 90–95% of lung cancer, 80–85% of chronic bronchitis and emphysema, and 20–25% of deaths from heart disease and stroke are attributable to tobacco. These percentage risks are lower in populations with less exposure. For the developed world as a whole, about 40–45% of all cancer deaths among men are caused by smoking. Among women the proportion is just under 10% but is rising rapidly. Each year, smoking is estimated to cause about 630 000 deaths from cardiovascular disease in developed countries. Of these deaths, around 450 000 are premature, occurring before 70 years of age. Numerous other health hazards, including other respiratory diseases, peptic ulcers, and complications of pregnancy, are also attributable to smoking. The adverse effects of smoking in pregnancy include low birth weight, increased incidence of spontaneous abortion, prematurity, stillbirth and sudden infant

Box 1. The four stages of the tobacco epidemic

Stage 1

This is the very beginning of the smoking epidemic in a population. Prevalence among males is comparatively low (<15%) while among females, largely because of sociocultural factors that discourage smoking among women, it rarely exceeds 10% and may well be less than 5%. Per capita consumption is also relatively low — generally less than 500 cigarettes per adult per year. Death and disease due to smoking are not yet evident.

Stage 2

During this stage of the epidemic, which may span 20–30 years, prevalence of smoking among men continues to rise rapidly, reaching a peak of between 50% and 80%. The proportion of ex-smokers is relatively low. Smoking prevalence among women typically lags behind that of males by 10–20 years, but is increasing rapidly. Smoking prevalence is probably similar among different socioeconomic groups but may be slightly higher among the better off. Consumption of cigarettes per adult varies between about 1000 and 3000 per year, the majority of which are still consumed by males (among whom annual consumption would probably be in the range of 2000–4000 cigarettes).

Stage 3

Prevalence of smoking among males begins to decline, falling to around 40% by the end of this stage, which may last for several decades. Prevalence tends to be lower among middle-aged and older men, many of whom have become ex-smokers. More importantly, the end of stage 3 is characterized by an initial decline in smoking among females. Since knowledge about the health hazards of tobacco is generally widespread by this time, the peak prevalence for women is likely to be at a considerably lower level than that for males. Experience from Canada, the United Kingdom, the United States of America, and other countries where smoking has been common among women for some time suggests that the maximum prevalence for women is around 35–45%. There is also likely to be a marked age gradient in prevalence among women, with something like 40–50% of all young women being regular smokers but with relatively few (<10%) smokers among women above 55–60 years of age.

Another characteristic of this period is the rapid increase in smoking-related mortality, which rises from about 10% of all deaths in males to around 25–30% within three decades. In middle age (35–69 years), the proportionate mortality of males due to tobacco is even higher (about 1 in 3 deaths). The tobacco-related death rate among women is still comparatively low (around 5% of all deaths) but rising.

Stage 4

Smoking prevalence for both sexes continues to decline more or less in parallel, but only slowly. Some 20–40 years after reaching its peak, prevalence among females might have declined only 10–15 percentage points and would typically be around 30%. Prevalence among males might be expected to be slightly higher, perhaps 33–35%. Meanwhile, male mortality from smoking would be expected to peak early in this period, possibly at around 30–35% of all deaths, as high as 50% of deaths in middle age. Within a decade or so, this proportionate mortality would fall below 30% and continue to decline progressively.

Conversely, female deaths due to smoking will rise rapidly in this phase as the full health effects of women's previous smoking patterns become evident.