Review Article

Tobacco Control: A Global Review with Specific Reference to the Role of the GP

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Curriculum Vitae

Dr Yach studied medicine at the University of Cape Town; followed that by studying Epidemiology at the University of Stellenbosch and Public Health at Johns Hopkins University. He currently co-ordinates the Medical Research Council's Essential Health Research Programme. His major interests and areas of publication have related to broad aspects of public health with a specific emphasis on major public health problems such as tuberculosis, measles, chronic diseases, the impact of tobacco on health and the impact of urbanisation on health. He serves on a number of Advisory Committees dealing with Primary Health Care, AIDS and Public Health Training. He has participated extensively in national and international meetings dealing with the future of public health policies. Dr Yach currently serves as a consultant to the Development Bank of Southern Africa's health sector, as well as to a number of private organisations involved in health initiatives.

Summary

The impact of tobacco on human health has been well described over the last four-and-a-half decades. Public concern about the need to emphasise effective preventive strategies has resulted in the development of comprehensive approaches to tobacco control on a worldwide basis. The purpose of this paper is to firstly, identify major global trends that are likely to influence the tobacco epidemic in future; secondly, provide information on the current impact of tobacco in South Africa; thirdly, highlight the current status of effective measures to control tobacco in South Africa and in doing so, give special reference to the role of the family practitioner in preventing smoking and assisting smokers to quit.

S Afr Fam Pract

1994;15:373-80.

KEYWORDS:

Smoking;

Smoking, Passive;

Health Education;

Physicians, Family;

The World Bank in its World Development Report, 1993, provided economic reasons for its new policy that forbids loans for tobacco cultivation, distribution and marketing. In a major review of the overall economic impact of tobacco, the author of the report, Mr Howard Barnum, a Senior Health Economist at the World Bank, concluded that "the nett effect on global welfare of investing in tobacco is emphatically negative". This statement by a hardnosed investment body represents in some ways the culmination of health and economic evidence that has

been accumulating since after the Second World War. Only major trends will be briefly commented upon here.

Prestigious health and medical institutions such as the Centres for Disease Control in the USA; the Royal College of Physicians in the United Kingdom; the International Agency for Research on Cancer and the World Health Organisation have all produced independent reviews of the impact of tobacco on human health. While initially the emphasis was on lung cancer, in recent years, studies have expanded in scope and concluded that tobacco related death and disease constitutes one of the most preventable forms of death and disease on a worldwide basis.

The most recent report of the WHO dealing with women and tobacco, clearly highlighted the rapid increase in lung cancer being seen in Scotland and the USA over the last two decades.

This finding followed several decades of targeting of women by the tobacco industry. The report of the US Environmental Protection Agency in the late 1992 on the impact of environmental tobacco smoke has resulted in a plethora of initiatives around the USA which are likely to spill over to other advanced industrialised countries and later into developing countries. The report highlights the fact that a significant proportion of total lung cancer mortality, a very high proportion of acute respiratory infections and asthma and respiratory diseases were associated with passive smoking. The report has already resulted in paternity cases being decided on the basis of the smoking status of the parent.

In recent months, the Surgeon General of the USA, Dr Elders, announced that she was convinced that the evidence linking Joe Camel adverts to smoking in children was sufficiently strong for her to require the Federal Trade Commission to investigate the possible banning of the advertisement. Taken together, the increased concern about the impact of tobacco on women; the growing evidence of the impact of passive smoking; the likely restrictions on tobacco advertising as well as the likely increase in tobacco tax to be included as part of the Clinton health reforms, have meant that tobacco consumption in the USA has declined in recent years and that future prospects for further growth must look bleak. It was in view of this that the previous Vice-president, Dan Quayle, announced at a meeting of tobacco manufacturers that "tobacco exports should be expanded aggressively because Americans are smoking less!"

World bank forbids loans for tobacco cultivation, distribution or marketing.

One of the most preventable forms of death and disease worldwide.

A recent review by the Economist, indicated that US producers had in fact started exporting dramatically with the increases occurring particularly since 1988; these increases almost exactly mirror the declines in consumption occurring in the USA.

The consequences of this has meant that what Mike Muller in a monograph entitled "Tobacco and the Third World: Tomorrow's epidemic?", published in 1978, warned about, is becoming a reality. The global incidence of lung cancer in 1990 was estimated to be just short of 1 million cases. Of these, about 440 000 occurred in developing countries. It is this figure that is likely to increase dramatically over the next few decades.

A significant proportion of asthma and respiratory diseases associated with passive smoking.

Studies in Brazil clearly indicate that

policymakers should not be lulled into a false sense of security when failing to see high levels of lung cancer in their population. The 25-30 years lag period between the onset of heavy smoking and the increase in the lung cancer epidemic, has been clearly documented not only in Brazil, but for most countries on a worldwide basis. As we will see later, I believe that South Africa is in the middle of that lag period with regard to its African men.

Worldwide concern about the growing impact of tobacco, has led the editors of a major review for the World Bank involved in developing a new agenda for adult health in developing countries, to list stop smoking programmes as the second highest priority on the list for developing countries now!

South African Experience

The strength of the tobacco industry in South Africa is well-known. In a book to celebrate the 500 years since the discovery of tobacco in the new world, by the local Tobacco Institute, they proudly remind us that Jan van Riebeeck (himself a barber surgeon) was successfully cultivating tobacco on the banks of the Liesbeek River by 1658. Commercial production however, took many decades and centuries to take hold. Their book, entitled "There's Sunlight in my Leaf", is more appropriately named "There's Death in my Leaf"!

Current smoking prevalence varies by race as well as gender. Apartheid policy has meant that race is strongly confounded with social class. Importantly, smoking rates among white men and women and to a lesser extent Asian men, while extremely high, have started to show significant declines over the last decade-and-a-half. However, there does not appear to be any decrease in smoking rates among African and coloured men, with smoking rates among coloured women, ranking among the highest among women in the world. The greatest potential for prevention still lies in the fact that between 5 and 10% of Asian and African women smoke.

"Tobacco *exports* in America should expand aggressively because Americans are smoking less".

The strong association between race and social class is a result of years of systematic apartheid policy. Importantly, a direct relationship is present between smoking prevalence and socio-economic class in Africans. This means that as income and education levels increase, smoking rates will increase in the bulk of the African population. For the white population in contrast, there is an inverse relationship meaning that further increases in income and education tend to be associated with lowered consumption. This can be understood intuitively when one realises that knowledge about the hazards of tobacco and avoidance of the aggressive marketing by the industry, increase with increasing levels of income. The challenge to all of us, is to realise that the bulk of the South African population lies in the lower socio-economic classes, meaning that, as the economy picks up, prospects for increased consumption must be good unless we can be effective!

Stop-Smoking programes should be a priority for developing countries now.

What are the major forces that are driving consumption in South Africa? Price is by far the most potent of these. It is important to note that for several years now, the price of tobacco products has fallen below that of the consumer price index for other products. Clearly, certain companies such as Pick-n-Pay when they discount prices must realise that they are going to increase consumption and thereby increase the toll of

Smoking rates of our coloured women almost highest amongst women in the world.

death and disease associated with tobacco.

A second major force has been advertising of several types. This includes the traditional billboards that have marred the landscape of Cape Town for so long, and more recently advertisements that take advantage of the changing political climate, as in the case with a recent advert using Nelson as the name of a cigarette that appeared in Senegal; or an advertisement that appeared locally the day after National Peace Day, trying to capture the spirit of the time and link it to smoking. Targeting the African population is a new phenomenon that is likely to accelerate as it has with regard to alcohol.

The third area relates to the way in which the tobacco industry has sought to buy public respectability with its sponsorship of the arts, the environment and sports. I return to this point later.

What has been the impact of tobacco industry marketing combined with smoking prevalence on health status? Smoking related death and disease now accounts for in excess of 25 000 deaths annually. This includes about a third of white deaths, about 20% of Asian deaths, around 10-15% of coloured deaths and around 5% of African deaths. However, as mentioned earlier, we must not be lulled into a false sense of security with regard to the African figures. As infant mortality rates continued to decline and Africans life expectancy increases fairly steadily, existing smoking rates among adults and young children, will, with absolute certainty, result two to three decades hence in significant increases in tobacco related death and disease, of which lung cancer will probably be the major contributor.

From an economic perspective we have calculated the balance sheet of tobacco and health in South Africa. This clearly shows that the overall economic impact favours stronger control measures.

As the economy picks up, smoking amongst blacks will also, unless we are effective.

New initiatives underway

Evidence such as that presented above, is now available for several African and other developing countries. This resulted in the first All Africa Tobacco Control Conference being held in Harare last year. Ironically, the conference was held at a hotel that only a month previously had proudly proclaimed that it will be providing VIP treatment for tobacco traders. Importantly, as the organising committee, we invited those tobacco traders and growers to what proved to be an extremely lively and important conference. The Minister of Health, Dr Timothy Stamps, in opening the conference stated that he would not compromise his position as Minister of Health by failing to tackle tobacco control as a major public health problem. He went further and suggested that farmers in Zimbabwe would be able to ensure their long term livelihood far better if they were to accelerate diversification. Following the conference, probably the strongest group of tobacco control advocates to visit South Africa spent time in meetings with local authority heads, non-governmental organisations, political parties and other tobacco control activists. The result has been an accelerated rate of action around tobacco control in the pre-election period.

A new cigarette called Nelson, is being advertised in Senegal.

Advertising is targetting the African population.

There is no doubt that the major changes at presidential level in swopping a smoking President for a non-smoking health conscious President, in itself, is likely to result in

significant increased support for tobacco control initiatives.

I will briefly comment on the most effective tobacco control measures for us to advocate for.

- With regard to tobacco tax, surveys we have carried out nationwide indicate that over 55% of the total adult population of South Africa, support significant increases in tobacco tax. Business Day recently came out in support of such a tax, as has the ANC in their health plan, the Medical Association, and most recently the present Minister of Finance, Mr Derek Keys. While all accept the need for an increase, there has yet to be consensus on the need to earmark a proportion of the increase for health promotion strategies targeted at the poorest smokers in the community.

- The new Tobacco Products Control Act makes provision for warnings to be placed on advertisements. The thrust does not go as far as encouraging the development of counter advertising. Further action will be needed to prevent and stop sports sponsorship. At a time when South Africa's sports are opening up to the international community, this may still be seen as an unpopular measure since it may threaten the expansion of sport. However, since sports performance is simply incompatible with tobacco use, and tobacco sponsorship worldwide is being used as a means of luring children into the habit, we believe that the chances of bans on sports sponsorship by the tobacco industry are likely even in South Africa. Extra revenue to provide support for the sports industry could come through a portion of the increased tax on tobacco.

- Programmes targeting children to ensure that they never start smoking need to be built into all our school syllabi. Sales of cigarettes to minors is now prohibited under the new Tobacco Products Control Act. Its enforcement requires attention by many local authorities around the country. Further, involvement of children in activities like Johannesburg City Council's recent "We're too special to smoke" -competition which attracted over 10 000 posters, is one way of "psycho-immunising" children for the future.

- Finally, the Tobacco Products Control Act also makes provision for the expansion of bans on smoking in public places. The private sector has already jumped ahead of the queue and led the way for example, by banning smoking on one regular flight of British Airways. We will see that these initiatives are likely to snowball over the next months.

Smoking-related deaths now more than 25 000 annually.

Swopping a smoking President for a non-smoking one in RSA!

Stop sports sponsorship by tobacco industry!

The Role of the Family Practitioner

That brings us at long last to the potential role of the family practitioner. Their personal behaviour, the presence of signs and brochures in their waiting rooms, the ability to identify smokers and advise them about quitting, the ability to target teenagers never to start, the need to target women specifically about the need never to start, their involvement with clinic nurses particularly, and general support to achieve smoke-free hospitals are only some of the potential roles that they have in tobacco control.

Worldwide, doctors' attitudes have been shown to profoundly influence their support of measures to control tobacco. For example, doctors who smoke are far less likely to advise patients that they should stop. The support of advertising bans, restrictions on smoking in public places and increases in price are also strongly related to their smoking status. Thus our initial work needs to focus on bringing down the current still relatively high smoking rates among doctors. In doing so, we need to recognise that in many countries it was shown that the decline in smoking rates among doctors preceded smoking rates in the general population. Whether this is due to the excellent example being given by doctors or merely to a temporal phenomenon related to the fact that they were in the highest social classes, is unclear. It is likely, however, that they do play a strong and direct role that has tended to be neglected.

Unfortunately, during last year, there tended to be the growth of antagonism towards treating smokers in the UK. Various strong positions were taken among them being that of Mark Jamison who said "it is my view that the average citizen has no obligation to pay the medical bills of cigarette smokers"; compared to that of William Godshell, who said that "insisting upon smoking cessation is arguably the most appropriate regimen that doctors can prescribe to smokers". My own view is echoed by that of Clifford Douglas who maintains that "we need to punish the smoking industry not the smoking individual".

The family practitioner can play a strong role in starting to create a supportive environment to encourage no smoking by maintaining a smoke-free office, stocking appropriate materials, using records to identify smokers and then intervene, and most importantly, monitor the progress both of smokers who are trying to quit and the non-smokers. In introducing policies, general practitioners need to be aware that there are several complex stages of smoking cessation. In the pre-contemplative state, a smoker is often oblivious to the risks and will certainly not consider quitting. In the contemplative stage, they have seriously considered quitting within six months and are particularly sensitive to the strong input of GPs. In the preparation phase, they have already had a least one quit attempt. Again, intensive GP action at this point can assist them in moving on to the action phase which is defined at that time when they would have quit for at least six months. After six months they will need continued support in the maintenance phase. GPs need to try and analyse at what stage the patients are and target the interventions appropriately.

There is a need for anticipatory guidance to prevent smoking. This includes the following components:

- Anticipating the risk for tobacco use at each developmental stage;
- Asking about exposure to tobacco smoke and tobacco use at each visit;
- Advising all smoking parents to stop and all children and adolescents not to use tobacco products;
- Assisting children and adolescents in resisting tobacco use and assist tobacco users in quitting; and
- Arranging follow-up visits when required.

In trying to persuade non-smokers to start or even smokers to quit, one needs to have good motivating

Programmes to psycho-immunise our children against smoking.

Never to start.

Signs and brochures in your waiting rooms.

reasons. Persuading teenagers to quit because of the long term impact on lung cancer is likely to be fruitless. However, letting them be aware of the association between smoking and bad breath, stained teeth, the cost, sore throats, cough and dyspnoea, might be far more successful.

For pregnant women, specific focus on spontaneous abortion and birthweight is likely to be more successful; while for parents a focus on many of the EPA passive smoking findings and the need to be a good role model for children, could very well be useful. For asymptomatic adults, it is likely that they will be motivated when fully informed that their risk will be twice that of developing heart disease; that if they smoke they will have a six times greater risk of emphysema and lung cancer; their lives will be shortened by 5-8 years; that the cumulative costs of cigarettes will increase dramatically as will cumulative costs of sick time. Less commonly used reasons such as bad breath, wrinkling and premature ageing are likely to be particularly useful in individuals already concerned about their looks and their need and desire to remain youthful in appearance.

For the symptomatic adult, the onset of symptoms is likely to be an excellent reason to stop. Further, the fact that there is a real benefit in quitting, for the reduction in their long term risk of lung cancer and coronary heart disease, should certainly drive home the message that quitting at any age is likely to result in a nett benefit. It is in this group of smokers that physicians can play a very significant role in tobacco control. By asking about smoking, advising smokers to stop, assisting those who want to stop and arranging adequate follow-up, studies have shown that quit rates of around 5% can be maintained beyond one year. If one realises that there are 50 million family practitioner consultations per year in South Africa, 5% becomes a very significant overall figure. In the subset of patients with pulmonary or cardiac disease, the likelihood of them remaining smoke-free at one year, rises to between 30 and 40%. Thus, don't underestimate your overall impact.

Punish the smoking industry, not the smoking individual.

Conclusion

Finally, I hope I have shown that tobacco is a major and emerging cause of death and disease in all South African populations; however, rather than give up and wait for treatment costs to rise, the family practitioner in his or her own practice and with others in associations such as the Medical Association, the Council Against Smoking, the Cancer Association and the Heart Foundation, can play a very significant role in initially moving towards smoke-free health services for all South Africans and in the process, assisting in ensuring that the dream of the world without cigarettes becomes a reality.

Doctors in the UK refuse to treat smoking patients.

Identify smokers on your record system.

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Identify reasons for each target group.

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