Smoking — is the public aware of the magnitude of the burden?

Tobacco kills 4.2 million people annually. The WHO forecasts that it will kill over 10 million per year by the late 2020s unless robust steps to curb the epidemic are taken immediately.[1] Tobacco use has been stated to be the leading cause of preventable death worldwide.[2] Annually, smoking accounts for approximately 400 000 deaths in the USA,[2] 120 000 in the UK,[1] 500 000 in Europe,[2] and in developing countries such as India and China, 800 000 and 750 000, respectively.[3,4] Smoking is therefore a highly formidable, but preventable, cause of extensive sickness and death.

It is necessary to appreciate that following major initial rises, there has recently been a decrease in the proportion of adult smokers in a number of developed countries. For example, in the USA the percentage of adult smokers fell from 42% to 25% between 1965 and 1990.[5] In the UK the proportion decreased to 28%, but may now be increasing.[1] Unfortunately, as is apparent, a high proportion of adults continue to smoke. Considerable increases have occurred among the young, in particular among high school pupils. Examples of present proportions of middle and high school students who smoke in the USA are 38.1% for boys and 31.4% for girls,[6] in the UK 28.1% and 33.1%,[7] and in Switzerland, 23% and 27%.[8]

With regard to the situation in developing countries, a very informative study in India of relatively young university staff, i.e. with a high level of education, revealed that 51% of males and 33% of females smoked.[9] In some regions of India smoking incidence is very high among men, as in Bangladesh, where the figure stands at 49%.[10] In Africa the practice has a low occurrence rate in some countries, e.g. in Senegal and Tanzania, but recently attention has been drawn to 'Africa's rising epidemic'.[11] In Tunis, North Africa, the proportion of male smokers has been reported to be very high (55.6%), although it is far lower among women (5.2%).[12] A study in Chad, Central Africa, found that 24% of men aged 25 years and older were smokers, but in men older than 45 years the figure was 40%.[13] In South Africa, a national study of urban dwellers in 1996[14] revealed that among those aged 18 years and over the proportion of male and female smokers was as follows: Indians 61% and 7%, coloureds 58% and 59%, blacks 53% and 10%, and whites 52% and 17%. A recent inter-ethnic enquiry among urban pregnant women found that 4% of black women and 3% of Indian women were smokers, while the figure was considerably higher among pregnant coloured women (47%).[15]

When did this disastrous menace to public health begin? Historically, in 1595 Sir Walter Raleigh brought tobacco back from the so-called New World, and popularised its use in England.[16] Interestingly, it has been related that Raleigh's servant, 'on first seeing the smoke drifting from Raleigh's mouth, doused his employer with a bucket of water, sensibly reasoning that where there was smoke there must be fire'.[17] In 1664, King James I of England described the smoking of tobacco as 'a custome lothsome to the eye, hateful to the Nose, harmefull to the braine, dangerous to the Lungs, and in the blacke stinking fume thereof, neerest resembling the horrible Stigian smoke of the pit that is bottomlesse'.[18]

From early times, tobacco smoking has been accompanied by warnings. Thus, in 1699, King Louis XIV of France asked 'whether the frequent use of tobacco shortened life?'[16] The view that it did, however, failed to hinder great increases in the practice. Centuries later, before 1900, cigarette smoking became very popular in many developed countries. As an illustration of the progressive increases, in the USA the per capita national rate of smoking increased enormously among smokers from an average of 40 cigarettes a year in 1880 to 12 854 cigarettes in 1977.[19] As a further indication, per capita, the annual consumption of cigarettes was under 100 in 1910, almost 400 in 1920, but rose to nearly 1 000 in 1930.[16] In recent years, despite the decreases mentioned, as in the USA[5] and the UK,[1] a quarter or so of adults remain smokers.

Healthwise, are the morbidity/mortality consequences of smoking being adequately rated? It is insufficiently appreciated that smoking is a causative factor in numerous cancers, as well as in cardiovascular diseases. The cancers concerned are lung, upper respiratory tract, bladder, oesophagus, stomach, kidney, and blood (leukaemia).[16] Smokers are far more prone to die from these diseases than those who have never smoked. With regard to cardiovascular diseases, heavy smokers have a relative risk of stroke 2 - 4 times greater than that of non-smokers.[20]

The salient question is — are individuals making meaningful attempts to stop smoking? The situation is complex.[21] In the UK, it has been stated that most smokers do not view themselves as being at increased risk for cancer or heart disease.[22] Notwithstanding, a major enquiry revealed that 69% of adult smokers would like to give up the practice.[6] In a similar study in the USA, 70% wished to quit, but only 5% succeeded in doing so within a year.[23] In developing countries appreciation of the dangers of smoking appear to be minimal. For example, studies from China revealed that 60% of adults did not know that smoking can cause lung cancer, and 96% did not know that it can promote heart disease.[24]

Although many have written of the dangers to health of passive smoking,[25] this has now been questioned.[26] However, the controversy continues.[27]

An important aspect to appreciate is that, on the one hand, life expectancy has increased considerably in recent years;

indeed, according to the *Lancet*, 'survival to 100 years or more may become the norm'.[28] On the other hand, and in strong contrast, the years of 'wellness' and of 'healthy life expectancy' are not increasing, and may be diminishing.[29] It is of public health concern that in addition to the major debilitating effects of smoking, the sequelae of other powerful health/disease factors have also become increasingly adverse. This applies particularly to the worldwide rise in the prevalence of obesity,[30] and to the major reduction in physical activity.[31]

Of relevance to populations in Africa, is the fact that in the USA African Americans who smoke are more prone to die from that cause than white American smokers.[32] However, it is imperative to face the fact that the chances of significantly reducing morbidity and mortality from smoking in developing populations, such as those in Africa, are small.

What precisely can the State do to reduce smoking practice? Understandably, this bears on the highly practical question of the ramifications of smoking on a country's product revenue. Very remarkably, the need to address this situation arose well over a century ago. In France, Napoleon III said of smoking, 'This vice brings in one hundred million francs in taxes every year. I will certainly forbid it at once — as soon as you can name a virtue that brings in as much revenue.'[33] in 1962 the Royal College of Physicians published its incrimination of cigarette sales and cigarette sales fell by 10% — however 6 months later they had risen above their previous level.[34] Yet, at that time, a government committee of ministers in the UK, headed by the science minister, Lord Hailsham, rejected the proposed health warnings on packets, arguing that 'there was no scientific evidence of a connection between tar and nicotine and lung cancer'. Furthermore, regarding the £800 million a year revenue derived from tobacco, Selwyn Lloyd, Chancellor of the Exchequer, stated that 'any action likely to lead to a sudden and substantial reduction in this figure would need to be considered in its fiscal as well as in its political and health aspects'.[35] Fascinatingly, a closely analogous situation arose very recently, in 2002. At the International Framework Convention on Tobacco Control, one of the many suggestions made was for 'manufacturers to put health warnings on at least 30%, and preferably 60%, of a cigarette pack'.[36]

However, at the meeting this suggestion was opposed by the USA, Germany, China and Japan. One acid comment made was that 'although the US has strict tobacco control compared with most other countries, it was the object of suspicion throughout the negotiations'. Furthermore, at the meeting, the body, 'Anti-Smoking Campaigns, charged that Bush is more interested in protecting the profits of the world's biggest exporter than in the health of the poor'.[36] Previously in 1995, it was reported that while the USA has 'some of the most aggressive antismoking policies in the world . . . the US is also the world's largest exporter of cigarettes'.[37]

Here, then, is a gigantic worldwide morbidity/mortality problem, associated with many millions of deaths, within the bounds of control — yet worsening. The current situation is indeed far removed from the expressed desire to reduce the prevalence of smoking among adults to 12% or less.[2]

Alexander R P Walker
Ahmed A Wadee

Human Biochemistry Research Unit and
Department of Immunology
National Health Laboratory Service and
School of Pathology
University of the Witwatersrand
Johannesburg

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