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Tobacco or Health: a WHO Programme

C. Chollat-Traquet

Tobacco is currently estimated to be responsible for 3 million deaths per year. The WHO, as a leader in international health, had to react to this situation to protect the health of the world's population against this new man-made epidemic. The traditional functions of the organisation and its structure have enabled it to create a global programme on tobacco or health; new approaches in health promotion will make the activities of this programme easier to follow by all countries and more cost-efficient for its member states. This article endeavours to summarise how the different constitutional mandates of WHO have given rise in the Tobacco or Health programme to (1) activities in support of health promotion advocacy and public information; (2) validation and dissemination of information; and (3) development of national tobacco control programmes. Furthermore, the WHO governing bodies are offering a forum for debate on these matters and buttressing national policies through international support and carefully steering WHO's Tobacco or Health programme in the face of almost permanent new scientific and political happenings, to keep its activities within the confines of WHO's role and the goals of the Tobacco or Health programme. The organisation has endeavoured to move the tobacco or health agenda towards the problems of developing countries who can still avoid the looming tobacco epidemic. Finally, a global strategy of health protection and promotion priority is given to women and children.
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INTRODUCTION

IN COUNTRIES where smoking has been a long-established custom, about 90% of lung cancer cases, 30% of all cancers and over 80% of cases of chronic bronchitis and emphysema are attributable to tobacco use, as are some 20–25% of coronary heart disease and stroke deaths. Numerous other adverse health conditions, including respiratory distress, peptic ulcers and pregnancy complications, are also attributable to smoking. The adverse effects of smoking on pregnancy range from low birth weight to increased incidence of spontaneous abortions, prematurity, still-births and neonatal deaths. Other long-term effects on the child include impaired physical and intellectual development. Tobacco used in smokeless forms, e.g. for chewing or snuff taking, is a major cause of oral cancer in countries, mostly on the Indian subcontinent, where the habit is widespread.

Tobacco smoke is not only dangerous to the smoker but to nearby non-smokers as well. Besides the acute effects of eye and throat irritation due to exposure to the smoke, passive smoking increases the risk of lung cancer and cardiovascular disease in non-smokers exposed for many years to sidestream smoking at the workplace and/or home. Children are particularly sensitive to the damaging effects of enforced passive smoking.

Tobacco use is currently estimated to account for 3 million deaths per year, with slightly more than half of these occurring in the developed world where the cumulative exposure (primarily smoking) has been much higher than in the developing world. Over the past decade or so, very significant changes in consumption patterns have taken place, with consumption and smoking prevalence stagnating or even falling considerably in several developed countries, most notably the UK and the USA, but rising in many developing countries, especially among men. In China, for example, which alone accounts for almost one-third of the entire population of the developing world, the consumption of cigarettes increased from 500 thousand million in 1978 to 1400 thousand million in 1987: this represents one-quarter of the world's total cigarette consumption. About 70% of Chinese men smoke, compared with slightly less than 10% of women. Surveys conducted during the 1980s indicate that in almost 60% of developing countries surveyed, over half of the men smoke, compared with fewer than 30% of industrialised countries.

Correspondence to C. Chollat-Traquet at the World Health Organization, CH-1211 Geneva, 27 Switzerland.
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DEVELOPMENT OF THE WHO TOBACCO OR HEALTH PROGRAMME

Although the WHO had carried out a number of activities in the area of tobacco control under its Noncommunicable Diseases programme, it was only in January 1990, coinciding with the beginning of the implementation of the Eighth General Programme of Work, that Tobacco or Health became a fully fledged programme with an independent indentity. The delay in taking action in this area was not due to a lack of interest on the part of the Organization and its governing bodies (a number of Executive Board and World Health Assembly resolutions show the intellectual and political priority given to the subject) but to inherent difficulties in creating a new programme and in particular in finding financial and staff resources to implement the proposed activities.

The tobacco or health programme is different from most other WHO programmes, in that it does not work to protect human beings against natural forces, such as disease or catastrophe, but rather against other human beings peddling a dangerous drug. The priorities of the WHO programme and its mode of action will therefore be quite original compared with the more traditional activities of the Organization. It is true that tobacco-control action could consume the entire WHO budget without coming close to the tobacco industry's advertising efforts and that the present budget for Tobacco or Health amounts only to 2% of the advertising expenses of one major tobacco company in the USA alone.

For WHO, tobacco issues are typical of the health protection and promotion programmes where the scope goes beyond prevention and treatment of diseases by medical technology. The

control of the tobacco or health situation in different types of countries fostering life-style and other social, economic, environmental and personal factors conducive to health. However, progress in health promotion does not depend solely on individual behaviour; the family and community also have a major role to play in influencing individual choice and action as do social and economic policies, many of which relate to sectors other than health; it is evident that in order to protect and promote health, advocacy needs to be pursued vigourously and a wide variety of measures taken in many sectors. Over recent years the World Health Assembly resolutions (and the Eighth General Programme of Work) have steadily and consistently emphasised WHO's main orientations in the tobacco or health area. These orientations could have given rise to a large number of activities but three factors had to be taken into account which scaled down the size of the programme.

First of all it would take a significant proportion of WHO budget to tackle tobacco issues on all fronts. The level of funds available entails a high degree of selection among competing ideas and the need to chose activities most appropriate for WHO. Secondly, in supporting action at the country level WHO was not alone in that work had already been carried out by other advocates in the tobacco or health sector; there are a few well-established governmental organizations and a large number of national and international non-governmental organisations specialising in tobacco control or dealing with it in relation to the control of specific diseases such as cancer, cardiovascular diseases or lung diseases. WHO and these organisations have a complementary role to play in joining forces in a concerted action against tobacco use. Some of the major successes in passing legislation, winning court cases and lowering consumption trends have been the results of symbiotic action from governmental and non-governmental organisations backed, either directly or indirectly, by WHO. Conversely, requests from governments to WHO for advice on tobacco control are more likely to come as a result of strong campaigns organised by non-governmental organisations.

Thirdly, the conversion of the policy decisions of the governing bodies and of the experts' opinions and policy into day to day collaboration with countries lies in the constitutional functions of the Organization, which also provide an interesting framework for the presentation of the present and future activities of WHO in the tobacco or health area.

INTERNATIONAL COORDINATION IN TOBACCO CONTROL?

The first WHO constitutional function is to be the directing and coordinating authority of international health work; this has permitted its member states to collectively prioritise health problems throughout the world and define health policies. It allows them to collectively devise strategies, principles and programmes to give effect to this policy and the attainment of their goals. In developing the *Plan of Action for Tobacco or Health (1988–1995)*, WHO's member states have shown their conviction in the fact that tobacco is indeed a priority health problem worldwide. Above all they express their willingness to follow similar approaches at a national level. It also gives WHO the responsibility to closely monitor policy, legislation and programme developments, a responsibility which has been confirmed in 1990 when WHO was requested to report biennially on progress made and on the effectiveness of national tobacco control plans adopted in individual countries.

International action also means a grouping of forces to pursue a common goal; it means setting norms, the exchange of comparable information and the circulation of examples of successes and/or constraints emanating from individual countries or prestigious international bodies. For example, in June 1990, WHO was called upon to testify in front of a General Agreement on Trade and Tariffs Panel on the harmful effects of tobacco consumption on health. The Organization's presentation triggered a very interesting discussion and the expert opinion offered by WHO appears clearly in the text of the final decision. In this instance WHO assumed its international expert role void of all economic and trade interests.

This international coordinating role also ensures that WHO through its regional offices propagates the models and examples emanating from countries which have been successful, such as Australia, Canada, Finland, France and Norway, and can be of inspiration to other countries which otherwise would be more hesistant in the application of internationally adopted resolutions. With different levels of health development and with different health priorities each WHO region has its particular approach to the tobacco epidemic. The WHO regional office for the Americans has initiated and carried out a trend analysis of the smoking epidemic in the Americas, of its characteristics and of the measures undertaken to combat it. The WHO regional office for Europe has set a strategy and specific targets for the European countries who agreed at the Madrid Conference (7–11 November 1988) that "it can be done". The WHO regional office for the Western Pacific has already provided examples of successes such as the 1987 Tobacco Act of the State of Victoria (Australia) stipulating that a share of the taxes levied on tobacco should be used for health promotion activities.

Generally, WHO has been very active in the promotion of tobacco control legislation. At this stage legislation of some kind exists in many countries and it has been possible to study its implementation in detail, successes and failures. Examples from Canada, France, the Australian state of Victoria and others have shown that the problems encountered in different countries having a modern, advanced legislation are often similar. While in Finland, it took 10 years for the tobacco industry to recover from the shock of the legislation, in France, Canada and Australia the tobacco industry knew from the beginning how to counteract legislation. International cooperation, fostered by WHO, between those countries having tobacco control legislation could help to overcome some of the problems. To this effect WHO will soon be issuing an up-dated version of its book "Legislative action to combat the world smoking epidemic" [1] which shows how complete legislation for tobacco control can be passed and which will provide a section on comparative laws underlining which measures are better for which countries.

A new development at the international level is the support that the WHO has been requested to give to countries which are economically dependent on tobacco production for their health and economic development. In fact this role which deals with the economic implications of tobacco consumption is dual. On the one hand WHO is better placed than most to perceive the catastrophic health, social and economic consequences of tobacco consumption. On the other hand, WHO has received repeated anxious messages from some developing countries who are economically dependent on tobacco for their health development and fear a reduction of tobacco consumption. Understanding the plights of countries who depend heavily on tobacco production for sustaining their very often weak economies, WHO in close collaboration with other UN agencies, has presented the situation on the international scene.

This is a current topic of intense activity within WHO: a detailed report on this subject was presented to the executive board at its 87th session in January 1991. It was further discussed at the 44th World Health Assembly in May 1991 where it triggered a debate exposing on the one hand the economic advantages of tobacco growing and export for some developing countries and on the other hand the need for WHO to concentrate on the exact goals of the Tobacco or Health programme, and to be wearied to step outside the confines of WHO's role. Yet in view of the importance of the issues for a few least developed countries the Director-General decided to present the socioeconomic and health dilemma revolving around tobacco production and consumption in a report to ECOSOC. It is hoped that under the auspices of this body the important issues of crop substitution, industrial and tobacco trade issues, government subsidies to tobacco growers, import duty and tobacco taxes, all requiring a wide participation from the United Nations system, will be taken up respectively by the competent agencies such as the Food and Agriculture Organization of the United Nations (FAO), the United Nations Industrial Development Organization (UNIDO), the International Labour Office (ILO), the United Nations Conference on Trade and Development (UNCTAD) and the General Agreement on Tariffs and Trade (GATT), together with WHO.

STIMULATION OF NEW KNOWLEDGE

Other constitutional functions attribute a key role to WHO in the stimulating of new knowledge. The power of persuasion of WHO and its effectiveness in advocating against tobacco use depends on its capacity to motivate new knowledge. Within this second major function, the tobacco or health strategy of WHO should be seen as a network of forces comprising many scientific programmes with tobacco related activities reinforcing the tobacco or health programme, such as cardiovascular diseases, cancer or maternal and child health; and in these disciplines, networks of collaborating centres, research laboratories and expert panels.

To give a few examples, the International Agency for Research on Cancer as part of WHO has already provided scientific evaluation on the harmful effects of tobacco [2] and collaborates closely with the Tobacco or Health programme. Together they are presently launching some prospective studies on tobacco related cancer and diseases, the first one being in Bombay, India. Other epidemiological research related to tobacco is ongoing in a number of cancer sites such as brain tumours in adults and the effect of parental smoking on the risk of brain tumours and leukaemia in children being assessed [3].

A further example is the rapid response of WHO when it called for the formation of a study group as soon as the problem of smokeless tobacco started to emerge and proceeded to produce guidance on smokeless tobacco control [3]. The conclusions of the Organization have since been adopted by a large number of countries.

In certain countries, considerable progress has been made towards future generations becoming tobacco-free. Some anti-smoking educational programmes, successful in reducing smoking among the young, have helped to improve their knowledge, have promoted their personal and social development, have involved their families, and have brought about changes in attitudes at school. In many countries, much remains to be done. Furthermore, societies are evolving, new fashions are developing, and countries will continue to require support in tackling new tobacco-related problems arising from changing national needs and situations. This is why a major interest of WHO will continue to be the promotion and support of studies of tobacco or health issues, including their socio-cultural and behavioural aspects. This exchange and adaptation of experience can relate to national, regional or local issues. In addition to encouraging the search for solutions at these levels, WHO can act as a facilitator by providing methodology and examples, and promoting comparative studies in such areas as health education.

Various approaches are used to generate this knowledge: meetings of WHO study groups and expert committees for discussions on essential and emerging issues on tobacco; comparative studies, e.g. on policy and legislation; "state-of-the-art" reports and consensus meetings, recently covering more specifically smoking attributable mortality, women and tobacco, evaluation of health education techniques and the role of school health education in tobacco control.

INTERNATIONAL TRANSFER OF INFORMATION

To play a leading role in the global discouragement of tobacco use and the creation of a social attitude where the non-use of tobacco is the norm, the Tobacco or Health programme, as a third group of functions, serves as a neutral ground for the international transfer of valid information, through various media, to develop an informed public opinion.

Advocacy and public information are geared to convince governments, the population at large and relevant target groups—such as the health and teaching professions, politicians, decision-makers, women and youth—of the extent and seriousness of the tobacco problem, and the need to act. It happens through the adaptation for public use of information provided by the technical programmes and its worldwide dissemination through the media. WHO's advocacy approach has endeavoured not only to sensitise governments and public opinion, but also the United Nations system and nongovernmental organisations to the health and social problems caused by tobacco consumption, to obtain their support, and jointly with them to explore possible solutions.

Collaboration with youth organisations have already strengthened the activities in identifying prevention of tobacco use as one of their priorities; participating in behavioural research on tobacco use in the value system of young people; and producing and communicating information of relevance to young people.

Other approaches are being used to disseminate tobacco or health information: monographs and articles are published; the newsletter of the Tobacco or Health programme, *Tobacco Alert*, is used to inform those concerned of the stance WHO takes with regard to tobacco control and to disseminate up-to-date information on the subject.

World No-Tobacco Days are now opportunities for WHO not only to ask people to abstain from smoking for one day, but also to publish information on specific themes and initiate research on these themes. Just a quick glance at the list of proposed themes for future World No-Tobacco Days shows what course the Tobacco or Health programme will follow in the area of advocacy in the near future: 1992, Smoke-free workplaces; 1993, Health services, including health personnel, against tobacco; 1994, The media against tobacco; 1995, The economics of tobacco; 1996, Sports and the arts without tobacco; and 1997, The United Nations and specialised agencies against tobacco.

The excellent coverage given all over the world and the remarkable work done with very little resources by WHO public

information officers in each country of our African region should be particularly mentioned.

As part of WHO's responsibility to disseminate information, is also the duty to assess the health situation and trends in the mortality and morbidity due to tobacco-related diseases, as well as monitoring the prevalence data on tobacco consumption on a worldwide basis. A WHO technical advisory group on Tobacco or Health recently identified the lack of adequate information on many tobacco-related issues in a large number of countries, such as mortality and consumption data, as one of the main obstacles to national programme development. Consequently, highest priority is given to the elaboration of a WHO tobacco or health data centre, which will collect, validate and disseminate smoking attributable mortality and morbidity data, and will monitor consumption patterns; together with monitoring and reporting biennially to the World Health Assembly on the progress and effectiveness of member states' comprehensive tobacco control programmes (resolution WHA 43.16).

To avoid duplication of efforts with already existing data centres and clearinghouses all over the world, WHO is taking the initiative in creating a "federation of clearinghouses" encompassing information on all aspects of tobacco control, from scientific to socio-political.

WHO has also endeavoured to sensitise the United Nations system to the harmful effects of tobacco use and obtain its support in dealing with the health, social and economic problems caused by tobacco consumption. Progress has already been made in making all organisations of the United Nations system tobacco-free. In the coming years further collaboration aimed at developing joint activities between member states and various United Nations agencies will for example, focus the issue of smoking at the workplace on ILO (trade unions could play a much more important role in discouraging tobacco use), and the issue of crop substitution on FAO, to encourage a decrease in tobacco production as demand is often the twin of supply.

DEVELOPMENT OF NATIONAL PROGRAMMES

Finally, what has been kept for the end is in fact the most important of the WHO constitutional functions; to support the strengthening and development of national programmes obeying policies collectively adopted by WHO member states with a view to attaining the objective of the Organization, the highest possible level of health by all peoples.

Political experience has shown that it is sometimes easier for a country to tackle the politically and economically controversial issues related to tobacco control through collective decisions rather than through individual action. For example, the meetings of WHO governing bodies offer a forum for debate and their collectively adopted resolutions can become the foundation on which to build national action and to adopt legislation. Regional anti-tobacco charters and policies adopted at continental level such as those recently enacted by the EEC can also stem from this foundation of collectively adopted decisions. Resolution WHA43.16, adopted in May 1990, is already being used by anti-tobacco advocates and the ministries of health in WHO member states to show how nefarious tobacco advertising can be and highlights the need to ban all forms of direct and indirect advertising as well as the sponsorship of sporting or cultural events.

These functions also include direct technical support for programme development and project design as well as project marketing with the Organization acting as a broker between donors and individual countries.

In reality the development of national tobacco control programme is a synergistic activity between WHO (represented by the Tobacco or Health programme) and its member states. WHO supports national initiatives but individual responsibility for the political decisions to implement tobacco or health policies and strategies must remain with individual governments.

While concentrating on the activities to be carried out by WHO, the technical advisory group also laid emphasis on joint action between all member states and the Organization, highlighting the need for countries lacking a comprehensive tobacco control policy to follow the examples given by other member states successful in this field (resolution WHA43.16 urged all Member States to implement multisectoral comprehensive tobacco control strategies containing at a minimum the nine elements outlined in resolution WHA 39.14). The joint work carried out in 1990 by WHO and the Mongolian Government for the establishment in that country of a tobacco control policy exemplifies this cooperation; as does the joint review of the tobacco control policy of Finland aimed at achieving further progress in that country, which will serve as a model for the formulation of similar policies in other Member States.

From its original and recent orientation it is obvious that the developing countries are WHO's main concern. While the world is acquiring the technology to break the vicious circle of poverty and disease, it is ironic to realise that increased tobacco consumption threatens to undo much of the progress made in health. The burden societies of developed countries bear because of tobacco consumption has shown that developing countries are unable to cope with the social and economic costs of further, avoidable ill-health caused by tobacco. For the developing countries where the rate of tobacco use remains low, there is still time to avoid this looming epidemic. For the countries where tobacco use is already wreaking havoc, WHO's role is to ensure the urgent transfer of knowledge.

The reasons that have motivated WHO commitment in the prevention of developing countries from ever reaching "high levels" of tobacco consumption, are also leading the organisation to emphasise action for the benefit of women. In most countries, women have not yet developed irreversible tobacco habits, even though they are the special targets of pernicious advertising. Action is also needed for the benefit of children and young people, who must be warned of, and protected from, the dangers of this destructive and easily avoidable habit.

For the 2 million premature deaths in developed countries, tobacco consumption threatens to annihilate much of the progress made in biomedical research and public health in recent years; it will also spoliate generations of middle-aged people who have contributed to pension schemes and will die before benefiting from them. But for the million premature deaths in developing countries it represents the fatality of ill health and the negation of years of efforts for health development.

The strategy mapped out in this article is a very ambitious programme for WHO, but as stated by Dr Hiroshi Nakajima at the seventh conference on Tobacco and Health (Perth, 1990): "Confronted with an evolving epidemiological situation, and the tobacco industry's powerful strategies, directing such a programme is a challenge and must be a dynamic process. By their collective work, WHO and its Member States have eradicated smallpox. In many countries this collective work has had a major impact on infant mortality. Our task now is to eliminate tobacco as a major threat to the health of future generations. Let us enter the 1990s convinced that this can be done".

1. Roemer R. *Legislative Action to Combat the World Smoking Epidemic*, World Health Organization, Geneva, 1982.
2. IARC 1985, 1986.
3. Technical Report Series No. 773, WHO, 1988 *Smokeless Tobacco Control*, Report of a WHO study group.

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Follow-up in Patients Treated for Head and Neck Cancer: How Frequent, How Thorough and for How Long?

THE CARE for cancer patients does not end when the treatment is completed. In most centres these patients are seen in the outpatient department at regular intervals for follow-up visits. Usually these occur at special interdisciplinary consulting-hours and for head and neck cancer patients consist of a short history and a physical examination of the head and neck. Attention is particularly directed to the mucous membranes of the upper aerodigestive tract and to the status of the regional lymph nodes in the neck. If suspicion for recurrence arises, further investigations are carried out. Generally, a chest X-ray is performed yearly.

Follow-up of patients treated for cancer primarily aims at early detection of loco-regional recurrences, based on the assumption that such recurrences are more likely to be salvaged if detected early. Boysen *et al.* (p. 426–430) have prospectively studied the value of regular follow-up in a group of 661 consecutive patients treated curatively for squamous cell carcinoma of the head and neck. Patients were seen at 2–3 monthly intervals in the first 2 years, and every 3–4 months in the following 3 years. After 5 years follow-up was usually discontinued. A total of 220 patients (33%) developed recurrences and 76% of these were diagnosed during the first 2 yeas and 11% in the 3rd year following the completion of primary treatment. In 131 (20%) the first site of recurrence was locally, in 54 (8%) regionally and in 35 (5%) at distant sites. Recurrences were diagnosed through symptoms and signs presented by the patients in 61% and by physical examination only in 39%. Surprisingly only 22% of regional recurrences were detected through physical examination.

Recurrences at the primary tumour site were successfully salvaged in over 40%. Secondary treatment of local recurrences was with few exceptions successful only in patients treated initially with radiotherapy alone or with limited surgery and these were, not surprisingly, nearly all patients with laryngeal and oral cancer. The implication here is that frequent meticulous follow-up during the first 3 years is of high value in these groups of patients. On the contrary it appears that we have little to offer in terms of salvage treatment for patients who initially had combined radiotherapy with major surgery. The authors suggest that follow-up in these patients should be mainly one of care taking and support giving on an individual basis rather than within a strict regular follow-up scheme.

Of the 54 patients with regional recurrences as the first site of failure, only 6 (11%) were salvaged. Taking into account that in 12 patients the neck was initially not treated and in another 28 patients the neck was initially treated with elective radiotherapy, the success rate of salvage treatment is surprisingly low. Apparently the lymph node metastases were detected late, which is in agreement with the statement by the authors that "symptoms and signs suggesting a regional recurrence were often noticed by the patients". The implication here is that follow-up in patients, for whom we still have salvage neck dissection available, should be more frequent in the first 2 years, e.g. once a month in the first year and every 2 months in the second year. At each follow-up visit the neck should preferably be examined with ultrasound and any nodes with a minimal axial diameter >4 mm should have ultrasound guided aspiration cytology [1, 2]. The suggestion by the authors that patients should be informed and instructed about the possible signs of recurrence in the neck really is to be discarded in a day and age investigational tools are available that permit early detection of nodal metastases in the neck with a much higher accuracy than palpation by an experienced examiner, let alone by the patient himself.

Another important objective of follow-up in patients treated for squamous cell carcinoma of the head and neck is the detection of second primary cancers. Multiple primary tumours constitute a major problem in these patients. The reported incidence varies from 15% to as high as 30% [3]. The great majority of these second primary tumours occur in the same organ, or organ systems: the respiratory tract and the upper digestive tract, including the oesophagus. A relatively small minority present at the same time, or within half a year of the first tumour—also termed the index tumour—and these are called synchronous tumours. The majority occur more than half a year after the index tumour has been diagnosed and these are designated metachronous tumours. Boysen *et al.* found, in their material, that multiple primary tumours developed at a constant rate of nearly 3% per year, which corresponds well with other reports in the literature [4–6]. The implication here is that follow-up after the third year, following completion of initial treatment should be particularly directed at the detection of second primary

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