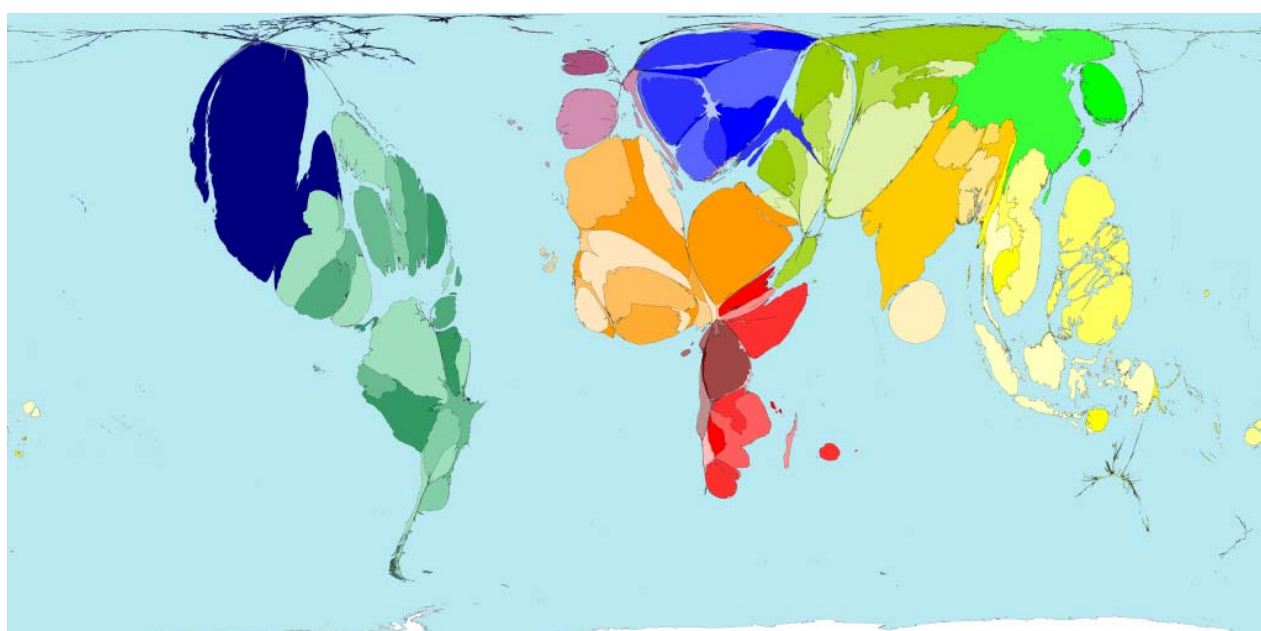


TOBACCO CONTROL

in

A DEVELOPING COUNTRY



Hatai Chitanondh, M.D., F.I.C.S., F.R.C.S.(T)

Executive President, Thailand Health Research Institute
President, Asia Pacific Association for Control of Tobacco

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Increase in tobacco use in developing countries is the world's major health concern. As far back as 1978 the WHO Expert Committee on Smoking Control warned that: "In the absence of strong and resolute government action, we face the serious probability that the smoking epidemic will have affected the developing world within a decade and that a major avoidable public health problem will have been inflicted on countries least able to withstand it for the twin reasons of commercial enterprise and government inactivity. The committee was of the opinion that, failing immediate action, smoking diseases will appear in developing countries before communicable diseases and malnutrition have been controlled and that the gap between rich and poor countries will thus be further expanded."⁽¹⁾

SMOKING PROBLEM IN DEVELOPING COUNTRIES

MAGNITUDE OF THE PROBLEM

1. CONSUMPTION

Tobacco consumption has been increasing 2.7% a year in developing countries while decreasing 1.8 % annually in developed countries.⁽²⁾ The number of cigarettes smoked outstripped population growth in all developing regions. In parts of Asia and Latin America, cigarette consumption increased at a rate more than 30% faster than the population growth between 1970 and 1985. WHO estimates that between 1970 and 1985, cigarette consumption increased by 24% in Latin America, 22% in Asia and 42% in Africa, while the same period saw reductions of 9% in the USA and 25% in the UK.⁽³⁾

2. TRADITIONAL FORMS OF TOBACCO USE

Although cigarette smoking is already the predominant type of tobacco use, in assessing the problem in developing countries, indigenous forms of tobacco consumption, which are characteristic of certain regions, have to be taken into account. They are bidi, chutta, chilum, sulpa, hookah, goza, hubble-bubble, chewing tobacco, and snuff. Tobacco chewing and reverse smoking have high risks for oral cavity cancer. Bidi smoking, either alone or in combination with chewing, has a high risk for cancer of the pharynx, larynx, and lung. In Goa, reverse dhumti smoking has been associated with palatal lesions. A relationship between reverse chutta smoking and cancer of the palate has been found in South India. Buccal and

labial cancers have been attributed to pan chewing in Kerala, Oral cancers are the leading site of the disease in Sri Lanka, accounting for 10-20 percent of all cases.

3. HEALTH BURDEN

The time-lag between the cause and the effects of tobacco consumption often leads people to underestimate the dangers of smoking. In some developing countries where tobacco use has become very prevalent, the incidence of hypertension and myocardial infarction has become almost as high as in the industrialized countries. There are evidences of increase of cardiovascular (CVD) in developing world. Twelve centers in 7 countries in developing nations – China, Thailand, the Philippines, Indonesia, Chile, Colombia, and Brazil connected with International Clinical Epidemiology Network (INCLIN) made a joint study measuring CVD risk factors in random samples of approximately 200 men aged 35-65 years. It found high level of risk factors, including smoking rate of 16-78 %, and recommended that steps should be started to prevent the emergence of CVD epidemics in the future.⁽⁴⁾ Cities in China have male death rates from lung cancer that already exceed those from other cancers. In Uruguay already male lung cancer rates are as great as in many developed countries.

It is predicted that in 1995 there would be one million deaths in developing countries. In mid-2020s world mortality due to tobacco use would rise to 10 million, 70 % of which will occur in the Third World. In India 630,000 deaths are attributable to smoking annually. In China alone, 50 million of all children alive today will eventually die from diseases caused by smoke.⁽⁵⁾

WHO⁽¹⁾ has estimated that some 50% or more adult men are dependent on some form of tobacco use but only less than 5% of women are smokers, except, for example, in certain areas of Bangladesh, India, Nepal, and Thailand, where a much higher proportion of females consume traditional form of tobacco characteristic of the region. Comparing to the higher, approximately 30%, rate of the western women there is a great challenge in the Third World to maintain this low smoking rate among females.

4. ECONOMIC BENEFIT VS BURDEN.

The economic benefits of tobacco production are usually smaller and less reliable than is perceived because tobacco consumption causes greater economic burden.

The role of tobacco plays in the economy of the country might be perceived as very important. The tobacco growing, production, sale, and export are thought to be an important source of employment and income. The manufacturing of tobacco products is often thought as a substantial source of employment and excise revenue for the government. The export and import of tobacco products is perceived as a significant source of foreign currency earning and import revenue for the administration.

But tobacco growing causes severe deforestation, soil erosion, desertification, and green house effects. The tobacco farmers are at a great health risk of the intake of pesticides, herbicides and soil sterilizers. There is also an increased risk of fires resulting from cigarette smoking in countries where dwellings are often constructed of highly flammable materials.

Tobacco manufacturing in developing countries and in developed countries with a free market economy is largely dominated by seven giant transnational tobacco conglomerates (TTCs). About 85-90 % of leaf tobacco that enters into international trade is under the direct control of about six transnational leaf buyers, some of which are TTC subsidiaries. Being oligopolies in both leaf production and manufacturing, they dictate the pricing of the world market. Thus the developing countries are altogether marginal to the marketing process. Although they supply 55%[^] of world leaf tobacco they have to do it through the TTC's marketing channels.

The costs of tobacco consumption that can be translated into economic terms are costs due to loss of production, medical care, fire and accidents. Loss of production is affected by reduction in life expectancy, increase in the numbers of the permanently disabled, and increased absenteeism from work. In China a scientific survey had discovered "the economic loss caused by smoking is far more than the profits the industry makes." According to a survey by researchers in Shanghai, cigarette smoking cost the city 1.19 billion yuan (US \$207 million) in 1988 while the total tax revenue of tobacco was only 1.13 billion yuan.⁽⁶⁾

THE CAUSES

There are many reasons for the increase of tobacco consumption in developing countries.

Government inactivity is the major cause. The administration usually perceive that production of tobacco leaves and tobacco products creates agricultural and manufacturing jobs and generates substantial tax revenue. The country has little incentive to address future

health problems caused by tobacco use since long exposure time is needed for smoking – induced diseases to occur. Governmental resources are low and already stretched by other serious health problems such as drought, malnutrition, and infectious diseases. Legislation for tobacco control are weak because of a great lack of political will.

Socioeconomic changes are significantly contributing to the increase in tobacco use. Industrialization and subsequent urbanization create stress among the population. Thus the consumer demand for nicotine is increased. The people's disposable income rises and consumption increases accordingly.

Weak or nonexistent non-government organizations and grassroots is a handicap in tobacco control in developing nations. This is either due to culture and political climate, mostly undemocratic, in the third World.

Declining tobacco use in the industrialized countries is encouraging the multinationals to set up their efforts aimed at the developing countries in order to replace the dwindling markets. *The TTC's behavior* and aggressive marketing techniques lead to continuous rise in tobacco consumption in the Third World. The images of sex, success, luxury and white European sophistication are used to promote the sale of tobacco products in developing countries.

TOBACCO CONTROL IN DEVELOPING COUNTRIES

To stop or slow down smoking epidemic in a developing country a comprehensive national smoking control program is needed. To be most effective the activities should include all components – data collection, public information, public education, restrictive measures and legislation, smoking cessation, research, and coalitions.

A national smoking control body should be set up to plan the programs and coordinate with other non – health ministries, universities, and other key groups, e.g., mass media, primary health care system, schools, community leaders, voluntary health and other organizations.

THE OBJECTIVES

The prime objective is to reduce tobacco consumption of the population to the lowest level possible. If this ultimate goal is achieved the results would be reduction of smoking – related diseases and economic burdens.

The main objectives are :

- (1) to prevent the initiation of smoking habit in the population ;
- (2) to change smoking behavior in the population ;
- (3) to establish non-smoking as a social norm.

At the start of the national program it is essential to create public awareness of the consequences of smoking for the individuals' as well as nation's health. It is also important that the policy-makers and decision-makers be aware of the consequences of smoking on public health and environment.

To prevent the initiation of tobacco use there must be measures to reduce influences conducive to smoking, to strengthen individual resistance to such influences, and to increase the attractiveness of non – smoking.

To change smoking behavior of the population there should be activities to induce smokers to perceive that tobacco use is an important health risk, to persuade smokers to quit for health benefits, to convince tobacco users that quitting is not difficult, and to prevent relapse.

To establish non-smoking as a social norm the activities needed are those creating public awareness of the social and health consequences of environmental tobacco smoke, protecting the health and the rights of the non – smokers, creating smoke-free zones, promoting a positive image of the non-smoker, and setting up effective programme for crop substitution for tobacco.

COMPONENT 1. DATA COLLECTION

A national tobacco control body should search and compile all available data for use in the planning. The useful ones are smoking prevalence in total population and in different groups with respect to sex, age, occupation, education level, socioeconomic status, residential area; total and average consumption levels; reasons for initiation and quitting; age of initiation ; and health awareness and attitudes of smokers.

Informations of the economic aspect of tobacco should also be collected, e.g., tobacco growing, manufacturing of tobacco products, import and export, revenues, etc.

Data on the TTCs should be compiled in terms of the Tobacco Institute (TI) activities, marketing strategies, association with local businesses and politicians.

COMPONENT 2. PUBLIC INFORMATION

The public should be informed, by a mass communication approach, of the nature and magnitude of the problem of tobacco use. Mass media are very useful in carrying informations to wide audiences which include various key groups such as politicians, academics, religious leaders, teachers, business people, workers, housewives, and youths. In developing countries religious groups and community leaders are very influential in creating social norms.

Various channels are available for public information. In most developing countries non smoking as healthy life-style by role models, sport heroes and popular actors are the best presenters for such promotion.

Newspapers are the best media in providing more factual, detailed, and even statistical informations. Magazines of various varieties are for middle-class literate groups. They can convey health informations to specific target readers such as youths, women, professionals, and business groups.

Posters and *billboards* are good at illustrating smoking problems and are helpful in creating non-smoking atmosphere. *Pamphlets* might not be fully useful for general public but are helpful for health personnel. Comic – strip cartoons are a good media in some developing countries, especially among young people. The cartoons should promote non – smoking life style. In rural areas of some countries travelling *puppet shows* and mobile *drama* units could be useful media to promote non-smoking behavior.

COMPONENT 3. PUBLIC EDUCATION

First the smoking prevalence of doctors and health professionals should be surveyed. If the rate is high, especially when compared to that of the general population, then they should be the first target for smoking-or - health education.

Public education programmes can be conducted both in schools, as a formal education activities, or in the community. The responsibility for public education rests with leading medical bodies, such as the Medical Association or the Public Health Association, and National and International health organizations.

Essentially the general principles for public education are presentation of smoking problem, raising public awareness and creating public opinion, and educating civic groups at the national and community levels.

Public education activities are best done by health personnel, including doctors, nurses, traditional health practitioners, and primary health care workers ; teachers and schools ; religious organizations ; the workplace ; and clubs and organizations.

COMPONENT 4. RESTRICTIVE MEASURES AND LEGISLATION

In certain system restrictive measures can be used without enactment of law, e.g., regulation for ban of smoking in government offices.

Restrictive measures and laws may be divided into 2 categories - one is to deal with the supply or production and another is to deal with demand or consumption. To control the products the legislation should include ban on promotion, especially advertising, requirement of health warnings, control of harmful substances, restriction on sale to adults, taxation and price policy, and economic measures. To control demand or consumption the legislation should include prohibition of smoking in public places and workplace, prevention young people from tobacco use, mandating health education, and restrictions on smoking of certain people.

1. PROHIBITION OF ADVERTISING AND PROMOTION

A law should be enacted to ban direct and indirect advertising in all media of tobacco products and of merchandises and services that have the same names of that of tobacco products. In Thailand's Tobacco Product Control Act 1992 the term 'advertising' is comprehensively defined as 'any act that enable people to see, to hear, or to know of, for commercial purpose. Thus an appearance of cigarette logo anywhere for commercial purpose is considered 'advertising'. So sport and culture sponsorship can not be done and there is no need to have another article to prohibit such activities.

The law should have articles to ban all forms of promotion, e.g. exchange, free sampling, free premium, discount coupons, redemption, sweepstake, price discount, product trial and product guarantee.

2. REQUIREMENT OF HEALTH WARNINGS

Health warnings should be legally required to be displayed on the packages of tobacco products and on the advertising media (if there is no advertising ban in that country). The health messages should be strong, e.g., smoking causes lung cancer, smoking causes heart disease, smoking causes emphysema, smoking causes stroke, smoking kills, smoking is

addictive, smoking harms those around you, smoking harms unborn child, giving up smoking reduces risk of serious diseases, giving up smoking increases your fitness.

These warnings should be clearly visible by being placed on both principal surfaces of the cigarette packages, with black letters on white background or vice versa, with the specific size of the area being 20-25 % of the principal surface, and with specific sizes of the letters according to the sizes of areas of health warnings.

Health warnings should be changed at intervals since after a certain period the smokers get used to the text and there is no more effect upon the change in smoking habit.

3. CONTROL OF HARMFUL SUBSTANCES

Legislation should be enacted *limiting upper limits of cigarette emission products*, e.g., tar, nicotine, and carbonoxide. These product emission levels should also be printed on the packages to inform the consumers. The optimum upper limit for tar is 15 mg and for nicotine 1 mg.

It would also be very useful for consumers' protection if the law could have an article that *disclosure of ingredients* is mandatory for each brand. Such requirement is a part of the law in Canada, New Zealand, and Thailand.

The problem of ingredients is enormous. There have been thousands different kinds of chemicals to be used as ingredients which is necessary to correct the stale taste after tar and nicotine are reduced. The last list that tobacco companies gave to the U.S. Health Secretary consisted of about 700 chemicals, most of which are not known and tested.

4. RESTRICTION ON SALE TO ADULTS

For adults restriction on sale could be implemented by local regulation. The best example is prohibition of sale of tobacco products in the premises of the offices under jurisdiction of the ministry of health. The same should be applied to medical schools. To permit the sale would be inconsistent with the organizations' leadership in health.

Prohibition of sale of tobacco products in pharmacies is a meaningful measure to counter the TTC's tactic of selling by association with pharmaceutical establishment via the white coated and respected pharmacist. For an important member of the health care team like a pharmacist to sell tobacco products is to dress it in a cloak of professional respectability and to sanitize it in the eyes of the population.

Limiting duty-free privileges for cigarettes can be implemented in some countries. Singapore removed the privilege for all inbound travellers from January 1, 1991.

5. TAXATION AND PRICE POLICY

Increase of excise tax is probably the most effective measure to reduce consumption and smoking rate in the population. This should be done regularly and the level of increase should surpass inflation rate in the country so that tobacco products would become 'less affordable'. Price increase has the effect of encouraging smokers to quit, triggering off the decision. The population group that is most affected is the younger people who are 'temporarily poor.'

6. ECONOMIC MEASURES

There are several economic measures that might or might not necessarily be enacted as laws.

Crop substitution for tobacco is a good program to lessen reliance on tobacco growing. Acting on repeated resolutions of World Health Assembly urging the FAO to study the substitution of other crops for tobacco, the FAO Commodities and Trade Division issued a report on the subject in 1982.

Limitation of subsidy to tobacco growers should be a policy of all tobacco-growing countries. In many regions this subsidy dwarf the financial commitment to smoking control program.

In a country where ban of tobacco advertising has yet to be a law *abolition or limitation of tax deductibility* of tobacco products promotion and advertising should be implemented.

Import ban, ban of manufacturing, and ban of sale could be implemented in certain situation. Prohibition of the import, production, and sale of smokeless tobacco was enforced in Hong Kong starting from 1986 and in Thailand since 1990.

Another good measure is the *income tax deduction* for the cost of smoking cessation program. Employers could be encouraged to provide bonuses and other *incentives* to workers who quit. The incentive could be in the form of interest-free loans for any form of cessation aid.

Insurance companies are encouraged to offer *preferential life, health, and household insurance premiums* to nonsmokers and for paying for smoking cessation program being

offered to group insurance subscribers. It is legitimate and most appropriate to require smokers to pay their fair share and to stop forcing nonsmokers to subsidize the unnecessary costs of smoking due to additional health care and residential fire.

Tobacco, as well as alcohol, price and tax should be removed from the consumers' price index (CPI) so as to avoid any inflationary effect.

7. PROHIBITION OF SMOKING IN PUBLIC PLACES

The main objectives are to protect non-smokers' health and rights. Ill health effects of environmental tobacco smoke (ETS) are thoroughly investigated and well publicized.

The law should specify the areas to be implemented. Total no – smoking zone should include all sorts of air-conditioned transport vehicles, elevators, and cinema halls. Totally smoke-free zone, except private rooms, should include art halls, libraries, and nurseries. Totally smoke-free, except designated smoking areas, should be trade exhibit halls, trade centers, indoor sport arena, government buildings, customers' area in commercial banks, and passenger terminals. At least 50% of the total area should be non-smoking zone in ordinary (non air-conditioned) passenger train and air – conditioned restaurants.

8. PROHIBITION OF SMOKING IN WORKPLACE

Because of health risk in ETS non-smoking workers should be protected by law or regulation to ban smoking in the workplace. Workers in some occupations, e.g. in the asbestos and mining industry, have specially higher risk because exposure to some chemicals have multiplicative effect when combined with tobacco smoke. Legislation should include those governing specific types of institutions, e.g. schools, colleges, hospitals, health care establishments, premises where foodstuffs are stored, handled, prepared for consumption or offered for sale; law relating to places where hazardous substances are used; and legislation enforcing upon industrial plants and offices.

9. PREVENTING YOUNG PEOPLE FROM SMOKING

The most important measure is *prohibition of sale of tobacco products to minors*, preferably those under the age of 18. Every country should have this law since it represents the government's will to protect the health of its children. Regulation could also be made in posting warning signs about the illegality of sales to minors.

Another measure to reduce the young people's access to cigarettes is the *restriction of sales from vending machines*. This could be a total ban or a ban in certain places, particularly public places that are legally accessible to minors, except some places, e.g., taverns, cocktail lounges, industrial plants, hotels, and motels.

Other restrictions might be valuable to create social norms for the younger generations, i.e., *prohibiting children and adolescents from possessing tobacco products, from smoking in the public, and prohibiting smoking in schools and in other places frequented by minors, and restricting advertising and promotion that might influence young people*.

10. MANDATING HEALTH EDUCATION

Before enactment of tobacco control laws health education on smoking should be mandated so the public and decision – makers know about health risks of tobacco use and the need for legislation. The effects on health should be included in the school educational curricula and community programs. Mandating health education on smoking, rather than leaving the task to voluntary initiatives, assures that education will go hand – in – hand with legislation, each strengthening the other.

COMPONENT 5 SMOKING CESSATION ACTIVITIES

Smoking cessation clinics should be set up in major, particularly tertiary, health care facilities. Both governmental and private cessation activities should be supported. The clinics usually provide health information, group discussion, mutual support, and cessation aids. One type of cessation aid is a nicotine replacement therapy using nicotine gum, transdermal nicotine patch, nicotine nasal spray, and a nicotine inhaler. Another type of cessation aids available are lozenges, capsules, and tablets. Some of these contain small doses of nicotine, aimed to reduce cravings, while others contain silver acetate which produced an unpleasant taste when a cigarette is smoked.

COMPONENT 6 RESEARCHES

The objectives are to measure the problem and to monitor progress of smoking control program.

There are two types of researches, especially in countries which have not yet taken much actions.

Firstly *baseline report* should include few informations. A survey of smoking prevalence should be done in certain groups of population, particularly doctors, women, and young people. The survey can be carried out using WHO guidelines. A survey of tobacco-related diseases should be done, mostly from national statistics. If this is not available hospital discharge records may be used. A forecast of the future incidence of smoking-related diseases is needed. A review of the experiences of developed countries should be prepared by collecting informations from specialized agencies, e.g. the reports of WHO, UICC, and US Surgeon General. Operations of the tobacco industry, both domestic tobacco monopoly and the TTCs should be recorded. The economic assessment of tobacco should be summarized.

Secondly *regular surveys and evaluations* should be carried out. Surveys of smoking prevalence, morbidity, and mortality, using WHO guidelines are done to assess the magnitude of the problem, to ensure the necessity of preventive measures, and to evaluate the effectiveness of the tobacco control activities. Surveys of the public attitudes about smoking are valuable for the preventive measure and health education in correctly addressing the people's belief. They also demonstrate to the government the strength of public support for national tobacco control program. Evaluation of economic impact of tobacco is useful in terms of the costs of medical care, production lost, social welfare costs from premature death and disability, fires, refuse collection, and the use of land for tobacco growing. The success of each tobacco control activity could be evaluated by analyzing the effect on the tobacco industry of any piece of antitobacco policy. The higher the resistance means the higher level of effectiveness.

COMPONENT 7 TOBACCO – CONTROL COALITIONS

Working hand in hand with the governmental national smoking control agency should be coalitions or networks of individuals or agencies concerned with preventing and controlling tobacco use. The coalition members represent the health professions, the general community, groups concerned with legislation and policy, and educational groups.

These coalitions carry out public education and information activities, address legislative efforts, educate professionals, work on developing a plan for tobacco – use control, and carry out research and evaluation.

Apart from the above tobacco-control components developing countries should seek help and advice from experts from industrialized countries and from international organizations,

e.g., WHO, the International Union against Cancer (UICC), the American Cancer Society, and others.

CONCLUSION

In developing countries tobacco use is rising rapidly, awareness of the health dangers is poor, governments are mostly inactive, and the multinationals are aggressive.

To slow down the looming tobacco epidemic and continuing genocide a solid national tobacco control program is needed. All components of the program must be very well integrated, carried out by a national smoking control organization run by a knowledgeable and devoted core group of health professionals, with close cooperation with coalitions and grassroots.

Public support is very much needed, so too is a strong political will.

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