

## 1.2

# Smoking in Society The Impact of Smoking

### Smoking and Mortality

It is estimated that between 1950 and 2000 around 60 million people died from tobacco-related diseases (Peto, 1994). In England, around 18% of deaths (among those aged 35 plus) were attributable to smoking in 2007 (HSCIC, 2008). These smoking related deaths comprise 82% of all deaths from lung cancer and 79% of deaths from chronic obstructive lung disease.

While there are other important preventable causes of premature death, smoking is very much in a 'league of its own'. An analysis of mortality figures for the UK in 2002 shows that the deaths caused by smoking were five times higher than the sum total of deaths arising from traffic accidents (3,439); poisoning and overdose (881); alcoholic liver disease (5,121); other accidental deaths (8,579); murder and manslaughter (513); suicide (4,066); and HIV infection (234) (Action on Smoking & Health, 2008).

### Smoking, Illness and Disability

Smoking, as well as a major cause of premature death, is also responsible for a significant proportion of illness and disability. In England in 2006/07 there were approximately 1.4 million hospital admissions for adults aged 35 and over attributable to smoking. This equates to around 3,900 admissions every day. Circulatory diseases accounted for the largest number of admissions where there was a primary diagnosis of a disease that can be caused by smoking, with the second most common involving a diagnosis of cancer (HSCIC, 2008).

### Smoking and Mental Health

A common assumption is that, while smoking may be bad for one's physical health, at least it has benefit for one's mental health in that it aids relaxation. This is a misconception that is dealt with in greater detail elsewhere (see section 2.3). However, in summary, it is notable that an increasing amount of research evidence indicates that long-term smoking is actually associated with adverse mental health effects. These effects include the onset and worsening of depression (eg- Pasco et al., 2008) and anxiety disorders (eg - Johnson et al. 2000). The mechanisms hypothesized to underlie these effects include the effects of smoking on serotonin levels (Malone et al., 2003).

### The Social Costs of Smoking

Smoking has an impact beyond health and illness. Most notably, a regular smoking habit impact on the financial resources of the smoker, particularly if those resources are limited. For example, recent estimates are that the economically poorest 10 per cent of households in England spend nearly 2.5 per cent of income on cigarettes per week (ONS, 2004).

Another consequence of smoking that can be considered to have a social impact is the cosmetic effect. For example, smoking results in significantly aged skin. This effect is a result of smoking impairing the production of collagen and increasing the production of tropoelastin and matrix metalloproteinases

(MMP) (Morita, 2007). In addition to older looking skin, smoking also leads to stained teeth and finger nails, as well as a body odour generally considered to be unpleasant.

## The Impact of Second Hand Smoke

Smoking has consequences beyond the actual smoker. The range of chemicals contained in tobacco smoke comprises about 4,000 different substances including several known poisons such as carbon monoxide, ammonia, arsenic, mercury and formaldehyde (RCP, 2005).

The evidence for the impact of second hand smoke on health is fairly consistent. For example, an analysis of 37 published epidemiological studies of the risk of lung cancer (4626 cases), yielded an increase in risk associated with second hand smoke exposure from the spouse of 24%. The risks of second hand smoke are not confined to the home, however. Research suggests that non-smokers exposed in the workplace experience an excess lung cancer risk of 19% (IARC, 2004, Hackshaw et al. 1997).

Finally, while often not considered under the label of 'second hand smoke' another route by which smoking affects those close to the smoker is that from pregnant mother to unborn child. Women who smoke during pregnancy can adversely affect their baby, with the main effects being low birth weight and miscarriage (Rogers 2008). In 2005, a third (32%) of mothers in England who had recently given birth reported smoking in the 12 months before or during pregnancy. The percentage of mothers who continued to smoke throughout pregnancy was 17% (HSCIC, 2007).

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