

Tobacco and Non-communicable Diseases

Controlling the Tobacco Epidemic

KEW Hagley

INTRODUCTION

The original use of tobacco was a part of the ritual of religious incantations of members of the indigenous population of the Americas in their invocations for the bestowing of blessings on their peoples and land. Sadly, with the growing and widespread use of tobacco, fuelled by its addictive properties and the marketing policies and strategies enacted by persons, groups and companies with vested financial interest in its use, the substance has become a curse on humanity because of the enormous impact of tobacco-related diseases which have been ravaging the health of its users as well as others exposed to its smoke.

In the fourth and fifth decades of the twentieth century, a growing number of isolated reports of the association of lung cancer and cigarette smoking was published and subsequent studies including the first large scale study undertaken in 1951 by two widely known and respected epidemiologists in the United Kingdom, Richard Doll and Bradford Hill, provided further confirmation of the causative link between cigarette smoking and the development of lung cancer (1). The first report of the Royal College of Physicians of London in 1962 on a study undertaken among 40 000 British Medical practitioners who were chronic cigarette smokers, revealed that smoking tobacco was a causative role in lung cancer, chronic bronchitis and heart disease (2). The report generated much interest and concern of the medical fraternity. The first United States Surgeon General's report on Smoking and Health in 1964 amplified the previous findings and provided an expanded view of the impact of smoking on health. Subsequent Surgeon General's reports addressed additional issues *eg* the impact of smoking in women, the aggravation and intensification of occupational lung diseases, the huge and growing human and financial cost engendered by smoking tobacco and the overall threat to public health.

As the years rolled by, it became obvious that tobacco smoking was responsible for approximately 85% of all lung cancers and was also contributing to the development of cancers in other tissues. Indeed by the eighth decade of the twentieth century, the World Health Organisation (WHO) noted that tobacco use was responsible for about one third of all cancers throughout the world. Published analyses of

tobacco revealed that among its over 4 000 constituents there were approximately 50 carcinogens as well as many other cancer promoting agents. In addition, the world learned that cigarette smoking was a major risk factor for cardiovascular diseases. In particular, it was accounting for over one third of acute myocardial infarctions in male chronic smokers but was also making notable contributions to cerebrovascular, peripheral artery and renal diseases. Indeed, additional data implicated smoking tobacco in the development of a wide range of pathological processes in a variety of tissues. Adverse effects on the smoking mother and fetus were outlined and the risk for the development of tobacco-related disease in passive (secondary) smokers became increasingly evident.

Studies revealed that cigarette smoking was a high risk factor for atherosclerosis and that it influenced its development from the endothelial changes resulting in endothelial dysfunction to the subsequent development and progress leading to plaque development and behaviour.

Control of tobacco use

Despite the enormity of the impact of the tobacco epidemic on health in the developed countries, their governments failed to take the appropriate measures to reduce this burden. Nevertheless, the entry of non-governmental organizations' anti-smoking activity provided a glimmer of hope in the struggle to reduce tobacco smoking. In 1971, ASH-UK established the first National Tobacco Control legislation, and organisations in other countries joined in educating their members and the public about the dangers of smoking tobacco and advocating the adoption of measures by governments to control its use.

At about this time, the WHO appointed an Expert Committee charged with recommending measures to be taken by countries to reduce the growing threat to health posed by tobacco-related diseases. Subsequently, WHO sponsored the holding of World Conferences on Tobacco and Health, the first of which was held in 1967. At the Fourth World Conference held in Stockholm in 1979, Sir George Godber, a highly regarded public health practitioner, in his address to the meeting stated that "the message at the end of this meeting must be to governments, not just health ministers – loud and clear. They prate of prevention being better than cure. So it is, but they must do those things which make general prevention possible. If the use of tobacco is to be prevented, however skilful our health educators may be, its commercial promotion must be stopped – only governments can do that" (3). In 1988, WHO invited the world to celebrate World No Tobacco Day on May 31 of each year to

From: Medical Associates Hospital, 18 Tangerine Place, Kingston 10, Jamaica.

Correspondence: Dr K Hagley, Medical Associates Hospital, 18 Tangerine Place, Kingston 10, Jamaica. Fax: (876) 960-4160, e-mail: kehag@yahoo.com

reinforce the necessity for adopting measures to control the epidemic.

The Framework Convention on Tobacco Control (FCTC) developed by WHO in consultation with representatives from its 184 member nations between 1999 and 2003 was established in 2003 (4). The countries were requested to sign and ratify this treaty. It is comprehensive in its approach to the issues relating to the control of the use of tobacco and following ratification, countries are required to adhere to the implementation of its various strategies and wide ranging recommendations.

The Treaty calls for parties to the Convention to:

- * Enact and undertake comprehensive bans on tobacco advertising, promotion and sponsorship
- * Ban misleading and deceptive terms on packaging such as “light”, “low-tar” and “mild”
- * Implement rotating health warnings and tobacco packaging that cover at least 30% (ideally 50% or more) of the display areas – this may include pictures or pictograms
- * Protect people from tobacco smoke exposure on public transport, indoor work and public places
- * Adopt or maintain taxation policies aimed at reducing tobacco consumption
- * Combat illicit trade in tobacco products – requires monitoring, documenting and controlling product movement

The FCTC provides an essential supporting structure with interlocking pillars of strategies and activities whose implementation in a multifaceted and comprehensive manner should lead not only to halting of the epidemic, but a profound reduction of the burden of tobacco-related diseases throughout the world in terms of mortality, chronic diseases and adult disability. Although the role of the governments in this endeavour is of critical importance, experience has shown that success is often hampered by barriers to progress emanating from the whims and fancies of government. Non-governmental organizations, other groups of persons, individuals who are able to participate in a meaningful way and civil society can all play important roles in thwarting and nullifying the powerful forces involved in the growth of tobacco, manufacture of its products – often foisted on a gullible public by intensive and extensive marketing strategies frequently immersed in deceptive statements and activities of the tobacco industry whose cigarettes kill 50% of the chronic smokers but yet dare to claim to exhibit good corporate citizenship.

The following facts highlight the need for urgent action (5):

- * Tobacco smoke kills one of every two chronic adult smokers and their deaths are usually premature
- * The annual number of deaths of passive smokers is approaching 1 million
- * Smoking tobacco kills nearly 6 million people every year. If present trends continue, this number is ex-

pected to rise to 8 million by 2030

- * The death toll from tobacco smoke has been rising at a faster rate in developing countries and by 2030, 75% of tobacco-related deaths will occur in the developing world
- * More than 80% of the one billion smokers live in low and middle income countries
- * Tobacco accounts for 10% of all global deaths and 4.2% of disabilities
- * Tobacco use is second only to hypertension in its contribution to world-wide mortality and remains the single most preventable cause of death
- * In the 20th century, the tobacco epidemic killed 100 million people world-wide and is likely to kill 1 billion persons in the 21st century

ADDENDUM

Tobacco-related issues in CARICOM countries

Cigarette smoking is the main form of tobacco use in CARICOM countries. The prevalence rates of smoking have never reached the rates registered in countries considered to have high populations of heavy “smokers”. Surveys have been relatively few but data published by PAHO/WHO in 2005 have been regarded as representative of existing prevalence rates in CARICOM countries with preponderance among males. The highest rates were recorded in Trinidad and Tobago (M = 37%; F = 6%) and Jamaica (M = 26.5%; F = 14%). The latest survey in Jamaica carried out by the National Council on Drug Abuse in 2010 showed worrying increases in rates among males, females and children.

Clinico-pathological data reflect a major impact of tobacco-related diseases on the health of CARICOM citizens. For instance, smoking tobacco is a well recognized contributor to the development of the three leading causes of mortality over the past 30 years: heart disease, cancers and cerebrovascular disease. Furthermore, the added risk for increased and more severe cardiovascular disease among smoking diabetic and hypertensive patients is well recognized.

Data from Jamaica revealed that on an annual basis, deaths due to cardiovascular diseases exceed the number of combined deaths caused by HIV-AIDS, injury-related events and cancers. The rapid rise to prominence of “heart attacks” in Trinidad and Tobago and Jamaica in the latter half of the twentieth century can in part be attributed to the increased cigarette smoking which had recurred in the middle of the twentieth century. The increase in cancer deaths, accompanied by the change in pattern of cancers, also coincides with increased cigarette smoking.

Fortunately, recent years have revealed evidence of a desire and determination of CARICOM countries to combat the impact of chronic non-communicable diseases whose development and impact are heavily influenced by smoking tobacco. For instance, the Port-of-Spain Declaration issued by Heads of CARICOM Governments at their historic

meeting, in 2007, primarily to address control of the chronic non-communicable diseases, included the endorsement of the FCTC and a recommendation for early signing and ratification of the treaty. At present, CARICOM is engaged in a project for the re-labelling of tobacco packets to include graphics. In addition, public bans on smoking have been enacted in Trinidad and Tobago and Barbados. A great pity is that Jamaica, having ratified the treaty in 2005, subsequently breached the treaty by supporting the planting of tobacco and the manufacture of cigars.

Non-governmental organizations must be encouraged to strengthen their educational voice to keep the public informed of the impact of tobacco use on health, to deepen their advocacy for the required changes to reduce their impact and to seek additional avenues leading to the implementation of the FCTC.

The Jamaica Coalition for Tobacco Control which comprises ten NGOs, with The Heart Foundation of Jamaica acting as its secretariat, has been involved in such activities and undertook an added initiative to its anti-smoking activities when it made a successful bid for a project funded by the Bloomberg Global Initiative, for the development of new labelling of cigarette packets to include graphics and written messages on 50% of the surface of the packs. This project jointly implemented by an NGO in each of four countries – Barbados, Guyana, Trinidad and Tobago and Jamaica – was seen as complementary to the CARICOM project on labelling of cigarette packs mentioned above. The Heart Foundation of Jamaica recently concluded the successful negotiation for another project relating to the implementation of the anticipated ban on public smoking in Jamaica and is being

funded by The International Union Against Tuberculosis and Lung Disease (The Union).

The establishment of the Healthy Caribbean Coalition (HCC) with its headquarters in Barbados followed the Port-of-Spain Declaration and provides the opportunity for the involvement of civil society in efforts to reduce the burden of these diseases on CARICOM peoples. At present, the HCC is promoting a wide network to “Get the Message” within CARICOM countries to “educate, agitate, integrate and communicate” with a particular focus on the youth in support of the planned meeting of the United Nations in September 2011 to address the burden of the chronic non-communicable diseases in peoples throughout the world. Plans for this meeting stemmed from a CARICOM initiative. The hope is that, among other happenings, the meeting will have a catalytic effect on the full implementation of the FCTC treaty in CARICOM countries and indeed throughout the world.

Keywords: Epidemic, mortality control, non-communicable diseases, tobacco

REFERENCES

1. Doll R, Hill AB. A Study of the Aetiology of Carcinoma of the Lung. *British Medical Journal* 1952; **2**: 1271–86.
2. Doll R, Peto R. Mortality in Relation to Smoking: 20 years Observation on Male British Doctors. *British Medical Journal* 1976; **2**: 1525–36.
3. Ramstrom LM, ed. Proceedings of the Fourth World Conference on Smoking and Health. Address by George Godber; 1979 June 18–21; Stockholm; 1979: 15–9.
4. World Health organization. FCTC Treaty. WHO Website 2011. Available from: www.who.int/tobacco/framework/en
5. The Tobacco Atlas, third edition. Atlanta, Georgia: American Cancer Society; 2009. Available from: www.tobaccoatlas.org