Smoking and social justice

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Smoking is disproportionately common among the disadvantaged, both within many countries and globally; the burden associated with smoking is, therefore, borne to a great extent by the disadvantaged. In this paper, I argue that this should be regarded as a problem of social justice. Even though smokers do, in a sense, 'choose' to smoke, the extent to which these choices can legitimise the resulting inequalities is limited by the unequal circumstances in which they are made. An analysis of the empirical literature reveals a variety of factors - such as targeted advertising, unequal dissemination of information about the health risks of smoking and inequalities in smoking norms - that make the disadvantaged more likely to become smokers and less likely to quit successfully. The paper then considers a range of common tobacco control policies from the perspective of social justice. The social justice perspective developed here poses a challenge for policy-makers: on the one hand, social justice concerns strengthen the case for tobacco control policies because such policies disproportionately benefit the health of the disadvantaged. At the same time, however, we must be particularly sensitive to any harms associated with such policies because such burdens, too, will fall largely on the disadvantaged.

1. Introduction

Smoking kills approximately 5 million people worldwide every year (World Health Organization, 2003: 91).[1] It is expected that by 2030, tobacco will cause about 10 million deaths per year, making it the single biggest cause of death worldwide (Jha and Chaloupka, 1999: 1, 22). Roughly half of these deaths are expected to occur in middle age (age 35 to 59), and those killed in middle age will lose, on average, more than twenty years of non-smoker life expectancy (Peto and Lopez, 2001). Smokers are also more likely to have a lower health-related quality of life than non-smokers, due to diseases such as chronic obstructive pulmonary disease (COPD) and asthma (Samet, 2001). Their susceptibility to other illnesses such as tuberculosis appears to

be greater than non-smokers' (Gajalakshmi et al., 2003). In addition to its direct impact on health, the financial opportunity cost of smoking means that fewer resources are available for other purchases, including basic items such as food; this effect is felt in industrialised countries[2] but is particularly pronounced in the developing world.[3]

In this paper, I consider smoking and tobacco control from the perspective of social justice. At the global level, smoking prevalence is rising in low- and middle-income countries, while falling in many industrialised countries. Most industralised countries have now developed a social gradient in tobacco use, smoking being most prevalent in the most disadvantaged groups, and a similar picture is beginning to emerge in low-income countries. While the public health literature identifies social justice as an important issue in considering smoking and tobacco control,[4] this issue has received little attention among philosophers, whose discussions of smoking have focused on the justifiability of paternalist intervention to prevent harms to smokers, particularly in light of the addictive nature of nicotine (Goodin, 1989a, 1989b, 1999), and the implications of the harms of environmental tobacco smoke on the rights of smokers (Butler, 1993).

The paper proceeds as follows. Section 2 sets out the empirical data on the unequal distribution of smoking rates. In section 3, I suggest that the unequal circumstances in which individuals make choices about smoking limit the extent to which these choices can legitimise the unequal outcomes to which they lead. Section 4 reviews the empirical literature, both quantitative and qualitative, in light of this consideration. I suggest that factors such as tobacco advertising targeted at low-income and minority groups, unequal distribution of information about the health risks of smoking, unequal access to cessation services and the normalisation of tobacco use among some, but not other, parts of the population, undermine the fairness of unequal health

outcomes resulting from differences in smoking choices.[5] Individual choices about smoking, then, are insufficient to justify the unequal health outcomes they create. Sections 5 and 6 consider the issue of tobacco control from the perspective of social justice. Section 7 concludes.

Given the focus of my argument, a number of issues fall beyond the scope of this paper. First, while much of the policy debate on tobacco and tobacco control focuses on the harms of environmental tobacco smoke on non-smokers, my argument is concerned with the harms that tobacco causes to *smokers*. However, the argument presented here has implications for arguments for tobacco control that are based on the harms tobacco may cause to non-smokers, and I comment briefly on these in section 7.

Second, we now have ample information about the measures taken by tobacco companies to ensure sales. Internal company documents provide shocking evidence of the tobacco industry's knowledge about the health risks of smoking, their attempts to withhold or undermine such information in the public and their efforts to recruit new smokers, including children and young adults (Brandt, 2007). We also know that tobacco companies seek (often successfully) to influence and undermine tobacco control actions taken by governments and international organisations (Mackay and Eriksen, 2002: 62-63, Sebrié and Glantz, 2006). While the actions of tobacco companies must, of course, be criticised sharply, the argument provided in this paper is meant to hold irrespective of the actions of tobacco companies.

Finally, it is important to note that smoking is particularly prevalent not just in populations of social disadvantage but also among individuals with mental health problems. Smokers with mental disorders also tend to be more heavily addicted, to have more difficulty quitting, and to be heavier smokers than smokers who have no mental health problems.[6] Addressing smoking

among populations with mental health problems raises specific issues, which are not addressed in this paper.

2. Smoking and disadvantage

2.1 The social gradient in smoking in industralised countries

In 2000, among men, smoking was more common among lower socio-economic groups in all EU countries. Among women, the same applies to northern Europe, whereas in southern Europe inequalities in smoking are beginning to emerge, especially among young women (Kunst et al., 2004). Studies suggest that, in many Western countries, smoking is probably the largest single contributor to socio-economic inequalities in morbidity and premature mortality, particularly among men (Kunst et al., 2004).

In the UK, where smoking kills over 120,000 people every year, the social gradient in smoking is particularly pronounced, relative to other European countries. The prevalence of smoking in routine or manual occupations is 30% (36% in men, 25% in women), while in managerial and professional occupations, 16% are smokers (15% of men, 18% of women) (Lader, 2008). Among the most deprived groups, smoking prevalence reaches over 70%; among homeless people sleeping rough, 90% are smokers (Richardson and Crosier, 2007). Smokers from lower SES groups also tend to smoke cigarettes with higher tar yield, and to have started at an earlier age (Robinson and Lader, 2008); both of these factors imply higher risk of tobacco-related morbidity. It has been suggested that tobacco use makes a significant contribution to the social gradient in health, causing half of the difference in survival to 70 years of age between social classes I and V (Wanless, 2003).

2.2 Low- and middle-income countries

82% of the world's 1.1 billion smokers now live in low- and middle-income countries (Chaloupka et al., 2003). Estimates suggest that, by 2030, approximately 70% of the 10 million tobacco-attributable deaths will be in low- and middle-income countries (Chaloupka et al., 2003). Developing countries also have a higher proportion of smoking-attributable mortality at ages 30-69 than at older ages (62% in developed vs. 49% in developing countries) (Ezzati and Lopez, 2003). Until recently, it was thought that in low- and middle-income countries, smoking was more prevalent among higher social classes. However, most recent research concludes that in such countries, too, men of low socioeconomic status are more likely to smoke than those of high SES (Jha and Chaloupka, 1999: 16).[7]

In developing countries, the health effects of smoking differ from the health effects we find in high-income countries. In China, for example, respiratory diseases and cancers account for most of the deaths caused by tobacco, while deaths from ischaemic heart disease make up a much smaller proportion of the total number of tobacco-related deaths than is the case in the west. Studies also suggest that smokers are more susceptible to the health risks resulting from exposure to tuberculosis, schistosomiasis and indoor air pollution, which are more relevant in the developing than in the industrialised world (Yach, 2001). Despite differences in patterns of smoking-related disease, however, it appears that the overall *proportion* who are eventually killed by persistent cigarette smoking is generally about 50% (Jha and Chaloupka, 1999: 25).

2.3 The social gradient of smoking and the smoking epidemic

Not all countries have smoking patterns of the kind described in section 2.1. In some countries,

smoking is equally common across social groups, and in a few countries, smoking is more common among high-income groups (Bobak et al., 2000). However, it is important to bear in mind that epidemiologists have found a general pattern of smoking behaviour, according to which smoking is initially taken up by high-income groups before spreading to the lower classes (first among men, then among women) (Lopez et al., 1994).[8] To the extent that this model correctly predicts that smoking will become increasingly common among low-income groups, a failure to control tobacco will disproportionately harm the disadvantaged, and a concern for social justice will recommend the implementation of tobacco control strategies.

3. Smoking, justice and individual choice

The question addressed in this paper is whether the inequalities (mainly in health, but also in other areas, such as income) that are the result of unequal smoking rates are unjust.[9] There are, of course, different theories of justice, and these theories differ on which factors are considered relevant in distinguishing fair from unfair health inequalities.[10] The focus of the argument presented here is the role that individuals' choices can – and cannot – play in drawing this distinction.

The role that smoking decisions can play in legitimising the harms associated with smoking is at the heart of the normative debate about smoking and tobacco control policies. Opponents of tobacco control legislation emphasise that smoking is an activity that smokers 'freely' (Scruton, 2000) engage in and that the risks associated with it are assumed 'willingly' (Scruton, 1998) by them. Proponents of tobacco control respond that the addictive nature of nicotine undermines the voluntariness and autonomy of smoking decisions, especially when, as we know, many smokers

become addicted as adolescents.[11]

However, the focus on the voluntariness or otherwise of smoking choices clouds an important consideration in the normative analysis of smoking and tobacco control policies: the unequal background conditions against which individuals from different social groups make decisions about tobacco use. A host of external factors affects whether or not individuals start to smoke, whether or not they attempt to quit, and whether or not any quit attempts are successful.

The concern that just social policy must be sensitive to the factors that make advantageous choices more or less costly or difficult for individuals in different groups is expressed by different approaches to social justice. For example, Wolff and de-Shalit emphasise that, when thinking about cases in which individuals do not avail themselves of opportunities that are available to them, we must ask 'whether it is reasonable to expect someone to act one way rather than another' (Wolff and de-Shalit, 2007: 80, emphasis omitted). They argue that an opportunity cannot be regarded as 'genuine' if exercising it involves 'undue cost or risk to [the agent's] other functionings' (Wolff and de-Shalit, 2007: 80). A similar idea is sometimes expressed in the luck egalitarian literature. For example, Arneson suggests that '[t]he degree to which one can reasonably hold someone truly responsible for conforming to a given standard of conduct depends on the difficulty and personal cost of conformity' (Arneson, 1997: 332). He continues, '[f]avorable and unfavorable external circumstances can … conspire to render making and implementing good choices easy and pleasant for some, difficult and painful for others. The extent to which it is reasonable to hold people responsible for their moral and prudential failures varies with the degree to which it would have been difficult and painful or easy and pleasant to have avoided these failures' (Arneson, 1997: 343). Social inequalities, of course, are an

important factor that can make certain choices easy and accessible for some but costly and difficult for others. Even if we think that individuals' choices can, in principle, justify unequal health outcomes, we must still ask whether different people's choices were made against roughly equal background conditions because inequalities in these background conditions could undermine the extent to which individuals' choices can justify unequal outcomes.[12] In applying this consideration to smoking choices, the argument presented in this paper is meant to be relevant for theories of social justice which, in assessing whether particular inequalities are fair or unfair, are open to the idea that, in principle, individuals' choices could justify outcome inequalities but also require that we be sensitive to the circumstances in which such choices were made. At the same time, the argument leaves open how other components of a theory of social justice are to be interpreted; it is consistent, for example, with both egalitarian and prioritarian approaches.

Importantly, a sensitivity to the background conditions in which individuals make their choices is not based on a concern about the voluntariness or autonomy of those choices. To see that unequal background conditions are an important factor when it comes to health inequalities, even when choices are voluntary, consider food choices. People living in poor neighbourhoods on low incomes will not have the same access to fresh, healthy food as someone with a high income in an affluent neighbourhood. We can describe this situation as a problem of social justice without saying that the choices involved are not voluntary or autonomous. The unequal background conditions in which these choices are made is enough to raise concerns about the health inequalities to which they may lead.

As I argue in the next section, a similar picture emerges from the empirical literature on

smoking. Disadvantaged groups are exposed to a range of factors that make them more prone to become smokers and that make smoking cessation more difficult for them than it is for others. The unequal outcomes arising from the choices made against such background conditions should concern us as a problem of justice, irrespective of whether or not the inequalities in background conditions undermine the autonomy or voluntariness of the choices individuals make.

4. Disadvantage and smoking: unequal choice contexts

This section reviews the empirical literature on smoking with these considerations in mind. In particular, we must look not just at individuals' reasons for starting to smoke, but also at the factors that affect their motivation and ability to quit. Studies on smoking behaviour find that many of the difficulties that individuals in low social groups face also affect their smoking decisions.

4.1 Information about health risks

Crucial to the debate is the extent to which individuals have information about the health risks associated with smoking: smoking decisions can help legitimise unequal health outcomes only if smokers have adequate information about the health risks associated with smoking and its addictive nature.

While in industrialised countries, information about the health risks associated with smoking has been widely disseminated, there are concerns that lower-income and less educated groups may not be as well-informed about the risks as higher-income groups (Stein et al., 2007, Finney Rutten et al., 2008). In low- and middle-income countries, research suggests that there is little

awareness of the risks associated with smoking. For example, a study among a rural Chinese population finds that 55% of non-smokers and 69% of smokers thought that tobacco did little or no harm.[13] Furthermore, in many low-income countries, smoking is common among health care workers, which may undermine any concerns about the health risks of tobacco.[14] Lack of information may, therefore, be a significant problem in the developing world, and it is likely that many of the most disadvantaged will be those with poorest access to information about the health risks associated with smoking.

4.2 Targeted advertising

That tobacco companies use marketing strategies that specifically target low-income groups is apparent both from tobacco company documents and studies of tobacco advertising 'on the ground'.

A 1986 internal memo of tobacco company RJ Reynolds describes the social position of their clientele:

> The loyal Marlboro younger adults can be characterized as having a 'working class/present oriented' mindset … and worry about their lives of today. … Previous analyses have shown that our market is much less highly educated than consumers in general, with the younger adult smokers becoming much less educated … in the future, marketing to a working class/present-oriented mindset will be even more important in appealing to younger adult smokers (RJ Reynolds, 1986).[15]

Several studies in US cities found that tobacco advertising was more prevalent in low-income and/or ethnic minority neighbourhoods (Barbeau et al., 2005, Luke et al., 2000). Thus, 'poor

working class, and less educated individuals are more likely to smoke because, in part, tobacco advertising and promotions are more prominent in their daily lives, as compared to more socially advantaged groups' (Barbeau et al., 2005: 20). Many common marketing methods, such as price offers and coupons, are particularly effective with low-income groups (Hastings and MacFadyen, 2000, Healton and Nelson, 2004, MacAskill et al., 2002). At the global level, there is also evidence that tobacco companies are increasingly targeting low- and middle-income countries (Brandt, 2007, ch. 13, Gostin, 2007, Mackay and Crofton, 1996), which are seen as potential new markets with few restrictions on tobacco advertising. It is reasonable to expect that the greater exposure of disadvantaged individuals to tobacco marketing makes them more likely to start and to continue to smoke, and it might also undermine cessation attempts (Wakefield et al., 2008).

4.3 Smoking norms and the social meaning of smoking

An important factor both in smoking initiation and cessation is the smoking behaviour of one's environment. The empirical evidence suggests that people in disadvantaged groups are more likely than individuals in higher income groups to experience an environment in which smoking has become the norm, and in which little or no support is provided for quit attempts.

Studies suggest that smoking is an integral part of disadvantaged communities and neighbourhoods. For example, Wiltshire et al. find that many of their interviewees from disadvantaged areas in Edinburgh routinely mixed with other smokers (at work, home and socially) and that smoking was deeply embedded in their daily lives. Smoking had become the norm, and in many instances, it was easier to be a smoker than a non-smoker (Wiltshire et al., 2003: 300-301).

Disadvantaged smokers did not always seem to be aware that the smoking patterns in their communities were vastly different from those of more affluent people (e.g. MacAskill et al., 2002: 24). One participant explained, 'Ma ex-husband, none of his family smoked. It was dead weird. Ah've never known a family that the whole o' them nivver smoked' (MacAskill et al., 2002: 24). People in disadvantaged areas therefore have very limited exposure to non-smokers and ex-smoker 'role models' (Stead et al., 2001: 338).

The higher smoking prevalence in poorer communities also means that smoking triggers are difficult to avoid. A participant in MacAskill et al.'s study explains that '[i]t was as if everyone I'd seen had a fag. ... I went by, like, this café's in the shopping centre, and I could see everybody sitting had a fag and it was as if they were really enjoying their fag… Mental torture!' (MacAskill et al., 2002: 26) Furthermore, quit attempts were not met with support or encouragement; rather, 'smokers often tended to experience indifference, or even the reverse' (MacAskill et al., 2002: 25).

The empirical research also points to the social meaning that smoking has in disadvantaged communities. Smoking appears to act 'as a means of expressing identity and belonging. The collective aspects of smoking – sharing, lending and borrowing cigarettes; jointly collecting coupons – provide a means of giving and receiving support, and arguably help to bind people together' (Stead et al., 2001: 341). Because smoking is more strongly embedded in the social relationships of working-class smokers than those of their middle-class peers (Chamberlain and O'Neill, 1998), cessation, for working-class smokers, often involves a break from their social network that middle-class smokers are unlikely to experience upon quitting. As a low-income participant in a study from New Zealand explains, 'You'd have to be strong to give up. Giving

up means getting probably a whole new set of friends, a whole new family and job away. I haven't been able to do that yet' (Chamberlain and O'Neill, 1998: 1111).[16]

Far less information is available about smoking norms in developing countries. It has been noted that in some low-income countries, cigarettes are often still regarded as a symbol of wealth and social status, and they are often bought as presents for superiors or older family (Abdullah and Husten, 2004: 625).

In many disadvantaged communities, then, smoking behaviour has become both 'normal' and 'normalized' (Lawlor et al., 2003). This, of course, makes initiation more likely and cessation far more difficult for individuals in such communities than it is in affluent communities.

4.4 Psychosocial factors

Many studies emphasise that smokers use cigarettes to alleviate feelings of stress and anxiety. MacAskill et al. note that, for the smokers in the deprived neighbourhood they studied,

> Smoking offered both a respite from, and a means of coping with, this stressful and unrewarding environment. Respondents described reaching for cigarettes when bills came through the door, when the debt collectors were due, when the children were playing up, and to alleviate the 'pure nervousness' produced by daily anxiety (MacAskill et al., 2002: 22).[17]

Stress levels have been found to be inversely associated with socio-economic status (Carroll et al., 1996), and research suggests that individuals from low-income groups are more likely to experience stressful work and home environments (Siegrist and Marmot, 2004). If smoking is perceived to be a means of coping with stress, then the higher stress levels of low SES smokers will also produce a greater situational pressure on them to smoke (Chamberlain and O'Neill,

1998: 1114).

This aspect of smoking is particularly evident in a study by Graham (1993), which examines the role smoking plays in the lives of young, disadvantaged mothers in the UK, among whom smoking prevalence is very high and cessation uncommon. Smoking, Graham explains, 'appears to be meshed into the ways in which women cope with living and caring in circumstances of disadvantage' (Graham, 1993: 37). In particular, the women in Graham's study described smoking as one of the few activities they pursued solely for themselves (Graham, 1993: 34); smoking was 'a self-directed activity which can be instantly accessed when mothers feel that their breaking point has been reached' (Graham, 1993: 35). These mothers also described how smoking helped them manage their anger and avoid physical abuse of their children. As one of the participants explains, '[s]ince the baby was born, you feel at the end of your tether and a cigarette made me feel better, helps me cope. I feel it's better than throwing him about and tearing my hair out' (Graham, 1993: 62).

Importantly, it is individuals in disadvantaged groups who will be least able to access alternative coping mechanisms or means of relieving stress. Disadvantaged communities typically provide few opportunities for respite, and resource constraints mean that other coping mechanisms will be out of reach. As participants in MacAskill et al.'s and Stead et al.'s studies describe, 'They say you should go swimming an' that. An' things like relaxation, but… There really isnae an awful lot goin' on in the schemes. It's getting the babysitter, you know, the money that costs just tae get oot the door' (MacAskill et al., 2002: 26). In this context, smoking easily becomes 'the only pleasure I have', as a mother in Graham's study explains (Graham, 1993: 35).

4.5 Use of cessation resources

Given the addictive nature of smoking, quitting is, of course, difficult. In the developing world, smoking cessation is still rare, and studies find few former smokers in low- and middle-income countries (Abdullah and Husten, 2004: 624, Gajalakshmi et al., 2000: 31-33**)**. In many industralised countries, *motivation* to quit seems to be equally high across social groups but smokers from disadvantaged groups are far less likely to be successful in their quit attempts.[18]

Many of the factors explored in sections 4.1 to 4.4 may work to undermine cessation attempts. Quitting is harder in an environment where smoking has become 'normal' and where advertising is more prevalent. In this section, I focus on the availability and use of smoking cessation resources, in particular nicotine replacement therapy (NRT), which - for example in the form of nicotine patches - can make an important contribution to successful smoking cessation (Coleman and West, 2001).

NRT is widely available in industrialised countries but only in a small number of low- and middle-income countries (Mackay and Eriksen, 2002: 82-83). Research from industrialised countries suggests that, although the daily cost of NRT is similar to the price of a pack of cigarettes (National Cancer Institute, 2009, Tang et al., 1994), cost is often cited by smokers as a barrier to using NRT (Roddy et al., 2006, Wiltshire et al., 2003). Subsidising NRT for disadvantaged smokers appears to help increase their use of it (Solomon et al., 2000, Thorndike et al., 2002).

Furthermore, there appear to be non-financial barriers to the use of NRT. Studies from the UK suggest that disadvantaged smokers are not always aware of the smoking cessation services available to them (Roddy et al., 2006, Stead et al., 2001), and that they were often sceptical about

the efficacy of paid-for cessation products and services, and concerned that these were a way of financially exploiting smokers' addiction (Stead et al., 2001).

5. Social justice, tobacco control and paternalism

What does the social justice perspective developed here imply for the policy response to smoking? This section outlines the challenges involved in designing a 'just' tobacco control strategy. While tobacco control may lead to greater health benefits for the disadvantaged than for the better off and thus reducing health inequalities caused by unequal smoking rates, any burdens associated with such policies will also fall predominantly on the disadvantaged. Furthermore, to the extent that tobacco control policies are motivated by a concern for the well-being of smokers themselves, such policies can be described as paternalistic.

5.1 Harms and benefits of tobacco control

The argument presented here implies that, from the perspective of social justice, tobacco control presents a challenging problem. On the one hand, the unequal distribution of smoking means that the most disadvantaged social groups also face the additional health risks associated with smoking. The fact that smoking exacerbates existing social and health inequalities strengthens the case for tobacco control strategies that can reach disadvantaged groups. On the other hand, to the extent that such policies disproportionately affect the lives of disadvantaged individuals, we must be particularly concerned about any harms such policies might imply for individuals.

With respect to the harms that might be associated with tobacco control policies, we must consider its effects both on the *present* generation of (disadvantaged) smokers and the harms and

benefits that may accrue to future generations, especially in light of the predictions we can make about future developments in smoking prevalence. The main benefit to be gained from tobacco control is the health benefits for individuals who will smoke less or quit in response to policies, and, for future generations, not even start. If the predictions about the developments of the tobacco epidemic (as discussed in section 2.3 above) are correct, successful tobacco control efforts can prevent smoking uptake particularly among the disadvantaged.

As will be discussed in more detail in section 6, many policies commonly used to discourage smoking impose specific burdens on smokers. Current smokers who do not quit in response to policies may, for example, find that cigarettes are harder to access or more expensive; while this will be a lesser concern for future generations, whose smoking initiation could be prevented by tobacco control policies, it will be a significant short-term consideration. Furthermore, tobacco control policies may encourage the stigmatisation and marginalisation of smokers and thus decrease their well-being.

5.2 Paternalism

Unlike smoking policies that are justified with respect to the harms of environmental tobacco smoke of non-smokers, the perspective taken in this paper is based on a concern for the well-being of smokers themselves. To the extent that this is what drives tobacco control strategies, such policies are paternalistic.

The justifiability - or otherwise - of paternalistic interventions is generally discussed in terms of the effect of such interventions on individual autonomy and liberty (e.g. Kleinig, 1984, Nys, 2008). In support of tobacco control, it has been argued that smoking choices are likely to be

characterised by various features that make them less autonomous or voluntary. Goodin, for example, suggests that smoking choices are often based on factual mistakes about the risks involved, undermined by the addictive nature of nicotine and manipulated by tobacco advertising; these characteristics of smoking choices make paternalistic interference more permissible than it is in other contexts (Goodin, 1999). Moreover, because many smokers, in fact, want to quit but find it hard to do so, tobacco control strategies might be consistent with the endorsed preferences of smokers themselves.

As I explained in section 3, the argument of this paper focuses not on the voluntariness or autonomy of smoking choices, but on the inequalities in the background factors against which these choices are made. However, these inequalities may also have implications for autonomy-based arguments about the justifiability of paternalistically motivated tobacco control policies. The picture emerging from section 4 suggests that disadvantaged smokers are more exposed than higher-income smokers to factors that, according to the arguments outlined in the previous paragraph, diminish the autonomy of their smoking decisions: more tobacco advertising is targeted at them, they often have less information about the health risks and, when they do decide to quit, they find themselves with fewer resources to succeed. If this is true, the paternalism involved in tobacco control strategies is less problematic with respect to disadvantaged individuals than it is for wealthier smokers.

Moreover, it has been argued that paternalism can make an important contribution to equality by protecting those who are more prone to making decisions that lower their well-being. Arneson suggests that paternalist interference (including interference that restricts fully voluntary choices), can contribute to distributive justice if we are interfering with individuals who, for

reasons of unequal brute luck, are less likely or able than others to make choices that enhance their own welfare (Arneson, 1989, 2005: 274-276). Antipaternalism, Arneson suggests, is 'a doctrine that would operate to the advantage of the already better-off at the expense of the worse-off, the needy and the vulnerable' (Arneson, 2005: 276). Smoking appears to provide an example of this, since – as far as their health is concerned – it is disproportionately the disadvantaged who are harmed by an antipaternalist stance on tobacco control.

6. Social justice and tobacco control: assessing different policy options from the perspective of social justice

How does a concern for social justice affect policy choices with respect to tobacco control? In this section, I re-evaluate a range of policy options from the perspective of social justice. Two considerations emerge from the discussion of previous sections. First, a social justice perspective would move us towards policies that can help diminish smoking among disadvantaged groups so as to address inequalities in smoking prevalence and the health inequalities to which they lead. A second consideration, however, is that when tobacco control policies impose costs or harms on smokers, such costs disproportionately affect disadvantaged individuals; the social justice perspective requires that we be particularly sensitive to these harms. The discussions of particular policies will reveal the different costs that tobacco control policies can impose on individuals.

Two points should be emphasised. First, my concern in this section is not the relative effectiveness of different tobacco control policies (although I will mention when some policies appear more effective with disadvantaged communities than others); rather, my focus is on the

normative considerations involved, once it is clear that smoking disproportionately affects the disadvantaged. Second, the perspective in this section is consciously narrow and focused on considerations of social justice; social justice, however, is only one of the considerations that must be taken into account in evaluating tobacco control strategies.

6.1 Taxation

Taxation is a central part of the tobacco control strategies (and, potentially, revenue raising efforts) of many countries.[19] In many high-income countries, taxes make up 65-75% of the price of a pack of cigarettes (Mackay and Eriksen, 2002: 84-85, World Health Organization, 2007). The option of using excise taxes as a tobacco control strategy brings out very clearly the tension mentioned earlier between the positive and negative effects that tobacco control policies may have on disadvantaged groups. On the one hand, it has been argued that increases in tobacco taxes have a greater effect on those with low incomes, both within countries[20] and globally.[21] To the extent that this is linked to a reduction in smoking in lower-income groups, tobacco excise taxation is indeed a '"progressive" public health policy' (Warner, 2000: 84), in the sense that it improves the health of disadvantaged smokers more than that of higher income groups, and also in the sense that it shifts some of the total tax burden of tobacco excise taxes towards more affluent groups (Farrelly et al., 2001). Furthermore, it has been suggested that, given the addictive nature of nicotine, the long-term effects of increased taxation are likely to be greater than its short-term effects, and higher taxes on cigarettes may help prevent smoking uptake among disadvantaged young adults (Chaloupka et al., 2000).

At the same time, however, the idea that lower income groups are more likely to reduce cigarette

consumption in response to price increases has been challenged empirically.[22] Furthermore, we must be careful to distinguish aggregate and individual effects of tax increases. Even if, *overall*, the tax burden shifts towards higher income groups, those least willing – or able – to reduce their consumption may find themselves with a greater share of their income spent on cigarettes. If these smokers do not reduce their smoking in response to price increases, this increased expenditure will not be offset by health benefits. Low-income smokers who continue to smoke will therefore have to spend an even larger share of their income on tobacco. In this sense, tobacco taxation is also highly regressive.[23]

The financial burden associated with smoking - which is exacerbated by increases in excise taxes - must not be underestimated. In New York City, estimates suggest that a smoker may spend $1200 per year on tobacco (Remler, 2004: 225). The impact of money spent on cigarettes will be greater the lower the smoker's income. In the developing world, expenditure on tobacco often comes at the expense of basic items such as food, health or education (Efroymson et al., 2001).

At the same time, taxation is a particularly cost-effective policy option for governments because the increased tax may actually generate revenue for governments (Ranson et al., 2000, Shibuya et al., 2003). This factor may be particularly important in developing countries, which often face severe budget constraints in implementing public health policies (Jha et al., 2000); in low-income countries taxation is therefore seen as 'the first choice' among different tobacco control interventions (Shibuya et al., 2003: 155). Given this consideration, it is worth noting a number of mechanisms that could make increases in tobacco taxation more consistent with social justice concerns. Redistributive welfare policies and income support for disadvantaged groups might help counterbalance the financial regressivity of tobacco taxes, as would policies that address

social inequality and the pressures of disadvantage more generally.[24] Furthermore, tax increases could be accompanied by free cessation programmes specifically targeting disadvantaged groups (Chaloupka et al., 2000, Healton and Nelson, 2004: 189).

6.2 Advertising bans

One implication of the account presented in this paper and the empirical evidence cited in section 4.2 is that the social justice perspective can support the use of bans on tobacco advertising. Given that the disadvantaged are disproportionately affected by such marketing strategies, comprehensive advertising bans can go some way towards levelling the playing field when it comes to smoking behaviour. Furthermore, such bans are relatively easy to implement, even in developing countries (Jha et al., 2000).

Are there any harms associated with such bans? It might perhaps be argued that restrictions on advertising are problematic because they limit consumers' access to information about different products. However, tobacco advertising typically provides little information, focusing instead on influencing affective responses to smoking and to particular brands (Romer and Jamieson, 2001).

6.3 Smoking bans and restrictions

Partial or complete smoking bans in public buildings and spaces, workplaces, etc., have become an important part of tobacco control strategies. While arguments for such policies generally focus on the protection of non-smokers from environmental tobacco smoke (e.g. Department of Health, 2004: 97-100), smoking bans can be beneficial for smokers too (Fichtenberg and Glantz, 2002). For example, quitting is probably easier in a smoke-free work environment than in a workplace where smoking colleagues can act as triggers, and such bans can help 'denormalize'

smoking (Healton and Nelson, 2004).

The experience with workplace bans, however, suggests that where such bans have been voluntary, they were more likely to be implemented in professional, white-collar workplaces than in manual work environments (Brenner et al., 1997, Gerlackh et al., 1997, Kunst et al., 2004). Workplace bans that are not equally enforced across different kinds of workplaces have the potential to exacerbate smoking inequalities. Furthermore, such bans cannot reach disadvantaged groups that are not part of a formal employment sector; this will be a problem in many developing countries (Jha et al., 2000).

As with taxation, there are also potential costs for those who cannot reduce their smoking in response to such bans. Workplace smoking restrictions often mean that employees must leave the workplace to smoke, and smokers may experience this as alienating and stigmatising. Again, given the unequal distribution of smoking, this is likely to affect disadvantaged groups more than those in higher income groups. Such effects were found by a study at the University of Edinburgh, which banned smoking in all its buildings in 1997. Smokers there explain that the ban made them feel like ‘lepers’, and one smoker reported feeling ‘humiliated’ on ‘standing outside in the rain and cold’. There were also marked inequalities in the impact the ban had on smokers in different occupational groups. Unlike administrative and manual employees, academic staff were able to avoid the ban by working from home rather than the office. The unequal flexibility among employees and the fact that the most highly paid employees were in the best position to avoid being affected by the ban was recognised as ‘unfair’ by one of the manual staff employees (Parry and Platt, 2000).

6.4 Tobacco ban

In normative discussions, complete bans on tobacco have generally been rejected as coercive or too great a restriction on individual liberty (e.g. Wikler, 1987). However, given the health risks associated with smoking and the addictive nature of nicotine, it is certainly not obvious that cigarettes should not be banned completely.[25] The limited perspective taken in this paper does not allow us to make an assessment of the justifiability or otherwise of banning tobacco completely; however, as far as social justice is concerned, a ban on the sale of cigarettes could be beneficial. The empirical evidence presented in this paper indicates that the harms associated with smoking disproportionately fall on disadvantaged groups; a decision not to ban tobacco therefore harms the disadvantaged far more than higher income groups. As far as health is concerned, then, a ban on tobacco would disproportionately benefit the disadvantaged and help address some of the health inequalities that result from differences in smoking behaviour. At the same time, of course, any harms associated with a ban would also fall most heavily on the disadvantaged; as with tax increases, a ban should therefore be accompanied by measures that address these harms. For example, Daynard suggests that cigarettes be phased out while non-smoked nicotine delivery devices remain available (Daynard, 2009).

6.5 Nicotine replacement therapy

As explained in section 4.5 above, NRT can make an important contribution to smoking cessation, but there are both financial and non-financial barriers to accessing NRT for disadvantaged groups. To address the financial barriers, NRT could be provided for free to disadvantaged smokers (Healton and Nelson, 2004). In addition, the research suggests that further efforts must be made to advocate the use of NRT among disadvantaged groups to address

mistrust and cynicism about its efficacy, which currently stands in the way of the use of NRT by these groups, even where it is available for free.

6.6 Public health campaigns

Education campaigns that aim to raise awareness of the health risks associated with smoking have been an important element of tobacco control strategies in many countries. To the extent that such campaigns merely provide information, they can help improve individuals' decisions about smoking without imposing restrictions on smokers and their use is therefore largely seen as unproblematic. However, some of the empirical evidence suggests that education campaigns have been more effective with affluent smokers than disadvantaged ones (Kunst et al., 2004, Niederdeppe et al., 2008, Townsend et al., 1994). The modes of delivery used by many of these campaigns - focusing on written material, for example - may have biased their effectiveness towards more advantaged smokers (Giskes et al., 2007). Campaigns of this sort are also likely to have only limited effectiveness in developing countries where many segments of the populations, especially the poorest, can be hard to reach.

There is, moreover, a more general concern about how effective the provision of information can be in the context of a behaviour that, especially for the disadvantaged, fulfils an important function. Studies suggest that there is no straightforward connection between knowledge about the risks of smoking and smoking behaviour. For example, Graham concludes from her study with female, working-class smokers that '[i]t was how women lived rather than what they knew which was the stronger predictor of their smoking status' (Graham, 1993: 101). If the health risks associated with smoking have little impact on the smoking choices of disadvantaged groups, then

providing information about these risks is unlikely to have much effect on disadvantaged smokers. Furthermore, if disadvantaged smokers do not think they can avoid these risks, then such information about could even impact negatively on their well-being.[26]

Instead of providing information, public health campaigns may aim to 'denormalize' and 'deglamorize' (Koh et al., 2007: 1497) smoking. If effective, such policies could be beneficial particularly in disadvantaged communities, where - as we saw in section 4.3 above - smoking has become 'standard'. However, public health campaigns that aim to denormalise smoking by portraying it as an anti-social, deviant behaviour have been linked to the stigmatisation not just of smoking, but of smokers themselves. Being stigmatised in this way may have a negative effect on the well-being of smokers (Guttman and Salmon, 2004: 546-550, West and Hardy, 2007), and this is reflected in some of the studies (Chapple et al., 2004, Roddy et al., 2006). From a social justice perspective, the fact that stigmatisation will disproportionately affect already disadvantaged groups is, of course, highly problematic and makes their use problematic (Bayer and Stuber, 2006).

6.7 Health promotion, counselling and quit lines

Smokers had mixed - and often negative - feelings about how health care providers responded to their smoking behaviour (Butler et al., 1998). Some studies suggest that health care professionals may have very limited training in the delivery of smoking prevention and cessation interventions. A study from the US suggests that very few health care professionals receive culturally appropriate prevention training that would facilitate reaching disadvantaged groups (Healton and Nelson, 2004, Spangler et al., 2002). This emphasises the importance of providing health care

professionals with training that allows them to address the particular difficulties faced by disadvantaged smokers.

What is the potential of health promotion initiatives in the primary care setting for reducing smoking, in particular among disadvantaged groups? Some studies suggest that health professionals can play an important role in providing disadvantaged smokers with the means of coping with the stress and pressures that smoking helps them relieve. Community support services can help smokers 'through the psycho-social sequelae of social disadvantage, like depression, low self-esteem and low self-efficacy' (Graham, 1998: 300). A programme offering cognitive behavioural therapy to disadvantaged smokers, piloted in the UK, showed good results in helping low-income smokers quit (Marks and Sykes, 2002). In addition to tailoring such programmes to meet the specific needs of low-income smokers, it may also be relatively easy for health professionals to target disadvantaged smokers, for example by advertising in GP practices and community centres in poor neighbourhoods. Telephone quit lines have also been proven successful in reaching disadvantaged smokers and helping them quit (Owen, 2000, Solomon et al., 2000).

6.8 Reduce social inequality

While the policies discussed in the previous sections target individuals' smoking behaviour directly, many studies challenge the idea that such policies can be successful in the absence of material improvements in the living situations of the disadvantaged (e.g. Lawlor et al., 2003: 269). Kunst et al. (2004: 61) express concern that, when the 'social roots' of smoking are not addressed, smokers may be either unable to stop or substitute other unhealthy behaviours for

smoking. They suggest that policies that aim to improve the living conditions of the disadvantaged can also be seen as tobacco-control policies (Kunst et al., 2004: 61-62). At the same time, even where such general policies aiming at the reduction of social inequality are politically possible, we must be careful not to overestimate their effectiveness when it comes to addressing smoking, at least in the short term: 'Given that smoking is addictive and that both disadvantage and smoking have long-term and cumulative effects on health, an improvement in socio-economic circumstances is unlikely to result in either an immediate reduction in smoking or an immediate improvement in health' (Graham, 1998: 299).

7. Concluding remarks

The central aim of this paper was to approach the issue of smoking from the perspective of social justice. In many countries as well as globally, smoking prevalence is particularly high among disadvantaged groups, and it is likely that these inequalities will widen further. Many of the circumstances faced by the disadvantaged also make smoking initiation more likely and cessation more difficult for them than is the case for more affluent groups. This challenges the idea that smoking choices can legitimise the health inequalities they cause; the unequal distribution of smoking rates should, therefore, also be seen as a problem of social justice. The social justice perspective underscores the importance of implementing tobacco control policies that can reach disadvantaged groups but also implies that we must be sensitive to any burdens that such policies may impose on disadvantaged smokers.

While my argument is concerned with the harms that tobacco causes to smokers, the points raised in this paper also have implications for policy debates that focus on the impact of smoking

on *non*-smokers. The unequal distribution of smoking suggests that disadvantaged non-smokers are more likely to than non-smokers in higher income groups to be affected by the harms associated with smoking. These harms include, of course, the health risks associated with environmental tobacco smoke, such as increased risk of heart disease and lung cancer, as well as higher risk of respiratory disease in children (Chaloupka et al., 2003: 648, Mackay and Eriksen, 2002: 34-35). Furthermore, in particular among poor populations, there are significant opportunity costs associated with household expenditure lost due to tobacco purchases. Children in particular are harmed by the reduction in funds available for basic items as a result of money being spent on cigarettes. This is a problem in high-income countries (e.g. Marsh and McKay, 1994, Thomson et al., 2002), but the effects are particularly dramatic in developing countries (Mackay and Eriksen, 2002: 42-43). Efroymson et al. (2001) estimate that, in Bangladesh, about 500 calories could be added to the diet of one or two children if the money smokers spend on tobacco were spent on children's diet instead, and the lives of 350 children saved each day. Thus, even if our concern is not with smokers themselves but with non-smokers harmed by others' tobacco consumption, social justice is an important concern.

Bibliography

Abdullah, A. S. M. and Husten, C. G. (2004). Promotion of smoking cessation in developing countries: a framework for urgent public health interventions. *Thorax* 59: 623-630.

Adda, J. and Cornaglia, F. (2006). Taxes, cigarette consumption, and smoking intensity. *American Economic Review* 96: 1013-1028.

Arneson, R. J. (1989). Paternalism, utility, and fairness. *Revue Internationale de Philosophie* 43: 409-437.

——— (1997). Egalitarianism and the undeserving poor. *Journal of Political Philosophy* 5: 327-350.

——— (2005). Joel Feinberg and the justification of hard paternalism. *Legal Theory* 11: 259-284.

Barbeau, E., Krieger, N. and Soobader, M.-J. (2004a). Working class matters: socioeconomic disadvantage, race/ethnicity, gender, and smoking in NHIS 2000. *American Journal of Public Health* 94: 269-278.

Barbeau, E., Leavy-Sperounis, A. and Balbach, E. D. (2004b). Smoking, social class, and gender: what can public health learn from the tobacco industry about disparities in smoking? *Tobacco Control* 13: 115-120.

Barbeau, E., Wolin, K., Naumova, E. and Balbach, E. (2005). Tobacco advertising in communities: associations with race and class. *Preventive Medicine* 40: 16-22.

Bayer, R. and Stuber, J. (2006). Tobacco control, stigma, and public health: rethinking the relations. *American Journal of Public Health* 96: 47-50.

Bobak, M., Jha, P., Nguyen, S. and Jarvis, M. J. (2000). Poverty and smoking, in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries.* Oxford: Oxford University Press, pp. 41-61.

Brandt, A. (2007). *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product That Defined America.* New York: Basic Books.

Brenner, H., Born, J., Novak, P. and Wanek, V. (1997). Smoking behavior and attitude toward smoking regulations and passive smoking in the workplace. *Preventive Medicine* 26: 138-143.

Butler, C., Pill, R. and Stott, N. (1998). Qualitative study of patients' perceptions of doctors' advice to quit smoking: implications for opportunistic health promotion. *British Medical Journal* 316: 1878-1881.

Butler, K. (1993). The moral status of smoking. *Social Theory & Practice* 19: 1-26.

Carroll, D., Smith, G. and Bennett, P. (1996). Some observations on health and socio-economic status. *Journal of Health Psychology* 1: 23-39.

Chaloupka, F., Hu, T.-W., Warner, K., Jacobs, R. and Yurekli, A. (2000). The taxation of tobacco products, in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries.* Oxford: Oxford University Press, pp. 237-272.

Chaloupka, F., Jha, P., Corrao, M., Da Costa E Silva, V., Ross, H., Ciecierski, C. and Yach, D. (2003). Global efforts for reducing the burden of smoking. *Disease Management & Health Outcomes* 11: 647-661.

Chamberlain, K. and O'Neill, M. (1998). Understanding social class differences in health: A qualitative analysis of smokers' health beliefs. *Psychology and Health* 13: 1105-1119.
Chapple, A., Ziebland, S. and Mcpherson, A. (2004). Stigma, shame, and blame experienced by patients with lung cancer: qualitative study. *British Medical Journal* doi:10.1136/bmj.38111.639734.7C
Coleman, T. and West, R. (2001). Newly available treatments for nicotine addiction. *BMJ* 322: 1076-1077.
Colman, G. and Remler, D. (2004). Vertical equity consequences of very high cigarette tax increases: if the poor are the ones smoking, how could cigarette tax increases be progressive?
Daniels, N. (2008). *Just Health: Meeting Health Needs Fairly.* Cambridge: Cambridge University Press.
Daynard, R. (2009). Doing the unthinkable (and saving millions of lives). *Tobacco Control* 18: 2-3.
Department of Health (2004). *Choosing Health: Making Healthy Choices Easier.* London: The Stationary Office.
Efroymson, D., Ahmed, S., Townsend, J., Alam, S. M., Dey, A. R., Saha, R., Dhar, B., Sujon, A. I., Ahmed, K. U. and Rahman, O. (2001). Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh. *Tobacco Control* 10: 212-217.
Ezzati, M. and Lopez, A. (2003). Estimates of global mortality attributable to smoking in 2000. *Lancet* 362: 847-852.
Farrelly, M., Bray, J. W., Pechacek, T. and Woollery, T. (2001). Response by adults to increases in cigarette prices by sociodemographic characteristics. *Southern Economic Journal* 68: 156-165.
Fichtenberg, C. and Glantz, S. (2002). Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal* 325: 188-195.
Finney Rutten, L. J., Augustson, E. M., Moser, R. P., Beckjord, E. B. and Hesse, B. W. (2008). Smoking knowledge and behavior in the United States: Sociodemographic, smoking status, and geographic patterns. *Nicotine & Tobacco Research* 10: 1559-1570.
Fox, B. (2005). Framing tobacco control efforts within an ethical context. *Tobacco Control* 14: ii38-ii44.
Franks, P., Jerant, A., Leigh, J., Lee, D., Chiem, A., Lewis, I. and Lee, S. (2007). Cigarette prices, smoking, and the poor: implications of recent trends. *American Journal of Public Health* 97: 1873-1877.
Gajalakshmi, C. K., Jha, P., Ranson, K. and Nguyen, S. (2000). Global patterns of smoking and smoking-attributable mortality, in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries.* Oxford: Oxford University Press, pp. 11-39.
Gajalakshmi, V., Peto, R., Kanaka, T. S. and Jha, P. (2003). Smoking and mortality from tuberculosis and other diseases in India: retrospective study of 43000 adult male deaths and 35000 controls. *The Lancet* 362: 507-515.
Gerlackh, K., D, S. and Hartman, A. (1997). Workplace smoking policies in the United States: results of a national survey of more than 100,000 workers. *Tobacco Control* 87: 1687-1693.

Giskes, K., Kunst, A., Ariza, C., Benach, J., Borrell, C., Helmert, U., Judge, K., Lahelma, E., Moussa, K. and Ostergren, P. (2007). Applying an equity lens to tobacco-control policies and their uptake in six Western-European countries. *Journal of Public Health Policy* 28: 261-280.

Goodin, R. (1989a). The ethics of smoking. *Ethics* 99: 574-624.

——— (1989b). *No Smoking: The Ethical Issues.* Chicago: University of Chicago Press.

——— (1999). Permissible paternalism: saving smokers from themselves, in W. Shaw (ed.) *Social and Personal Ethics.* Belmont, CA: Wadsworth, pp. 251-257.

Gostin, L. O. (2007). Global regulatory strategies for tobacco control. *Journal of the American Medical Association* 298: 2057-2059.

Graham, H. (1993). *When Life's a Drag: Women, Smoking and Disadvantage.* London: Department of Health.

——— (1998). Promoting health against inequality: using research to identify targets for intervention - a case study of women and smoking. *Health Education Journal* 57: 292-302.

Grill, K. and Hansson, S. (2005). Epistemic paternalism in public health. *Journal of Medical Ethics* 31: 648-653.

Guttman, N. and Salmon, C. T. (2004). Guilt, fear, stigma and knowledge gaps: ethical issues in public health communication interventions. *Bioethics* 18: 531-552.

Gwatkin, D., Rutstein, S., Johnson, K., Suliman, E., Wagstaff, A. and Amouzou, A. (2007). *Socio-Economic Differences in Health, Nutrition, and Population Within Developing Countries: An Overview.* Washington, DC: The World Bank.

Hastings, G. and MacFadyen, L. (2000). A day in the life of an advertising man: review of internal documents from the UK tobacco industry's principal advertising agencies. *British Medical Journal* 321: 366-371.

Healton, C. and Nelson, K. (2004). Reversal of misfortune: viewing tobacco as a social justice issue. *American Journal of Public Health* 94: 186-191.

Hooper, C. R. and Agule, C. (2009). Tobacco regulation: autonomy up in smoke? *Journal of Medical Ethics* 35: 365-368.

Jarvis, M. J. (2004). Why people smoke. *British Medical Journal* 328: 277-279.

Jha, P. and Chaloupka, F. (1999). *Curbing the Epidemic - Governments and the Economics of Tobacco Control.* Washington, DC: World Bank.

Jha, P., Paccaud, F. and Nguyen, S. (2000). Strategic priorities in tobacco control for governments and international agencies, in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries.* Oxford: Oxford University Press, pp. 449-464.

Kenkel, D. and Chen, L. (2000). Consumer information and tobacco use, in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries.* Oxford: Oxford University Press, pp. 177-214.

Kleinig, J. (1984). *Paternalism.* Totowa, NJ: Rowman & Allanheld.

Koh, H., Joossens, L. and Connolly, G. (2007). Making smoking history worldwide. *New England Journal of Medicine* 356: 1496-1498.

Kotz, D. and West, R. (2009). Explaining the social gradient in smoking cessation: it's not in the trying, but in the succeeding. *British Medical Journal* 18: 43-46.

Kunst, A., Giskes, K. and Mackenbach, J. (2004). *Socio-economic Inequalities in Smoking in the European Union. Applying an Equity Lens to Tobacco Control Policies.* Rotterdam: Department of Public Health.

Lader, D. (2008). *Smoking-related Behaviour and Attitudes, 2007.* Newport: Office for National Statistics.

Lance, P. M., Akin, J. S., Dow, W. H. and Loh, C.-P. (2004). Is cigarette smoking in poorer nations highly sensitive to price? Evidence from Russia and China. *Journal of Health Economics* 23: 173-189.

Lasser, K., Boyd, J., Woolhandler, S., Himmelstein, D., McCormick, D. and Bor, D. (2000). Smoking and mental illness: a population-based prevalence study. *Journal of the American Medical Association* 284: 2606-2610.

Lawlor, D. A., Frankel, S., Shaw, M., Ebrahim, S. and Davey Smith, G. (2003). Smoking and ill health: does lay epidemiology explain the failure of smoking cessation programs among deprived populations? *American Journal of Public Health* 93: 266-270.

Lopez, A., Collishaw, N. and Piha, T. (1994). A descriptive model of the cigarette epidemic in developed countries. *Tobacco Control* 3: 242-247.

Luke, D., Esmundo, E. and Bloom, Y. (2000). Smoke signs: patterns of tobacco billboard advertising in a metropolitan region. *Tobacco Control* 9: 16-23.

MacAskill, S., Stead, M., MacKintosh, A. and Hastings, G. (2002). 'You cannae just take cigarettes away from somebody and no' gie them something back': can social marketing help solve the problem of low-income smoking? *Social Marketing Quarterly* 8: 19-34.

Mackay, J. and Crofton, J. (1996). Tobacco and the developing world. *British Medical Bulletin* 52: 206-221.

Mackay, J. and Eriksen, M. (2002). *The Tobacco Atlas.* Geneva: World Health Organization.

Marks, D. F. and Sykes, C. M. (2002). Randomized controlled trial of cognitive behavioural therapy for smokers living in a deprived area of London: outcome at one-year follow-up. *Psychology, Health and Medicine* 7: 17-24.

Marsh, A. and McKay, S. (1994). *Poor Smokers.* London: Policy Studies Institute.

Mindell, J. and Whynes, D. K. (2000). Cigarette consumption in The Netherlands 1970-1995: Does tax policy encourage the use of hand-rolling tobacco? *European Journal of Public Health* 10: 214-219.

National Cancer Institute (2009). Dispelling myths about nicotine replacement therapy. http://www.smokefree.gov/docs/MythsaboutNRTFactSheet.pdf, accessed 9 September 2009.

Niederdeppe, J., Fiore, M. C., Baker, T. B. and Smith, S. S. (2008). Smoking-cessation media campaigns and their effectiveness among socioeconomically advantaged and disadvantaged populations. *American Journal of Public Health* 98: 916-924.

Novotny, T. and Carlin, D. (2005). Ethical and legal aspects of global tobacco control. *Tobacco Control* 14: ii26-ii30.

Nys, T. (2008). Paternalism in public health care. *Public Health Ethics* 1: 64-72.

Owen, L. (2000). Impact of a telephone helpline for smokers who called during a mass media campaign. *Tobacco Control* 9: 148-154.

Parry, O. and Platt, S. (2000). Smokers at risk: implications of an institutionally bordered risk-reduced environment. *Health & Place* 6: 117-123.

Peto, R. and Lopez, A. D. (2001). Future worldwide health effects of current smoking patterns, in C. E. Koop, C. Pearson and M. R. Schwarz (eds.) *Critical Issues in Global Health.* San Francisco: Jossey-Bass, pp. 154-161.

Platt, S., Amos, A., Gnich, W. and Parry, O. (2002). Smoking policies, in J. Mackenbach and M. Bakker (eds.) *Reducing Inequalities in Health: A European Perspective.* London: Routledge, pp. 125-143.

Ranson, K., Jha, P., Chaloupka, F. J. and Nguyen, S. (2000). The effectiveness and cost-effectiveness of price increases and other tobacco-control policies, in P. Jha and F. Chaloupka (eds.) *Tobacco Control in Developing Countries.* Oxford: Oxford University Press, pp. 427-447.

Regidor, E., Pascual, C. and Gutiérrez-Fisac, J. L. (2007). Increasing the price of tobacco: economically regressive today and probably ineffective tomorrow. *European Journal of Cancer Prevention* 16: 380-384.

Remler, D. K. (2004). Poor smokers, poor quitters, and cigarette tax regressivity. *American Journal of Public Health* 94: 225-229.

Richardson, K. and Crosier, A. (2007). *Smoking and Health Inequalities.* London: ASH and Health Development Agency.

RJ Reynolds (1986). Analysis of the virile segment. Bates number 505923292/3295, http://legacy.library.ucsf.edu/tid/iqd94d00.

Robinson, S. and Lader, D. (2008). *General Household Survey: Smoking and Drinking among Adults, 2007.* Newport: Office for National Statistics.

Roddy, E., Antoniak, M., Britton, J., Molyneux, A. and Lewis, S. (2006). Barriers and motivators to gaining access to smoking cessation services amongst deprived smokers—a qualitative study. *BMC Health Services Research* 6: 147-153.

Roemer, J. E. (1993). A pragmatic theory of responsibility for the egalitarian planner. *Philosophy & Public Affairs* 22: 146-166.

——— (1998a). Equal opportunity for health: paying the costs of smoking-induced lung cancer, in J.-F. Laslier, M. Fleurbaey, N. Gravel and A. Trannoy (eds.) *Freedom in Economics: New Perspectives in Normative Analysis.* London: Routledge, pp. 241-251.

——— (1998b). *Equality of Opportunity.* Cambridge, MA: Harvard University Press.

Romer, D. and Jamieson, P. (2001). Advertising, smoker imagery, and the diffusion of smoking behavior, in P. Slovic (ed.) *Smoking: Risk, Perception, and Policy.* London: Sage, pp. 127-155.

Samet, J. (2001). The risks of active and passive smoking, in P. Slovic (ed.) *Smoking: Risk, Perception, and Policy.* London: Sage, pp. 3-28.

Scruton, R. (1998). A snort of derision at society. *The Times*

——— (2000). *WHO, What and Why? Transnational Government, Legitimacy and the World Health Organization.* London: Institute of Economic Affairs.

Sebrié, E. and Glantz, S. A. (2006). The tobacco industry in developing countries. *British Medical Journal* 332: 313-314.

Shafey, O., Dolwick, S. and Guindon, G. (eds.) (2003), *Tobacco Control Country Profiles, 2nd ed.,* Atlanta, GA, American Cancer Society.

Shibuya, K., Ciecierski, C., Guindon, E., Bettcher, D. W., Evans, D. B. and Murray, C. J. L. (2003). WHO Framework Convention on Tobacco Control: development of an evidence based global public health treaty. *British Medical Journal* 327: 154-157.

Siahpush, M., Wakefield, M., Spittal, M., Durkin, S. and Scollo, M. (2009). Taxation reduces social disparities in adult smoking prevalence. *American Journal of Preventive Medicine* 36: 285-291.

Siegrist, J. and Marmot, M. (2004). Health inequalities and the psychosocial environment—two scientific challenges. *Social Science & Medicine* 58: 1463-1473.

Solomon, L. J., Scharoun, G. M., Flynn, B. S., Secker-Walker, R. H. and Sepinwall, D. (2000). Free nicotine patches plus proactive telephone peer support to help low-income women stop smoking. *Preventive Medicine* 31: 68-74.

Sorensen, G., Barbeau, E., Hunt, M. and Emmons, K. (2004). Reducing social disparities in tobacco use: a social-contextual model for reducing tobacco use among blue-collar workers. *American Journal of Public Health* 94: 230-239.

Spangler, J., George, G., Foley, K. and Crandall, S. (2002). Tobacco intervention training: current efforts and gaps in US medical schools. *JAMA* 288: 1102-1109.

Stead, M., MacAskill, S., MacKintosh, A., Reece, J. and Eadie, D. (2001). "It's as if you're locked in": qualitative explanations for area effects on smoking in disadvantaged communities. *Health and Place* 7: 333-343.

Stein, K., Zhao, L., Crammer, C. and Gansler, T. (2007). Prevalence and sociodemographic correlates of beliefs regarding cancer risks. *Cancer* 110: 1139-1148.

Tang, J. L., Law, M. and Wald, N. (1994). How effective is nicotine replacement therapy in helping people to stop smoking? *British Medical Journal* 308: 21-26.

Thomas, S., Fayter, D., Misso, K., Ogilvie, D., Petticrew, M., Sowden, A., Whitehead, M. and Worthy, G. (2008). Population tobacco control interventions and their effects on social inequalities in smoking: systematic review. *Tobacco Control* 17: 230-237.

Thomson, G. W., Wilson, N. A., O'Dea, D., Reid, P. J. and Howden-Chapman, P. (2002). Tobacco spending and children in low income households. *Tobacco Control* 11: 372-375.

Thorndike, A., Biener, L. and Rigotti, N. A. (2002). Effects on smoking cessation of switching nicotine replacement therapy to over-the-counter status. *American Journal of Public Health* 92: 437-442.

Townsend, J., Roderick, P. and Cooper, J. (1994). Cigarette smoking by socioeconomic group, sex, and age: effects of price, income, and health publicity. *British Medical Journal* 309: 923-927.

Ugen, S. (2003). Bhutan: the world's most advanced tobacco control nation? *Tobacco Control* 12: 431-433.

Wakefield, M., Germain, D. and Henriksen, L. (2008). The effect of retail cigarette pack displays on impulse purchase. *Addiction* 103: 322-328.

Wanless, D. (2003). *Securing Good Health for the Whole Population: Population Health Trends.* London: HMSO.

Warner, K. (2000). The economics of tobacco: myths and realities. *Tobacco Control* 9: 78-89.

West, R. and Hardy, A. (2007). Stigma, in S. Ayers, A. Baum, C. Mcmanus, S. Newman, K. Wallston, J. Weinman and R. West (eds.) *Cambridge Handbook of Psychology, Health and Medicine.* 2nd ed. ed. Cambridge: Cambridge University Press, pp. 213-215.

Wikler, D. (1987). Personal responsibility for illness, in D. Vandeveer and T. Regan (eds.) *Health Care Ethics: An Introduction.* Philadelphia: Temple University Press, pp. 326-358.
Wilson, N. and Thomson, G. (2005a). Tobacco tax as a health protecting policy: a brief review of the New Zealand evidence. *New Zealand Medical Journal* 118: 1-10.
——— (2005b). Tobacco taxation and public health: ethical problems, policy responses. *Social Science & Medicine* 61: 649-659.
Wiltshire, S., Bancroft, A., Parry, O. and Amos, A. (2003). 'I came back here and started smoking again': perceptions and experiences of quitting among disadvantaged smokers. *Health Education Research* 18: 292-303.
Wolff, J. and de-Shalit, A. (2007). *Disadvantage.* Oxford: Oxford University Press.
World Health Organization (2003). *The World Health Report 2003: Shaping the Future.* Geneva: World Health Organization.
——— (2004). *WHO Framework Convention on Tobacco Control, updated reprint.* Geneva: World Health Organization.
——— (2007). *European Tobacco Control Report 2007.* Copenhagen: World Health Organization.
Yach, D. (2001). Tobacco control, in C. E. Koop, C. Pearson and M. R. Schwarz (eds.) *Critical Issues in Global Health.* San Francisco: Jossey-Bass, pp. 162-169.

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1 This number includes deaths from both active and passive smoking.

2 In the UK, over 70% of two-parent households on income support smoke, spending about 15% of their disposable income on tobacco; Marsh and McKay, 1994.

3 See, for example, Efroymson, et al., 2001 for empirical evidence from Bangladesh.

4 See, for example, Fox, 2005, Healton and Nelson, 2004, Novotny and Carlin, 2005.

5 Most of the empirical data available is from industrialised countries, but I try to include the situation of low- and middle-income countries where possible.

6 For data from the US, see Lasser, et al., 2000.

7 For specific figures from low-income countries, see Gwatkin, et al., 2007.

8 The model is based on observations about changes in smoking prevalence in industrialised countries, many of which are in advanced stages of the smoking epidemic. It is not clear to what extent the model can predict changes in smoking patterns but Lopez et al. maintain that, in the absence of national tobacco control strategies, countries currently in the early stages of the smoking epidemic are likely to follow this pattern.

9 This question is sometimes framed within the distinction between health inequalities and health inequities, where health inequalities include all (just and unjust) disparities in health across different groups, whereas health inequities denote those inequalities that are unjust.

10 Daniels, for example, emphasises the difference between 'natural' health inequalities and health inequalities that are the result of an unjust distribution of resources; see Daniels, 2008, ch. 3.

11 E.g. Goodin, 1989a, Goodin, 1999, Hooper and Agule, 2009. On the addictive effects of nicotine, see Jarvis, 2004.

12 This idea is operationalised by Roemer, 1993, Roemer, 1998a, Roemer, 1998b.
13 Chinese Academy of Preventive Medicine, *Smoking in China: 1996 National Prevalence Survey of Smoking Patterns*, cited in Jha and Chaloupka, 1999. See also Kenkel and Chen, 2000.
14 Abdullah and Husten, 2004, 625; see also Mackay and Eriksen, 2002, 25, Shafey, et al., 2003.
15 See also Barbeau, et al., 2004b.
16 See also MacAskill, et al., 2002, 27.
17 See also Stead, et al., 2001.
18 Barbeau, et al., 2004a, Kotz and West, 2009, Lader, 2008, Richardson and Crosier, 2007, Roddy, et al., 2006, Sorensen, et al., 2004. In the UK, 74% of smokers reported that they wanted to quit, with no differences among SES groups; see Lader, 2008, 13-15.
19 For example, taxation is a central element of the World Health Organization's Framework Convention on Tobacco Control; see World Health Organization, 2004.
20 See, for example, Farrelly, et al., 2001, Siahpush, et al., 2009, Townsend, et al., 1994, Wilson and Thomson, 2005a.
21 Studies suggest that price-elasticity of demand for tobacco products is much greater in low- and middle-income countries than it is in high income countries; Chaloupka et al. suggest that price elasticity is between -0.50 and -1.00 in low- and middle-income countries, and around -0.40 in high-income countries; see Chaloupka, et al., 2000
22 On differences in price elasticity in high-income countries, see Colman and Remler, 2004, Franks, et al., 2007, Regidor, et al., 2007, Thomas, et al., 2008. Lance, et al., 2004 raise doubts about estimates of price elasticity in developing countries. Furthermore, it is not clear that reduced tobacco *expenditure* as measured in studies is really indicative of lower *consumption*; smokers may respond to price increases by smoking cigarettes more intensely (Adda and Cornaglia, 2006), or by moving to cheaper or self-rolled cigarettes (see Mindell and Whynes, 2000).
23 For a detailed discussion of different senses in which tobacco taxation is 'regressive', see Remler, 2004.
24 Giskes, et al., 2007, Kunst, et al., 2004, Townsend, et al., 1994, Wilson and Thomson, 2005b; see also Platt, et al., 2002.
25 A complete tobacco ban has been implemented only in parts of Bhutan; see Ugen, 2003.
26 For a related argument about the provision of information about health risks, see Grill and Hansson, 2005.