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Research and exchange of information

*As a general rule, the most
successful man in life is the man
who has the best information.*

— Benjamin Disraeli



INTRODUCTION

Today, there is general and scientific agreement that tobacco use is dangerous to human health. Despite this consensus, tobacco use remains socially acceptable in many parts of the world, highlighting the tobacco industry's success in promoting a hazardous product. The ability to reduce the global burden of mortality and morbidity from tobacco-related illnesses necessitates that every person recognizes the hazards of tobacco use and the deceptive nature of the tobacco industry. This requires the application of a systematic means of gathering information on the harms of tobacco and the tobacco industry's strategies to promote a dangerous product. It also demands a strategic use of mechanisms to disseminate scientific information to the general public.

FROM HYPOTHESIS TO POLICY

Lessons learned from the history of tobacco control

Carrying out systematic research and translating the information gathered into public information is essential to convince individuals, communities and governments to take action to reduce tobacco consumption. A mechanism to communicate the evidence for tobacco control will help facilitate the movement to control the tobacco epidemic.

Sound public health policies often arise in response to health hazards uncovered by research. To illustrate, how did an early hypothesis that smoking caused lung cancer lead to the creation of a policy that required the tobacco industry to include a health warning on all cigarette packs in the United States by 1967? In 1939, less than

Box 1. Lung cancer research and tobacco control policy

- 1939** Franz Muller observes dose–response relationship between smoking and the development of lung cancer.
- Early 1950s** Morton Levin publishes a study in the *Journal of the American Medical Association* linking smoking and cancer; Ernst L Wynder and Evarts A Graham also publish a study in the *Journal of the American Medical Association* showing that 96.5% of lung cancer patients interviewed were smokers.
- 1954** Sir Richard Doll and Bradford Hill publish their finding in *The British Medical Journal* that heavy smokers are 50 times more likely to get lung cancer.
- 1964** The United States Surgeon General's Report concludes that smoking is a health hazard requiring action.
- 1967** The first tobacco control policies in the United States are established, based on the strength of the evidence from the above studies.



30 years before the policy was made, health warnings on tobacco and cancer were published in the book *The Nazi War on Cancer* (1).

In it Franz Hermann Muller of Germany observed a strong dose–response relationship between smoking and lung cancer. The ‘hypothesis’ was further supported by three key case control studies in the 1950s. Two studies were published in the *Journal of the American Medical Association*; one by Morton Levin linking smoking and cancer and the other by Ernst L Wynder and Evarts A Graham showing that 96.5% of lung cancer patients interviewed were smokers (2, 3). In 1954, more evidence appeared when Sir Richard Doll and Bradford Hill published in *The British Medical Journal* their finding that heavy smokers are 50 times more likely to get lung cancer (4). In 1964, after evaluating the existing evidence, the United States Surgeon General’s Report, concluded that cigarette smoking is:

- a cause of lung cancer and laryngeal cancer in men;
- a probable cause of lung cancer in women;
- the most important cause of chronic bronchitis;
- a health hazard of sufficient importance to warrant appropriate remedial action.

This pivotal Surgeon General’s Report provided the data on which the first public health policies were based to address tobacco use in the United States. It illustrated how a hypothesis supported by scientific research, and strengthened by publication and information dissemi-

“...I am going to start by asking you to face certain facts, certain vital statistics... The vital statistics I would like you to bear in mind are 7, 57, 139 and 227... They are the death rates per 100,000 per year from cancer of the lung of men who were non-smokers (they are the 7), men who smoked 1–14 cigarettes daily (they are the 57), men who smoked 15–24 cigarettes daily (they are the 139) and men who smoked 25 or more cigarettes daily (they are the 227)... Those vital statistics are basically the reason why we are here tonight... These vital statistics are really vital. They threaten the life of the tobacco industry in every country of the world.”

—Confidential Philip Morris memo, 1969
The Present Position: Main Evidence Against Smoking

Box 2. The case against second-hand smoke

- 1986** The National Research Council of the United States publishes a key report on the hazards from second-hand smoke entitled *Environmental Tobacco Smoke: Measuring Exposures and Assessing Health Effects*.
- 1986** IARC publishes *Evaluation of Carcinogenic Risks of Chemical Smoke: Tobacco Smoking (Vol. 38)*, reinforcing the case against second-hand smoke.
- 1993** The United States Environmental Protection Agency classifies second-hand smoke as a ‘Class A’, or definite human, carcinogen.
- late 1990s** The first public policy banning smoking in public places goes into effect in several states of the United States.



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- **Delay the progress and/or release of the study.**
 - **Affect the wording of its conclusions and official statement of results.**
 - **Neutralize possible negative results of the study, particularly as a regulatory tool.**
 - **Counteract the potential impact of the study on governmental policy, public opinion, and actions by private employers and proprietors.”**

—From a Philip Morris memo in 1993, identifying the aims of a multi-million dollar campaign to undermine the IARC study on second-hand smoke. Campaign for Tobacco-Free Kids, *Trust Us We're the Tobacco Industry*, 2001. Bates No. 2501341817-23

nation can drive policy-makers into action (this example is summarized in Box 1) (5).

How did the cigarette industry react to the mounting evidence against smoking? A confidential Philip Morris Memo showed that as early as 1969 the industry recognized the power of research.

A second example of how research can drive public policy involves second-hand smoke (summarized in Box 2). In 1986, the National Research Council of the United States published a key report on the hazards from second-hand smoke entitled *Environmental Tobacco Smoke: Measuring Exposures and Assessing Health Effects* (6).

The evidence against second-hand smoke was reinforced in the IARC monograph, *Evaluation of Carcinogenic Risk of Chemical Smoke: Tobacco Smoking*. In 1993, the United States Environmental Protection Agency (EPA) classified second-hand smoke as a ‘Class A’, or a definite human carcinogen. As a result of these and other similar studies, several governments established legislation to ban smoking in public places to protect non-smokers from the deleterious effects of second-hand smoke.

In response, the tobacco industry launched a systematic effort to discredit scientific information on second-hand smoke. Tobacco control researchers concluded that the effort launched across the tobacco industry against one scientific study – the largest European study by IARC showing a 16% increase in the point estimate of risk for lung cancer for non-smokers – was “massive” and “remarkable” (7). Today, the industry continues to conduct a sophisticated campaign against studies that conclude that second-hand smoke causes lung cancer and other diseases in non-smokers, to subvert the normal scientific process and to retard or prevent effective tobacco control policies from being developed and implemented in countries (8).

RESEARCH AND INFORMATION EXCHANGE FOR TOBACCO CONTROL AND THE WHO FCTC

The WHO FCTC provides guidance on surveillance, research and exchange of information on tobacco control. It encourages countries to direct attention towards:

- establishing a national system for the epidemiological surveillance of tobacco consumption, periodically updating economic and health indicators to monitor the evolution of the problem and the impact of tobacco control;



- facilitating regional and global tobacco surveillance and exchange of information on tobacco control indicators by:
 - initiating and cooperating directly, or through competent international bodies, in the conduct of research and of scientific assessment;
 - promoting, supporting and encouraging research that contributes to reducing tobacco consumption and harm from tobacco use, particularly in developing countries.
- facilitating the full, open and prompt exchange of scientific, technical, socioeconomic, commercial and legal information, as well as information on practices of the tobacco industry, by:
 - compiling and maintaining a database of national and subnational laws and regulations on tobacco control and enforcement, and cooperating in developing complementary programmes for national, regional and global tobacco control;
 - compiling and maintaining a central database of information from national surveillance programmes;
 - strengthening training and support for all those engaged in tobacco control activities, including research, implementation and evaluation.

The global agenda for tobacco control research

Back in 1999, researchers and policy-makers from developing countries, international donors, and research bodies with global mandates recognized the need for a global agenda for tobacco control research. Participants gathered at the meeting on Global Research Priorities for Tobacco Control, co-hosted by Research for International Tobacco Control (RITC) and WHO in Washington, DC, in March 1999, and at the Global Forum for Health Research in Geneva, Switzerland, in June 1999.

At these two meetings, experts in tobacco control research agreed that tobacco control policies and programmes must be based on strong scientific evidence to achieve progress in controlling the tobacco epidemic. They concluded that a serious and concerted effort to strengthen tobacco control research is urgently needed. This would require:

- advocacy for investment in research;
- building sustainable capacity in developing countries;
- targeting select priority themes;
- establishing appropriate institutional arrangements to move research forward.

The priority themes were identified and are listed in Boxes 4 and 5 (see also Box 3 for information on work done by RITC/IDRC and WHO in the area of tobacco control research). These form the core of the global research agenda recommended by WHO and its partners. Some of the themes relate to country- and region-specific issues, while others are broader in scope and have the potential to affect international policies and practices. The development of common research instruments and methodologies would facilitate data-gathering and allow for cross-country comparisons.

**Box 3. WHO and Research for International Tobacco Control/
International Development Research Centre (RITC/IDRC)**

In 1998–1999, Research for International Tobacco Control (RITC), a multidonor Secretariat housed at the International Development Research Centre (IDRC) in Ottawa, Canada, conducted a series of regional consultations to guide the formulation of tobacco control research agendas in developing countries. The meetings involved participants from Latin America and the Caribbean, South and South-East Asia, and eastern, central and southern Africa.

Following these regional meetings, RITC was asked to act as a convener in preparing a draft document outlining global tobacco control research priorities. The resulting document was endorsed by the Global Forum for Health Research in June 1999 and published jointly by RITC and the WHO Tobacco Free Initiative under the title *Confronting the epidemic: a global agenda for tobacco control research*.

The research priorities identified in the global agenda parallel many of the provisions of WHO FCTC and, as such, establish a framework for an evidence base to support signature, ratification and implementation of the global treaty. Research needs to address both demand for and supply of tobacco are outlined. The need for country-specific research that is compelling and relevant to legislators in individual countries is specified.

The global agenda also identifies dissemination as a key aspect of tobacco control research. Tobacco control research in developing countries is critical as the evidence base for the development of sound policies and programmes. RITC-funded projects are required to include a dissemination component that outlines strategies for knowledge transfer within the scientific community, and also considers the preparation of policy briefs and other modalities to inform decision-makers and media or advocacy strategies to improve public awareness of issues related to tobacco control. Effective knowledge transfer requires an understanding of the political processes that shape policy decisions and the interplay of various stakeholders in influencing the legislative agenda. *Tobacco Control Policy: Strategies, Successes and Setbacks (9)*, contains narratives from six countries around the world: Bangladesh, Brazil, Canada, Poland, South Africa and Thailand. Each country has successfully introduced tobacco control legislation. The strategies and struggles that led to the passage of legislation are documented in order to inform and inspire other countries.



Box 4. Global Agenda for Tobacco Control Research: critical themes

Country-specific research

The lack of standardized and comparable data is a recurrent theme. Surveillance systems should capture country and regional data on:

- tobacco use prevalence and consumption patterns (particularly among young people and health professionals);
- trends in tobacco-attributable morbidity and mortality;
- awareness levels of the health risks associated with tobacco use among different segments of the population;
- pricing policies, backed by country and segment-specific elasticity studies to determine the impact of taxation on tobacco control;
- behaviours and attitudes related to tobacco control measures, to understand how social norms are formed and transmitted and to allow cross-cultural comparisons of regional and cultural differences in the acceptability of tobacco use.

Policy interventions

Research is crucial to determine the impact of tobacco control policies objectively, such as raising prices through increased taxation, instituting policies for smoke-free public places, restricting tobacco marketing, advertising and promotion, and restricting young people's access to tobacco. Specific research areas include:

- Economic research
 - elasticity-of-demand studies to determine optimal levels of taxation according to social class, age and geographical conditions;
 - the determinants, process and impact of illegal trafficking, and the influence of smuggling on tobacco use;
 - opportunities for and barriers to the harmonization of prices at regional level.
- Legislative research
 - effect of international trade agreements on production, trade and marketing of tobacco products;
 - empirical and theoretical research to assist in drafting, implementing and evaluating policies, including advertising bans.

Programme interventions

The global research agenda should be grounded in a comprehensive public health model of nicotine addiction that encompasses environment, agent, host and vector. Areas that require scientific scrutiny include:

- opportunities for and barriers to tobacco control;
- optimal components (programmes and policies) of a comprehensive tobacco control strategy;
- communications research on the development of effective messages to counter tobacco industry promotions;
- behavioural research to evaluate the efficacy of prevention and treatment programmes;
- sociocultural studies to determine the cultural acceptability of specific interventions and to elucidate differences in responsiveness among ethnic and cultural groups;
- development and evaluation of novel approaches to preventing tobacco use, especially among populations at disproportionate risk;
- assessment of the relative effectiveness and consequences of prevention interventions that employ single-risk strategies versus multiple-risk strategies.

Treatment of tobacco dependence

Two broad research fields are of particular importance:

- examination of a range of approaches to increase cessation rates in different populations;
- evaluation of new pharmaceutical interventions and delivery mechanisms, their costeffectiveness, and their impact in diverse sociocultural, physiological and genetic subgroups.

Tobacco product design and regulation

Product modification (in nicotine/tar content, delivery system, additives, taste, size, etc.) to change use patterns and/or reduce harm among various subgroups is another potential research area. The following components are

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possible research topics:

- the biology of tobacco addiction;
- characterization of additives to tobacco products;
- assessment of alternative labelling for tobacco products;
- evaluation of the public's expectations about tobacco products and people's behaviour with respect to new products;
- formulation of an objective basis for future decisions about nicotine and tar content derived from public health findings.

Tobacco industry analysis

While some research on the tobacco industry will be country-specific, research on the international role of the transnational tobacco companies (TTCs) will also be important:

- characterizing the ownership, corporate structure and regulation of the tobacco industry at both the local and international level, including dominant industry forces, manufacturing practices, alliances and trends in relative market share;
- tobacco and cigarette production as an international and regional trade issue in terms of foreign exchange earnings, employment, country imports and exports, and trafficking;
- political mapping of tobacco industry relationships with governments (including lobbying activities);
- tobacco industry involvement in smuggling activities;
- tobacco industry advertising, marketing and promotion efforts (particularly with respect to women, youth and other high-risk groups), the impact of changes in advertising on consumption, and public perceptions of advertising and promotion by TTCs;
- industry influence on issues related to smoking and addiction (including their influence on the content and direction of research).

Tobacco farming

Many aspects of tobacco cultivation are poorly understood, including occupational hazards, the environmental impact, economic

benefits and sociocultural impact (particularly for women and children). Important research topics include:

- the relationship of tobacco production to the destruction of the ecosystem, particularly concerning deforestation, pesticides and degradation of soil nutrients;
- attitudes, beliefs and practices of tobacco farmers and the underlying historical/cultural context;
- the economic impact of tobacco control on developing countries that grow and manufacture tobacco or tobacco products for domestic or foreign markets;
- opportunities for alternative crops and alternative livelihoods: information on crop options for farmers and on employment outside tobacco growing for their children;
- cultivation and curing practices at the country and subnational level;
- occupational health hazards related to cultivating, curing and handling tobacco, including the use of pesticides, herbicides and fertilizers;
- the impact of tobacco cultivation on women and children;
- the feasibility of diversification in countries heavily dependent on tobacco farming and tobacco manufacturing, and mechanisms for supporting these countries in their diversification efforts.

WHO FCTC

Research data from the global agenda outlined above was pivotal in providing technical assistance for the development and implementation of the WHO FCTC. In addition, research is needed for the ratification and implementation of, as well as monitoring and compliance with WHO FCTC. Key areas of study include:

- global political support: mechanisms to secure ratification and implementation;
- structure and design of monitoring mechanisms to be established by the WHO FCTC and related protocols;
- verification of the effectiveness of the Convention.



Box 5. Global Agenda for Tobacco Control Research: cross-cutting themes

Cross-cutting research themes include a number of issues that will need to be taken into consideration in all thematic areas.

High-risk populations (e.g. youth, women, indigenous populations)

- there is a need to identify high-risk segments of the population, e.g. those with high or escalating rates of prevalence, youth as an entry point to tobacco use, others targeted by industry promotions;
- basic biologic and behavioural research needs to be done to understand the sociocultural, psychological, physiological and genetic factors that influence the initiation of tobacco use, progression to nicotine addiction, and smoking cessation among high-risk segments of the population;
- studies should be conducted on the influence of tobacco advertising and promotion, especially in high-risk groups and
- research needs to be done to determine why some high-risk groups are resistant to interventions.

Country readiness

- qualitative and quantitative research should be conducted to assess each region's/country's readiness for tobacco control measures as evidenced by indicators such as knowledge of health effects of tobacco use, support for interventions, and priority given to tobacco control by key opinion leaders, including politicians and health professionals.

Dissemination

- research should be carried out to provide a better understanding of how to translate knowledge into effective practice, particularly in policy development (the research should include knowledge synthesis as well as methods for ensuring the dissemination, adoption, implementation and maintenance of strategies known to be effective);
- mechanisms should be developed for optimal dissemination of proven prevention and treatment interventions through different delivery channels at the local and national level;
- there should be a means of dissemination of the results of research to policy-makers.

Capacity development

- the capacity for tobacco control (including research) should be assessed, especially in areas not directly related to health such as economics and policy analysis;
- researchers and research institutions currently (or with the potential to become) involved in tobacco control research should be identified as well as the needs and activities of current stakeholders in tobacco control initiatives, in order to relate research to policy, programme and practice needs.

Mobilization of human and financial resources

- there should be a concerted mobilization of human and financial resources to implement a comprehensive research agenda, build partnerships and stimulate comparative research and analysis.



CHALLENGES TO EFFECTIVE TOBACCO CONTROL RESEARCH

While research plays a critical role in guiding public policy to control tobacco use, it remains an underdeveloped area in some countries. Capacity and resources remain limited, and are often concentrated within some developed countries and selected developing countries – such as China, India, South Africa and Thailand – that are already advancing faster than the rest of the global community with regards to tobacco control policies and programmes. In 1990, it was estimated that approximately US\$ 148–164 million were allocated to global tobacco control research and development. This represented an expenditure of only US\$ 4.31 per disability adjusted life year lost (10). Most of this funding supported research activities predominantly in developed countries, making the findings and recommendations only partially relevant to the socioeconomic and political climate in many developing countries. Furthermore, the majority of global funding is directed toward health-related research rather than multidisciplinary, policy-oriented tobacco control research that is crucial for developing effective interventions to curb tobacco use.

Four major challenges to effective tobacco control research in developing countries were identified during the series of meetings conducted by RITC/IDRC and WHO in 1999 (11).

1. The lack of standardized and comparable data. There is a clear need for regional surveillance systems and research to provide comparable baseline data on: the prevalence of tobacco use; consumption patterns and trends; patterns of and trends in tobacco-attributable morbidity and mortality; existing policies and programmes; and ongoing and completed research initiatives. While a certain amount of material exists, databases of this nature are costly to maintain. What is especially needed is detailed information broken down by sex, age group, populations at risk and regions and provinces.
2. The absence of a network for communication of information, data and best practices. While many of the electronic networks have contributed positively to the discussion of tobacco control, they are not universally accessible in the developing world. Having accessible communications networks would promote the efficient dissemination of research findings, and assist in harmonizing research efforts by facilitating collaboration and partnership across countries and regions.
3. Lack of adequate capacity for tobacco control research, especially in non-health-related areas such as economics and policy analysis. The current and potential socioeconomic burden of tobacco production and consumption underscores the need to bolster research capacity in developing countries. A scarcity of skills and competence for multidisciplinary and policy research is compounded by the failure of donor agencies to be proactive in funding research on evolving issues.
4. A need for concerted mobilization of human and financial resources in order to implement a comprehensive research agenda, build partnerships and stimulate comparative research and analysis. This is recognized under the WHO FCTC, which calls for countries to work together to augment the resources for tobacco control research and information exchange.



A practical approach to research for developing countries

Establishing a strong research agenda requires strategic planning and commitment. While investments in capacity-building and infrastructure are needed, the costs need not be prohibitive. A pragmatic approach and priority setting are essential. The following guidelines should be given serious consideration.

- Assess current research resources, needs and gaps. If data exist, there may not be a need to spend time and money in developing a new survey or study. Instead, resources should be directed towards locating, collating and analysing existing data to address the needs of the tobacco control programme.
- Set research priorities based on policy needs. Effective research should support and direct the development of public health policy. When choosing research priorities, select areas that address gaps in policy and advocacy. Avoid doing research for research's sake. Because resources are limited, all tobacco control research should lead to improvements in policies or programmes to reduce tobacco consumption. Using this criterion should assist you in eliminating research projects that are redundant, unnecessary or superfluous.
- Partner with scientific and academic institutions. Most countries, no matter how small or underdeveloped, will likely harbour research capacity in the academic setting. By building relationships with these institutions, it is possible to identify local researchers who can assist in developing, implementing and evaluating research projects. Moreover, the equipment and technology needed for research, such as statistical software and other computer applications are usually available in universities and other institutions of higher learning, as well as within the scientific community.
- Integrate a research agenda into the national plan of action. The research agenda should address those areas of the plan of action that require supporting evidence.
- Be quick to identify potential opportunities for collaborative research. Tobacco control cuts across many programme areas in public health as well as other sectors of government. There may be opportunities to 'piggyback' tobacco control research projects into the research agendas of these programmes and sectors. For instance, revenue and tax departments may have the resources to evaluate the impact of cigarette smuggling on the national economy. Research on lifestyle interventions to reduce the mortality from non-communicable diseases could include a component on the cost effectiveness of smoking cessation. Actively search for these potential opportunities to collaborate in generating data for the tobacco control programme.
- Participate in intercountry collaborative research projects. There are also opportunities for collaborative tobacco control research among countries. For example, the South-East Asian Alliance for Tobacco Control and the London School of Tropical Medicine and Hygiene are currently supporting several South-East Asian countries in conducting research on the tobacco industry documents that affect the region.
- When creating the national research agenda, be guided by the Global Agenda for Tobacco Control Research developed under the auspices of WHO and IDRC.



- Integrate research into surveillance and monitoring systems. Most of the data generated by periodic surveillance can be used to answer specific research questions.
- Include a dissemination strategy when planning the research agenda. Information generated by research must be shared and disseminated to the general public for maximum impact. Most researchers frequently neglect this critical aspect. Information that is not made public is often useless, and cannot drive public policy.
- When planning the research agenda:
 - Consider multisectoral areas of research. Include the systematic evaluation and study of economic, media, sociological, cultural and legislative aspects of tobacco control.
 - Make use of all opportunities to obtain data. For instance, obtain data on smoking status during all clinical encounters.
 - Be creative. For example, use village health care workers to obtain data from the field.
 - Use both qualitative and quantitative methods to generate information.
 - Build local capacity.
 - Constantly search for funding opportunities.
 - Link research to the evaluation process.

RESEARCH FOR ADVOCACY

The previous chapter covers the major issues related to establishing surveillance systems to capture fundamental information about tobacco production, consumption and health impacts. However, in addition to these technical research areas, NTCPs also need to carry out research to support advocacy for tobacco control. This is particularly important in developing countries where scarce resources must be utilized efficiently to produce tangible results.

Research for advocacy in tobacco control aims to establish data that will lead to introducing or strengthening laws and policies to reduce tobacco consumption. The research is conducted as part of a comprehensive strategy to establish effective tobacco control interventions. Unlike epidemiological studies or randomized clinical trials, research for advocacy can take several creative forms (12).

- Opinion polls or surveys. These are useful as evidence to policy-makers that the general public supports tobacco control measures. Opinion polls can also identify areas where greater public education and tobacco control advocacy are needed.
- Economics research. The World Bank's publications *Curbing the Epidemic: Governments and the Economics of Tobacco Control* (13) and *Tobacco Control in Developing Countries* (14) provide concrete ideas about economic issues relevant to tobacco control. Local data that demonstrate how tobacco control interventions will not harm a country's revenues, but could, in fact, be beneficial to the economy and underscore the costs of tobacco use to a nation's economy, can persuade politicians to support tobacco control policies and laws.



- Country-specific review of the internal tobacco industry documents. This was discussed in Chapter 13.
- Qualitative research. This type of research uses personal stories and quotes to give a human face to the tobacco epidemic. If used strategically and communicated effectively, information from this type of research can be extremely powerful.

The following are tips and suggestions for developing and conducting tobacco control research for advocacy. Refer to the publication *Low Cost Research for Advocacy* for a more detailed discussion of the topic (12).

- Plan ahead. Develop a research agenda that complements and is consistent with the aims and objectives of your national plan of action for tobacco control. Base specific research activities according to your national needs. In addition, determine how you will use the information gathered by the research activities to achieve the expected outcomes of the national plan of action. In particular, have a strategy for disseminating the results of research activities to the appropriate target audiences.
- Obtain the appropriate technical expertise when designing and conducting policy-oriented research projects. Depending on the nature of the research activity, you may need to consult experts in quantitative or qualitative study design and statistics. Seek the assistance of experts outside of the health sciences, particularly when doing qualitative studies. Colleagues in the social sciences, marketing research and anthropology may be particularly helpful.
- Be guided by previous work, if at all possible. There is a growing body of published and online research for tobacco control done in both developed and developing countries that provides information and tips on research topics and methodologies. Furthermore, research techniques used in marketing may be applicable for advocacy-related tobacco control studies. Avoid reinventing the wheel and adapt existing data, methods and research instruments, if at all possible. This saves resources, time and effort.
- Communicate results strategically. Findings should be framed to address the policy issue driving the research directly. When presenting the results of your research, keep your message focused on the relevant issues and ensure that you reach your intended target audiences directly, usually the media and political decision-makers. (See Chapter 8 for tips on effective communication.)
- Use the information to pursue specific policy initiatives. The ultimate gauge of success in research for advocacy is whether or not the findings contributed to a definitive change in the policy or legislative environment for tobacco control.

UNDERSTANDING THE MECHANISMS FOR INFORMATION EXCHANGE

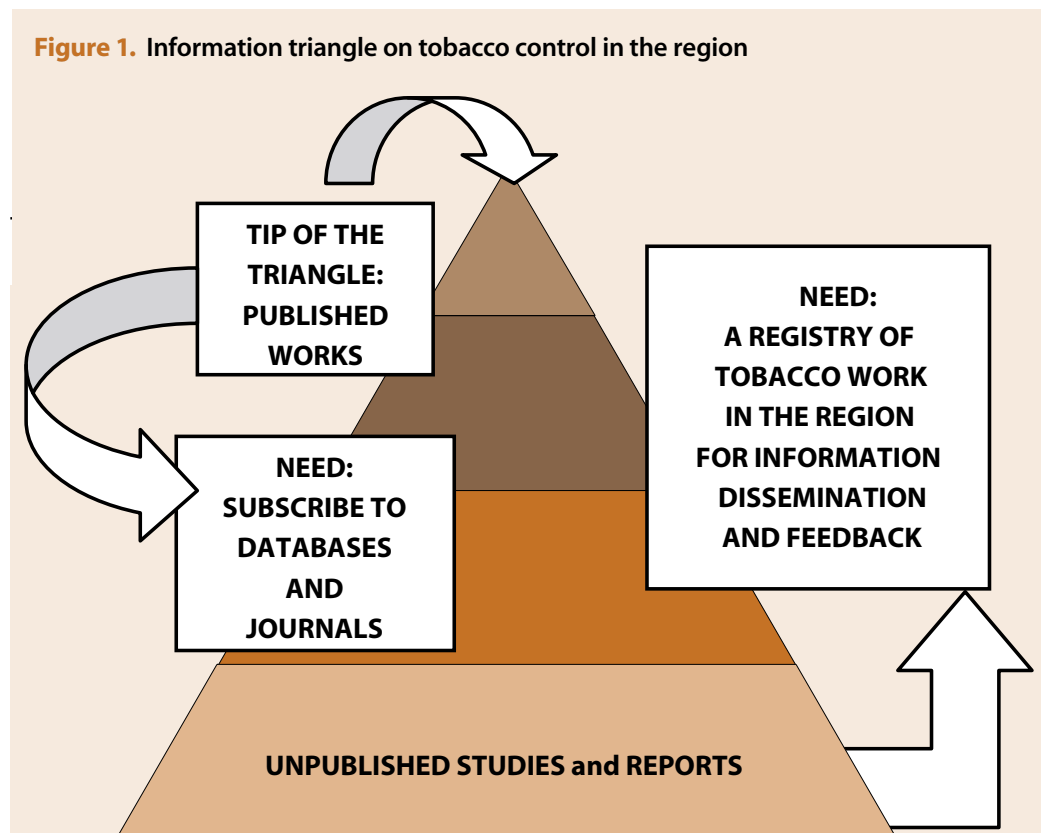
The timely exchange of information is a vital component of an effective research strategy for policy change. In countries where the tobacco control programme is



newly established, understanding the evidence related to tobacco control and linking the evidence to the formulation of effective policies will depend largely on access to information from local, regional and global counterparts. In general, published articles represent the tip of the information triangle (see Figure 1). This means that those interested in tobacco control, including NTCP, must have access to journals or databases. In some developing countries where resources are limited, access to subscriptions may be costly. However, some journals, such as *Tobacco Control*, provide free electronic access to journal articles for citizens of developing countries (15). The broad base of the triangle may include important research information or databases that have not been published. This creates an important need for developing a registry of tobacco research to provide easily accessible information and feedback.

The following are possible barriers to tobacco information exchange in developing countries that may contribute to the paucity of published research:

- Research
 - lack of funding
 - limited technical support and available training
 - few tutors or mentors
- Publication
 - English language may be an obstacle for some





- uncertainty about journal options
- other needs/advocacy concerns compete for writing time
- Information access
 - poor working facilities
 - erratic communication
 - no Internet access
- Political constraints
 - government-supported tobacco industries
 - desire to deflate/inflate statistics showing tobacco toll
 - competing health priorities.

Access to tobacco control information is vital to support existing tobacco control programmes. Information empowers; ideally, there must be a flow of information between developed and developing countries to ensure a better future for tobacco control research, and to enhance the probability that scientific information will lead to beneficial health policies. Electronic media may help to narrow the information gap between developed and developing countries, even if building up information communication technology (ICT) of lower-income countries may be slow at the beginning. There is reason to expect that access to the World Wide Web will increase tremendously in the next few years. Ideally, information must flow both ways, because there are insights and lessons to be learned from the experience in the developing world. Tapping the Internet may improve information flow in all directions as countries and regions are establishing free networks for the exchange of tobacco control information.

Models for research and information exchange

There are several online discussion groups, mail and news groups and information clearinghouses that national tobacco control officers can join, provided that they have the equipment and Internet access. Three examples are highlighted in Boxes 6, 7 and 8.

Setting up a clearinghouse for tobacco control information

Countries in other parts of the world that share geopolitical boundaries and/or cultural traditions may want to set up a clearinghouse for tobacco information that specifically addresses their needs. Provided the technical expertise and financial resources are sufficient, it is possible to accomplish this. The basic steps for creating an online clearinghouse for tobacco control are listed in Box 9.

The clearinghouse should use reference sources classified as preprimary, primary, secondary and tertiary. Human resources may include people from government, NGOs, academic institutions and private organizations. A system must be developed for indexing, cataloguing and tagging of available resources. A clear description of

**Box 6. GLOBALink**

Perhaps the best known of the current online tobacco control communities is the International Union Against Cancer's (UICC) GLOBALink (16). GLOBALink serves over 3900 members in 133 countries around the world (as of December 2003). The site provides tobacco control professionals – including advocates, educators, lawyers, policy-makers, researchers, smoking-cessation specialists – opportunities to network, to exchange ideas and obtain information.

GLOBALink allows its members to search for the latest, most accurate information and analysis on tobacco control, by enabling them to exchange information with top tobacco control professionals and to access specific research including publications, guidelines and reports.

In addition to providing information and network facilitation, GLOBALink offers a wide range of additional services:

- petitions, campaign coordination (petitions.globalink.org);
- calendars, directories, databases;
- access to other tobacco control links (www.tobaccopedia.org);
- custom search-engines for tobacco industry documents;
- free web hosting (www.localink.org) – GLOBALink currently hosts more than 150 tobacco-control web sites including the well-known site *TobInfo* (www.tobinfo.org) for countries in central and eastern Europe and newly independent states (in English and Russian);
- distance learning (www.tobaccoAcademy.org).

GLOBALink is evolving with the needs of its membership. Because there is a real need for partnerships in the tobacco control scientific community, *GLOBALink Research* was launched in early 2003. *GLOBALink Research* provides research information and discussion groups and will be serving as the core system for the Global Tobacco Research Network, a project of Johns Hopkins University.

GLOBALink's efforts to bring together tobacco control communities earned it several awards, including the prestigious Luther Terry Award in the category of Outstanding Tobacco Control Organization (2003), and the WHO Tobacco or Health Medal (1997).

Source: (17)

Box 7. International Agency on Tobacco or Health (IATH)

IATH is a unique public health charity registered in the United Kingdom, dedicated to supporting tobacco control advocates in countries with fewer resources. For most of the organizations that IATH serves, lack of funds, especially hard currency, prohibits access to vital communications taken for granted by colleagues in the industrialized world: international conferences, computer access to the Internet and e-mail, even subscriptions to scientific journals, are simply beyond their means. IATH's monthly mailing – its news bulletin and other useful materials – ensures that they are up-to-date on all major areas of tobacco control, and its ad hoc advice service helps them with specific problems. IATH also carries out a range of other work aimed at reducing the burden of disease caused by tobacco, including policy consultancy, training, lecturing and writing.

The core of IATH's information service is a monthly mailing to all its contacts. The main item in the mailing is a news bulletin covering scientific developments, news of the latest tobacco control legislation, new marketing tactics by the industry, legal initiatives, cessation developments and other important news from all over the world.

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In addition to the bulletin, the mailing includes various materials of significant value to national tobacco control agencies: e.g. fact sheets on tobacco and specific diseases; policy notes on individual aspects of tobacco control policy; cessation notes; and tobacco control literature, posters and other educational materials.

IATH also provides an ad hoc advice service for its contacts. Typical requests concern local opportunities for legislation and other policy changes; and how to counter specific marketing ploys and lobbying tactics of the tobacco industry. In responding to such requests, IATH is able to draw on a wide range of information and an extensive network of colleagues around the world to provide practical help and advice.

IATH provides its main services free of charge to selected contact agencies. These include government health agencies, NGOs such as cancer, heart and chest disease societies and consumer organizations, as well as dedicated anti-tobacco groups. As of August 2003, IATH was serving 265 contact agencies in 118 countries.

Source: (18)

Box 8. The Clearinghouse for Tobacco Control

The Clearinghouse for Tobacco (C-TOB), developed with a grant from the Rockefeller Foundation by the National Poison Centre, Universiti Sains Malaysia (USM), is an Internet web site (19) that makes evidence-based tobacco literature and related abstract, summary and comparison materials widely available to healthcare professionals, NTCP officers, tobacco control advocates and the public. C-TOB hopes to provide services in different languages to facilitate information exchange with provisions for interactive communication and learning.

C-TOB provides the following services:

- It distributes free or low-cost anti-tobacco materials from a systematic collection of available items on anti-tobacco materials;
- It collects culturally diverse prevention, intervention and treatment resources tailored for use by parents, teachers, youth, communities and prevention/treatment professionals, in a systematic manner;
- It customizes searches in the form of annotated bibliographies from drug and tobacco databases;
- It provides a system of electronic tobacco information exchange among South-East Asian countries in particular and the rest of the world in general;
- It develops and implements an electronic content management system for handling tobacco-related information materials, including fact sheets, brochures, pamphlets, monographs, posters and videotapes;
- It publishes an electronic newsletter providing up-to-date tobacco control literature with articles of particular relevance to developing countries;
- It has established a network of experts and related organizations to support the creation of a systematic data and information centre on tobacco-related activities and research;
- It provides technical support to countries in conceptualizing, planning and implementing tobacco control programmes tailored to their particular needs and situation;
- It coordinates fellowship training programmes in the tobacco control information management.

**Box 9. Steps for creating a web-based clearinghouse for tobacco control information**

1. Set up a panel of reviewers – local, regional and international:
 - search for relevant documents
 - compile the documents
 - review the documents
 - summarize the contents
 - disseminate the information.
2. Create web-based tobacco research database.
3. Require registration of users with user names and log in passwords.
4. Categorize users:
 - receive queries
 - provide literature retrieval service.
5. Establish and support the virtual community.

the form in which they are available (i.e. videotape, audio and text) should be made. Finally, after a systematic review of the material, the information may be released as approved to the target users.

COMMUNICATING THE EVIDENCE FOR TOBACCO CONTROL

Research on tobacco control must communicate the evidence for action to major stakeholders. A mechanism to promote the exchange of tobacco control information to effect change is necessary. There are several venues that can be utilized to ensure that new tobacco-related data are communicated in a timely and effective way to critical audiences. These are discussed in greater detail in Chapter 8.

As an example, C-TOB, together with South-east Asia Tobacco Control Alliance, hosted a workshop entitled *Communicating the Evidence for Tobacco Control (20)*. The workshop provided an avenue for discussion where stakeholders in tobacco control learned about ways that evidence from research can be used to support and promote bans on tobacco marketing. Through the workshop, researchers and tobacco control advocates were trained to communicate research evidence more effectively to policy-makers, the public and civil society. At the same time, policy-makers were introduced to the available evidence and experience in countries with successful tobacco control strategies.



CONCLUSION

For more than three decades, WHO and the Surgeon General of the United States Public Health Service have released reports on the adverse impact of tobacco use on health. The tone and content of these reports have changed over the years. Early on, there was a need for critical review of the epidemiological and biological aspects of tobacco use. Today, the deleterious effects are well documented, and the reports have begun to investigate the social, economic and cultural consequences of these effects and what needs to be done to address them. However, the formidable task of curbing the tobacco epidemic still needs utmost attention and global cooperation. Hopefully, translating research into policy and creating mechanisms for the exchange of information will lessen the guesswork for those who are just beginning their efforts for tobacco control while strengthening the work of those who started much earlier. Despite the obstacles, optimism and persistence must prevail, because the costs of the tobacco epidemic are too high if not addressed.

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