PUBLIC HEALTH PAST AND PRESENT

Illicit drugs and the rise of epidemiology during the 1960s

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Epidemiology has been crucial to the understanding of both tobacco smoking and illicit drug taking as public health issues in Britain since the 1960s. There were, however, significant differences in the way in which epidemiology was used between the two psychoactive substances.

The fundamental role played by epidemiology in establishing a causal link between smoking and lung cancer during the 1950s is well known and well documented.^{1–4} Less familiar, but equally important, was the way in which epidemiology became central to the debate about illicit drug taking a decade later. Here, epidemiology was used not to link drug taking to a chronic disease, as with smoking, but instead to describe the spread of drug use itself. Based around the notion of addiction, drug use had long been seen as a disease, but in the 1960s heroin addiction was reconceptualised as a “socially infectious condition” requiring “epidemiological assessment and control”.^{5–6} This resulted in a response that in many ways paralleled the handling of infectious diseases in the late 19th and early 20th centuries, including compulsory notification of incidences of addiction and dedicated treatment centres.^{7–8} At the same time, an increasingly psychiatric understanding of addiction as a form of mental illness began to develop.^{9–10} However, the notion of addiction as a socially infectious condition did not entirely disappear. It was suggested that an individual’s psychiatric make up could make him or her more susceptible to the “infection” of addiction. According to Virginia Berridge, highlighting populations at “relative risk” from a specific disease was first introduced with respect to smoking and lung cancer, but this concept was put to different uses in the formulation of the response to illicit drugs.¹ With smoking, emphasis was placed on education and prevention; with drugs the primary concern was treatment and control. This article will tease out some of these differences, and consider how epidemiological approaches to smoking and to drugs came to influence one another.

EPIDEMIOLOGY, SMOKING AND CHRONIC DISEASE DURING THE 1950S

Indeed, the very fact that epidemiology was involved in defining the response to illicit drugs in the 1960s can only be understood in the light of the growing authority surrounding epidemiology in this period, an authority derived from its vital role in identifying a link between smoking and lung cancer. Sir Richard Doll and Austin Bradford Hill’s now famous article, published in the *British Medical Journal* in 1950, demonstrated a clear statistical association between smoking and

incidences of lung cancer.¹¹ This initial paper was followed by a flurry of other epidemiological studies which confirmed that smoking was an important causal factor in the production of carcinoma of the lung. For a number of commentators, this body of work constituted a crucial moment for epidemiology.^{1–4} Epidemiological methods became accepted by the medical profession as a way of explaining the aetiology of disease.^{1–4} Moreover, the studies on smoking and lung cancer drew attention to the role of individual behaviour and lifestyle in disease causation.⁸ This was central to smoking policy, and public health policy more generally, from the 1970s onwards.^{1–12} Efforts were directed at curbing the danger to health posed by tobacco through the introduction of measures that were designed to change the behaviour of individuals without actually prohibiting smoking. This included the taxation of tobacco and restrictions on advertising and health education.^{1–2}

THE HEROIN “EPIDEMIC” OF THE 1960S

The link between disease and behaviour was also central to the understanding of heroin addiction in the 1960s, but it was the behaviour itself (drug taking) that was regarded as a disease. Heroin addiction was extremely rare in Britain until the 1960s. The Rolleston report on morphine and heroin addiction, published in 1926, found that addicts were few in number, mostly middle-aged, middle-class and had usually become addicted to opiate drugs following treatment for another condition. Rolleston accepted that opiate addiction was a disease requiring treatment, and a legitimate part of this treatment could involve long-term prescription of an opiate drug to the patient by his or her general practitioner.^{13–14}

Little changed for almost 40 years, until the numbers of addicts known to the Home Office began to rise during the early 1960s. In 1959 there were just 47 known heroin addicts; by 1964 this had risen to 328. More significantly, the population of addicts seemed to be changing. Firstly, addicts were younger: in 1964, 40% were <35 years of age, compared with 11% in 1959. Secondly, the new addicts had not normally been taking heroin for the treatment of another condition: in 1964, 94% of recently reported addicts were of non-therapeutic origin.⁶ These new addicts seemed to pose a threat to public health. Their youth and the apparently recreational nature of their drug use raised fears that the new addicts comprised a deviant subculture that could pose a danger to the physical and moral health of society. The Interdepartmental Committee on Heroin Addiction (known as the Brain Committee after

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its chairman, Lord Russell Brain) maintained that although the addict should still be regarded as a “sick person”, addiction was a disease, which, if allowed to spread unchecked, would “become a menace to the community.”⁶

To many observers, the rise in reported cases of addiction and its spread among a specific group of users seemed to constitute an “epidemic” of heroin use, in contrast with the handful of isolated cases of addiction seen in the past. Psychiatrist Thomas Bewley stated in the *Lancet* in 1965 that, “There is at present a small epidemic of heroin and cocaine addiction with case-to-case spread.” He also noted that, “Epidemiological research into drug addiction is virtually non-existent.”¹⁵ Indeed, there was very little research into addiction or expert knowledge about this at the time, partly because addiction had previously been such a rare condition. Bewley¹⁶ remarked in an interview that he was regarded as an expert in the field during the mid-1960s after having seen just 20 addicted patients. This lack of expertise was compounded by the fact that the treatment of addiction was often seen as an unrewarding area of medicine. Dealing with a highly stigmatised group of patients that rarely seemed to get better was thought to have a negative effect on one’s career, making it an unattractive topic for clinicians and researchers.⁷ There were no extensive, authoritative, epidemiological surveys of drug addiction as had been in the case of smoking. Instead, there were more informal, anecdotal reports. But these did take a distinctly epidemiological approach by attempting to give a sense of how heroin addiction was spreading within the population.

A key tool was the Home Office addicts index. The index, established in 1934, was a record of the names of addicts known to the Home Office, based on information derived from police inspections of pharmacists’ records and reports from doctors.¹⁷ This made it possible to observe the pattern of heroin addiction on a broader scale. Bing Spear, Chief Inspector of the Home Office Drugs Branch, made use of the index in a study published in 1969, but dealing with the spread of heroin addiction some years earlier. Spear took an implicitly epidemiological approach by detailing how addiction spread on the basis of contact with an addict.¹⁸ As Lart¹⁹ has observed, the paper is framed in terms of “an infective agent arriving in ideal conditions for the spread of contagion.” Moreover, Spear’s work seemed to be confirmed by the observations of doctors who were seeing patients with addiction. Bewley noted that “addicts of this type [the new, young addicts] become heroin and cocaine addicts only after contact with other heroin addicts.”¹⁵ For alcohol specialist Max Glatt, writing in the *Lancet* in 1965, “Every addict is a potential source of infection.”²⁰

THE RESPONSE TO HEROIN ADDICTION

In order to combat this infection a series of public health measures were introduced. The Interdepartmental Committee on Heroin Addiction recommended in 1965 that incidences of addiction be notified to a central authority, that dedicated treatment centres be established to treat addicts and staff working at these centres should have the power to compulsorily detain a patient with addiction if they thought it necessary.⁶ Compulsory notification and isolation of sick individuals had first been introduced in 1889 to deal with infectious diseases such as smallpox, typhus, typhoid and diphtheria.⁸ In the early 20th century special clinics were introduced to treat diseases that spread by social contact, such as tuberculosis and venereal disease.^{21 22}

The response offered to heroin addiction in the 1960s clearly drew on this public health legacy. The government adopted all recommendations of the Brain Committee, except for compulsory treatment, and in 1968 dedicated drug dependence units

(DDUs) were opened in a number of London Teaching Hospitals.⁷ The physical location of the DDUs and the language used to describe them reflected the perceived infectiousness of heroin addiction. In order to prevent the spread of addiction to other patients the DDUs were often based in remote parts of the hospital building, and clinics were held in the evenings to stop addicts mixing with “ordinary” patients.²³ The public health function of the DDU was further underscored by references to it as a “containment unit.”²⁴ It was decided that the heroin epidemic could best be contained by the long-term prescription of opiate drugs, including heroin, to patients with addiction attending the DDU. This was designed to negate the need for addicts to sell drugs to others (and so create more addicts) in order to fund their own habit. However, the DDUs were expected to do more than just limit the spread of heroin addiction; they were also to offer treatment to addicts. Treatment took the form of the prescription of the opiate substitute methadone on a gradually reducing basis until the addict had withdrawn from the drug. The DDUs thus had a dual function, to both treat heroin addiction and control the heroin epidemic.⁷

PSYCHIATRY, ADDICTION AND DEPENDENCE

This dual policy resulted in the formulation of a dual conception of heroin addiction. Intertwined with the model of heroin addiction as a socially infectious disease, was an individualised, psychiatric understanding of addiction. This was based around the long-held notion that addiction was a disease of the mind, rather than of the will or the body.⁵ The Brain Committee asserted in their first report, published in 1961, that heroin addiction was, “an expression of mental disorder,” and went on to recommend in their second report that treatment centres should “form part of a psychiatric hospital or of the psychiatric wing of a general hospital.”^{6 25} Psychiatrists, many of whom were already involved in treating alcoholics, took on the treatment of heroin addicts in the DDUs.^{16 26} However, this understanding of addiction as a mental disorder did not necessarily conflict with the idea that this was also a socially infectious condition. Bewley asserted that though addiction spread by contact the addict “may have factors in their personality which predisposed to addiction.”¹⁵ He went on to state in an editorial in the *British Journal of Addiction* in 1972²⁷ that, “both constitutional and environmental factors determine individual susceptibility to dependence on alcohol and drugs.”

It is interesting to note that Bewley, in his later editorial, used the term “dependence” instead of “addiction”. Although the two terms were often used interchangeably, by the 1970s dependence was perhaps the more “official” term, used by bodies such as the World Health Organization (WHO) and the Medical Research Council. The WHO maintained that “dependence” was used instead of “addiction” for reasons of semantic clarity, but Mars and Berridge have argued that “dependence” was intended to convey the psychological, and also the physical aspects of this condition, drawing attention to an essentially behavioural model of drug taking.^{28–30} Although some of the psychological research conducted on smoking during the 1970s pointed to the possibility of nicotine dependence, the concept of dependence was not central to the debate about smoking as it was in the drugs field during this period.¹ This was partly because addiction was not a notion that had been previously applied to tobacco. Nineteenth-century doctors and polemicists believed that smoking tobacco was merely “habit forming” in contrast with the “addictions” of drinking alcohol and drug taking.^{1 2} However, since the late 1980s and 1990s the addictive, rather than habit-forming or dependence-producing properties of tobacco have received more attention. This can be seen, for

example, in the report on smoking produced by the American Surgeon-General in 1988, which focused on nicotine addiction.³¹ Alcohol, drugs and tobacco have been increasingly placed together under the category of “psychoactive substances”. This has resulted in some of the policy responses offered to different psychoactive substances drawing closer together.¹ Concepts and initiatives that were confined to one substance or another are increasingly being exchanged.

PUBLIC HEALTH AND PASSIVE SMOKING

One clear example of this is in the debate over, and response to, passive smoking. In 1981, a paper by Hirayama³² was published in the *British Medical Journal* showing that the non-smoking wives of heavy smokers experienced a higher risk of developing lung cancer. This initial work was confirmed by a number of other epidemiological studies. What was particularly significant in terms of public health policy was that the health of the general population, not just smokers, seemed to be endangered through exposure to tobacco smoke by “passive” or “involuntary” smoking. As Berridge has noted, it was the threat to others posed by passive smoking, particularly to so-called “innocent victims” such as women and children, which “widened the debate and provided a more powerful engine for driving policy.”³³ This has led to more restrictive measures against smoking, seen most recently in the passing of a Bill in February 2006 to ban smoking in enclosed public spaces in England, including public houses, bars and restaurants.³⁴

Two parallels can be drawn between the response to passive smoking since the 1980s and the earlier reaction to heroin addiction. The first revolves around the reconceptualisation of an individual’s behaviour as being dangerous to all, and not just to the smoker or to the heroin user. With smoking, this was the risk of developing lung cancer after being exposed to someone else’s cigarette smoke; with heroin, it was the threat that addiction posed to social and moral health. The danger heroin addiction was thought to pose in the 1960s was not necessarily conceived of in the same way as the threat posed by smoking in the 1990s (there was little discussion, for example, of the damage done to “innocent victims” by heroin at this point) but a common thread can be detected in the wider belief that the use of psychoactive substances had consequences for public health.

The second parallel is perhaps less obvious, and requires consideration of the broader social and cultural position of smokers and drug takers at the moment that their behaviour was being regarded as a danger to public health. Although there has been a substantial reduction in the proportion of smokers in the UK, from 51% of men and 41% of women in 1974 to 28% of men and 26% of women in 1998, this decline has not taken place evenly throughout society. In 1998, men who lived in “unskilled manual” households were almost three times more likely to be smokers than those who lived in professional households. A similar pattern is replicated for women: in the early 1990s just 13% of women in the highest socioeconomic groups were smokers, compared with 35% in the lowest groups (figures are quoted by Berridge³⁵). Smoking was increasingly being concentrated in marginalised groups—groups that were more readily conceived of as being “deviant.” According to Berridge, “It was much easier to mount a more consistent attack on the existence of a habit associated primarily with women and the poor.”³³ A similar pattern can be observed in the case of heroin addiction during the 1960s when young, recreational addicts were frequently demonised and were subjected to much greater forms of control than their middle-aged, middle-class counter-parts of the 1920s. It would appear that a change in the population of those using a specific

substance—whether it be tobacco or heroin—is significant in determining the way this is dealt with.

CONCLUSION

The extent to which responses to smoking and drug taking have drawn closer together reflects a similar closeness in the way the diseases surrounding these behaviours are being conceptualised. Smokers, like drug users, have increasingly been regarded as having a disease (addiction) that poses a danger to all. This kind of behaviour is no longer simply seen to lead to disease, as was the case with smoking and lung cancer in the 1950s; rather, the behaviour has come to be regarded as a disease in itself. Of course, this was not new—homosexuality was understood as a disease posing a threat to public health during the 19th and early 20th centuries—and this tendency to regard certain kinds of behaviour as diseased has undoubtedly continued into the contemporary period. Smoking and drug taking are just two examples; other more recent illustrations might include overeating (obesity) or undereating (anorexia).

However, as consideration of the heroin “epidemic” of the 1960s has demonstrated other, older, notions of disease and its cause persist even within seemingly “new” interpretations. Although heroin addiction was coming to be understood as a psychiatric illness, addiction was also conceived of as being “socially infectious”, a label often applied to diseases such as tuberculosis and venereal disease 60 years previously. Moving forward in time once again to the 1980s and 1990s, this picture was further complicated by AIDS, as drug taking was found to facilitate the spread of infectious disease. Now, as AIDS is increasingly regarded (at least in the developed world) as a chronic disease, parallels could be drawn with the earlier case of smoking and lung cancer, as behaviour once more leads to a chronic disease. Taking the long view of the role played by epidemiology in tracking and defining disease would seem to suggest that public health diseases, and the campaigns mounted to tackle these, cannot easily escape the echoes of the past.

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APHORISM OF THE MONTH

In public health, let the dough rise slowly (but not too slowly)

In problem-solving, being distracted can be a good thing. The tendency is to be drawn in to an analytic and reductionist assessment of what we are faced with, when intuition and affective awareness of what is impacting on the community can give real insights into what the real way forward is. Sleep on it, reflect and listen.

Lowell Levin and JRA