Part VI

Key research dimensions
Introduction and key concepts

Health and illness are universal human experiences, although the ways these experiences are structured varies from society to society. In pre-modern societies these experiences tended to be framed by religious belief and practices. For example Mary Douglas (1966, 1990), a social anthropologist, analysed the ways in which in pre-modern societies used sin to account for misfortune, such as illness and death, and ascribe responsibility for such misfortunes. Since the seventeenth century the development of science-based medical knowledge has meant that the causes and management of such misfortune have been secularised (and globalised) with risk replacing sin through the medicalisation of birth, death and illness (Conrad, 2007).

Science and medicalisation

In Western Europe and North America the transition to a risk-based medicalised approach to health and illness took place in the late eighteenth and early nineteenth centuries alongside the major social changes associated with industrialisation and urbanisation. The transition drew on Enlightenment ideas that highlighted the capacity of science to enable the modernisation of society creating human progress and development (Porter, 1991a).

As Wilson (1995: 376) noted, established members of the emerging medical profession, such as surgeons, drew upon the ‘scientific enterprise’ of the Enlightenment to justify their practice and status. In the nineteenth century this led to an expansion of the scope of medicine from the treatment of disease in individual patients to the identification and management of risk in populations through the development of epidemiology, the systematic collection of data on the incidence of diseases. For example, John Snow (1855), a founder of public health, mapped the incidence of the 1854 cholera epidemic in the City of London. He showed that during the epidemic proximity to a water pump on, the now famous, Broad Street increased the probability of being infected, leading to the conclusion that cholera was an infectious disease spread by faecal contamination of water or food. Thus public health exemplifies the rational approach to risk in which evidence from the temporal and spatial distribution of past adverse events is used to predict and prevent the occurrence of such events in the future.
Medical surveillance

Although epidemiology provides a powerful tool for improving the health of populations, it also changes the individual experience of health and illness. In pre-modern societies illness is often not differentiated from other forms of misfortune whose causes are often seen in terms of social or spiritual malevolence that experts such as witch doctors can help identify and counteract (Evans-Pritchard, 1937; Lewis, 1975). In modern societies the identification and treatment of illness is a highly specialised activity mainly undertaken by medical experts who use epidemiological and clinical knowledge to identify and treat illness (Parson, 1951: Chapter X). Furthermore the boundary between illness and health is blurred – even if individuals are not categorised as ill they have a definable risk of becoming ill. In the context of epidemiological knowledge illness is seen through the lens of risk and becomes a virtual risk object (van Loon, 2002), an ever present and imminent event that ‘responsible’ citizens (Rose, 1999) should try to prevent by following public health advice, for example by not smoking, drinking sensibly, eating healthily and having safe sex. Individuals become part of a system of medical surveillance in which they are scrutinised for signs of increased risk.

This medical surveillance underpins the continued expansion of screening programmes. As Heyman argued, screening is based on risk rationality by scrutinising target populations to identify individuals with heightened levels of risk:

Screening provides a quintessential exemplar of late modern risk thinking, claiming to proactively reduce the prevalence of future diseases by means of probabilistic scanning in populations.

(Heyman, 2010: 1)

Screening blurs the boundaries between illness and health. Individuals who test positive in a screening programme are no longer categorised as healthy but they are not yet ill. The way in which screening is creating liminal, in-between categories, can be seen in diagnostic labels such as prediabetic. Although doctors making the diagnosis see themselves as performing a biomedical technical activity that makes evident existing reality:

patients saw the categorisation as creating a more fundamental change, the making of a new ‘high-risk’ person who had to take action . . . in their everyday life, to manage these risk factors. They defined themselves as having a medical condition, a ‘lifestyle disease’.

(Hindhede, 2014: 600)

In pre-modern societies individuals consulted specialists to identify and counteract harmful forces as and when they experienced misfortunes, including illness (Evans-Pritchard, 1937). In contrast individuals in modern society are under constant expert surveillance and often engage in treatment to minimise risk, such as taking medication to reduce their blood cholesterol levels even though the personal benefits may not be clear.

Major debates about the role of risk in medicine and health

The limits of rationality

In the standard narrative of risk, medicine plays an important and essentially benevolent role. In this narrative doctors use their scientific knowledge to assess and communicate the risks
that individuals and group face, thus empowering them to make informed choices that enable well-being to be maximised. As the Editor of the British Medical Journal noted, risk communication is now the main work of the doctor and is central to modern practice in which doctors are trusted to provide information that enables individuals to make informed choices (Smith, 2003: 327).

Not only does risk underpin the relationship between medical experts and citizens, it is also central to the system of health care. This can be clearly seen in the UK with the development of an evidence-based system of health care to minimise risk and enhance patient safety and health outcomes. In the UK the shift to a risk-based health-care system was initiated by the 1997 government policy statement The New NHS: Modern, Dependable. The change involved a shift from a system based on clinical autonomy, in which doctors had the responsibility and freedom to make clinical decisions using their professional judgement based on tacit and other sources of knowledge, to a system of risk-based clinical governance in which individual clinicians were required to make decisions based on and justified by national protocols and guidelines grounded on a systematic review of available scientific knowledge. The performance of clinicians and organisations became subject to regular inspection, audit and public reporting to ensure they were not exposing their patients to 'unreasonable' risk (see Alaszewski, 2003; Flynn, 2002).

Among other influences, the shift to clinical governance has been prompted by negative public experience of health care, its lack of transparency and major scandals involving clinicians and hospitals. The medical profession itself is now subject to a regime of risk governance and the public empowered by greater transparency and rational risk communication.

However, far from being empowered by such risk communications, many patients experience this information as disempowering. This sense of disempowerment is partially engendered by the rationalist underpinning of the risk information; the assumption that those receiving the information base their decision making on the rational evaluation using information on risk to assess the probability and benefits of different outcomes. As Alaszewski and Horlick-Jones (2003) have argued these assumptions do not accord with the experience of decision making in real social circumstances. In everyday life, individuals use and weigh up different sources of information (Kiisel and Vihalemm, 2014). Individuals use different strategies to manage uncertainty, some of which are rational, some such as hope are not, and some such as trust and emotion combine rational and irrational features (see Zinn, 2008).

The standard narrative also fails to recognise that risk can and often is contested. Experts often do not agree about risks and new evidence can undermine a scientific consensus about risk. For example, in the 1980s most experts and the government claimed that Bovine Spongiform Encephalopathy (BSE) or 'mad cow disease' was not a risk to humans because it could not spread from cows to humans. The government's Chief Medical Officer stated that it was safe to eat British beef. Microbiologists Helen Grant and Richard Lacey made counterclaims, but they were dismissed as mavericks. In March 1996 new scientific evidence proved the ‘mavericks’ right – scientists had identified a new variant of Creutzfeld–Jakob Disease caused by eating beef infected with BSE (Alaszewski and Brown, 2012: 117–18). Furthermore, the authority and benevolence of modern science are not universally accepted. For example Yang et al., (2014) examined the response of the social media in China to an experiment in which some Chinese school children were fed ‘golden rice’, a genetically modified form of rice that contains β-carotene. Although most of the articles were pro-golden rice, framing it in terms of scientific humanitarian progress, about a third were hostile using emotive language to frame it as a Western conspiracy to use genetic engineering to establish control over global agriculture and/or harm Chinese children.

Individuals can experience risk information as threatening, even oppressive, especially when they are unable or unwilling to avoid the specified risks. For example, Gjernes (2010) examined
the ways in which women smokers responded to health promotion advising them to reduce and stop smoking:

For health promoters, the smoker’s body is . . . ‘an objective body’, and health promotion is meant to make the smoker adopt such an objective and disciplinary perspective on her own body . . . Habits such as smoking are integrated in the life forms of lived bodies. The interviewees in this study reported that smoking was a resource when used as a reward, as a stress reducer, when it compensated for food and sleep, and was used as a ‘time-out’.

\[ \text{(Gjernes, 2010: 485)} \]

Risk as power and oppression: governmentality

Michel Foucault, the French philosopher and sociologist, has provided a powerful critique of the standard risk narrative. In his earlier work he used a series of historical case studies on the treatment of the mentally ill \[ (Foucault, 1967) \], the development of modern prisons, \[ (Foucault, 1977) \] and the development of modern clinical medicine \[ (Foucault, 1973) \] to undermine the claim that the transformation stimulated by the Enlightenment represented a liberation and empowerment of individual citizens. These reforms removed what are – to modern sensibilities – distasteful, public spectacles, such as the public disfigurement, flogging and hanging of criminals, displaying of lunatics in madhouses and the ‘theatre’ of surgical operations. However, Foucault argued that these traditional forms and displays of power were replaced with a new form of power and control embedded in the new professions with their discourses of risk. This power was expressed in the professions ability to define boundaries – boundaries between the normal (healthy/safe) and the other (ill/dangerous), and boundaries within these categories, for example by defining and classifying different types of abnormality or deviance (see, for example, \[ Foucault, 1967: 185–95 \]).

Modernity created new boundaries between the normal and abnormal that were not only embedded in the language of professional discourses, but were also made visible in the architecture of the institutions built and expanded in the nineteenth century: workhouses, prisons and asylums. These institutions were surrounded by walls that controlled access and exit, excluded the public and subjected the inmates to the expert gaze. The model identified by Foucault for these institutions was the ‘panopticon’, made famous by the British Utilitarian philosopher, Jeremy Bentham. This was a 12-sided polygon with a central tower, in which inmates were shielded from public gaze but subject to the gaze of authority. For Foucault this model represented the enduring exercise of power:

\[ \text{Bentham laid down the principle that power should be visible and unverifiable. Visible: the inmate will constantly have before his eyes the tall outline of the central tower from which he is spied upon. Unverifiable: the inmate must never know whether he is being looked at any one moment, but he must be sure that he may always be so.} \]

\[ \text{(Foucault, 1977: 201)} \]

In his later writing, Foucault developed the concept of governmentality and expanded the scope of his analysis from the development of specific institutions to the ways in which the professional discourse and power of risk management permeated society in general. In the nineteenth century, medical knowledge and status expanded with and through the expansion of institutions. However, in the second half of the twentieth century many of these institutions were considered ‘risky’ and in some areas there was a major shift to community-based services.
This shift resulted in the breakdown of the rigid distinctions and barriers between normal/safe and abnormal/risky. But rather than making the abnormal normal, it facilitated the identification of potential abnormality in the normal, general population. Holmes and Warelow (1999) argue that this expanding redefinition can be seen in changes in the American Psychiatric Association’s ‘scientific’ classification of mental disorder. The first manual was published in 1952 (*Diagnostic and Statistical Manual (DSM) of Mental Disorder*, American Psychiatric Association, 1952) when psychiatric practice was institutional and it identified and classified the mental illnesses that psychiatrists mainly treated in hospital. By the time the fourth edition of the manual was published in 1994 (American Psychiatric Association, 1994) psychiatry had moved out of institutions into the community and the focus was on how all individuals were at risk of mental illness. Holmes and Warelow described the ways in which:

DSM-IV serves to psychiatrise everyday life by deconstructing the traditional distinctions between the mentally disordered and the mentally healthy … invading that behavioural area once differentiated as ‘healthy’ or ‘normal’.

(*Holmes and Warelow, 1999: 116*)

For Foucault (2010) governmentality is a sophisticated form of social control through which modern governments can, with minimal cost, gain control and create a compliant, productive population. Governmentality reaches into the private sphere of the family and even inside the self. It combines the illusion of choice with the reality of control through the internalisation of expert-defined behavioural norms (Rose, 1999). Thus commentators using governmentality argue that individuals govern themselves by orienting their actions towards ‘healthy norms’ that minimise the risk of ill health.

Foucauldian analyses of ways in which expert risk discourse shape individuals’ understanding of and response to risks are persuasive. They show how reason and rationality as defined by experts such as doctors shape individuals experiences of risks, including illness and disease. However, there are limitations. The Foucauldian analysis does not address social structuring that is less visible. How individuals act is not necessarily shaped by conscious thought and reflection. As Giddens (1991) the British sociologist noted, most of the time individuals do not stop and think about risk, they ‘push it to one side’ and ‘bracketed it out’ (1991: 129) and the routines of their everyday lives are based on an assumption that life is ‘normal’ and ‘predictable’ (1991: 126). This process of bracketing out risk can be seen in Green and her colleagues’ study of how individuals talk about food risks and choices:

Despite making routine comments about the complexity, contradictions and uncertainty of ‘expert’ knowledges of food, most participants utilized practical and efficient ‘short cuts’ to making food choices a straightforward and routine everyday activity. A framework of trust in both people and systems means that safety is, in many senses, ‘taken for granted’.

(*Green et al., 2003: 49*)

The French sociologist and philosopher, Bourdieu (1990) argued that these routines of everyday life are shaped by habitus – individuals’ mindsets that develop through the shared experience, activities and routines of everyday life. For Bourdieu such knowledge lies outside explicit reasoning and, for members of a group, ‘goes without saying’ (Bourdieu, 1990: 66–7). Therefore, habitus is intrinsically difficult to identify and study. It is easier to identify when it is made more visible by cultural differences and it can be identified in studies of other cultures. For example, in Northern India most Hindu communities are vegetarian. This diet is part of normal everyday
life and therefore does not need to be justified. In the community, the diet is considered satisfying, pleasurable and healthy. In these communities being vegetarian is an important aspect of being a good, clean-living Hindu and a way of marking superiority over other meat-eating individuals and communities.

The difference between governmentality and habitus are evident in Gjernes (2008) analysis of the ways in which Sámi women in Northern Norway perceive risk and uncertainty. Public health experts consider the Sámi an at-risk group and have sought to persuade them to change their lifestyles by eating less fatty meat, exercising and not smoking. For the Sámi, the main threat they face is not directly to their health but indirectly through disruptions to their way of life, which is reindeer herding. Rather than exercising by going to the gym or jogging, Sámi women see their everyday labours, such as reindeer herding and picking berries, as protecting their health:

Much physical work is ascribed a value beyond labour. To spend much time outside is outdoor life, and outdoor life is considered to be healthy. As such, it also has a high moral value . . . By attaching their way of life to outdoor life, the [Sámi] women are communicating that even though most of them do not do structured exercise in a gym, they gain health capital from their outdoor life activities . . . According to my respondents, the air in the locality is fresh and healthy. This also means that those who live under such conditions live healthy lives without exposure to industrial pollution.

(Gjernes, 2008: 511)

In late modern societies, most individuals do not live in stable small-scale communities and are therefore exposed to a wider range of influences building their own personal routines and mindsets; however, there are social settings in which individuals engage in intimate face-to-face relations and have shared routines and lifestyles. In such settings, it can be easier to identify habitus. Some groups of drug users form part of such communities. From the perspective of public health, heavy-end crack cocaine users are seriously at risk and need help to stop their addiction. However, McGovern and McGovern (2011) study of crack users in the North of England found that users normalised drug use as part of their everyday life. They develop and share routines that enable them to survive the chaos of everyday life (2011: 492) and create ‘meaning in an otherwise meaningless life’ (2011: 487). In the community of users, a competent user was someone who had the embodied skill in managing the high-end risks of drug use. Users had to regularly demonstrate their knowledge of drugs, their skill in acquiring and using them and their ability to avoid police detection.

The feminist critique

The feminist critique of risk is narrower and more focused than the Foucauldian critique, but overlaps with it. Feminists focus on the ways in which risk is a male construct that acts as a mechanism through which men, especially doctors, control women’s bodies.

One example of this is the disease category ‘hysteria’, which derives from the Greek word for womb. In early Greek medical texts, especially the Hippocratic corpus, the female body is treated as intrinsically different to the male, and female diseases are caused by the movement or misplacement of the womb:

The Greek adjective *hysterikos* means ‘from the womb’; as such, it is a purely physical description of cause, showing the part of the body from which other symptoms emanate.
In a woman, as another Hippocratic text puts it, ‘the womb is the origin of all diseases,’ so it would be fair to say that, in Hippocratic gynecology, all diseases are hysterical.

(King, 1991: 12–13)

The nineteenth-century doctors reinterpreted the Hippocratic texts and the displaced womb became the major risk to the health of women as a mental illness. Doctors took the lead in (creating) and managing the nineteenth-century epidemic of hysteria:

It was during the nineteenth century that hysteria moved center-stage. It became the explicit theme of scores of medical texts. Its investigation and treatment made the fame and fortunes of towering medical figures – Charcot, Breuer, Janet, and Freud. Hysteria came to be seen as the open sesame to impenetrable riddles of existence: religious ecstasy, sexual deviation, and, above all, that mystery of mysteries, woman.

(Porter, 1991b: 227)

Doctors no longer argue that there is a link between the womb and mental illness, making the nineteenth-century conception of hysteria redundant; however, doctors continue to perceive the female body as both vulnerable and dangerous and requiring medical supervision, as can be seen most clearly in the medicalisation of pregnancy and childbirth. Such medicalisation is underpinned by discourses about the vulnerability of foetuses, babies and children and the need to protect them from harm, including that caused by their mothers (Katz Rothman, 2014).

In high-income countries, epidemiologists have identified the ways in which the pregnant woman’s behaviour impacts on the health and well-being of their foetus. Thus, as the foetus is made increasingly visible by medical imaging, so it acquires the status of a quasi-person and the pregnant woman acquires responsibility for minimising risk to the foetus by avoiding potentially harmful behaviours. Risk to the foetus has therefore become the reason for policing the behaviour of pregnant women, and such policing of the role of men, for example as partners influencing behaviour, tends to be neglected. Stengel (2014) examined the case of women with a history of illicit drug use and makes clear such policing is not just metaphorical. The thirteen women in her study had to agree to constant and intrusive surveillance to demonstrate that they were drug-free during pregnancy and were constantly worried that their babies would be removed from their care when they were born, as happened in five of the thirteen cases. Because of their past behaviour and the risk to their unborn foetus, these women were judged to be untrustworthy and no longer capable of managing risk themselves.

Public health experts argue that the risks they identify and advice they provide are grounded in scientific evidence; however, there are some areas in which the risk is considered so serious that advice is based on the precautionary principle – a ‘better safe than sorry’ projection of a possible future threat – rather than the probability of harm based on past evidence (see Alaszewski and Burgess, 2007). Although there is strong epidemiological evidence that heavy drinking during pregnancy damages the unborn foetus, there is little evidence that low consumption is risky. Leppo et al. (2014) note that ‘the shift from estimation of risk to the precautionary principle and the advice to totally abstain should be understood as a symbolic struggle to protect the purity of the foetus and to construct the ideal of the perfect mother’ (Leppo et al., 2014: 526).

Childbirth has also been medicalised based on the premise that medical technology provides the most effective and safest way of managing the uncertainties of birth. The safety of high-tech medical units and the riskiness of home delivery appear to be overstated in the context of a medical desire to retain close control over the birth experience. In England, a National Perinatal Epidemiology Unit study of birth outcomes for low-risk women in terms of place of birth
showed a small but significant increase in negative outcomes for first-time mothers choosing to have a home birth but none for other women (Birthplace in England Collaborative Group, 2011). However, pregnant women often accept the premise of medicalisation. As Coxon et al. (2014) found in their study of women’s choices about where to give birth, in a culture of blame and responsibility, women accept the dominant narrative that giving birth is an uncertain and dangerous activity and they need the protection provided by modern medicine:

> When women planned hospital birth, they often conceptualised birth as medically risky, and did not raise concerns about overuse of birth interventions; instead, these were considered an essential form of rescue from the uncertainties of birth. Those who planned birth in alternative settings also emphasised their intention, and obligation, to seek medical care if necessary.

_(Coxon et al., 2014: 51)_

As Katz Rothman (2014) points out, this approach disregards women’s skills and undermines their confidence – both the confidence of birthing women in their bodies and also the confidence of midwives that they can facilitate birth with minimum intervention.

**Open questions and perspectives**

Medicine is by its nature constantly developing and innovating. This creates new opportunities, uncertainties and risks. For example, with the development of research on the human genome it is becoming possible to sequence each individual’s genome and identify a range of ‘risks’.

The grand narrative presents medical practitioners as highly competent technical practitioners who apply their knowledge in a disinterested and objective fashion; however, critical reflection upon the ways in which the language of risk is used can allow us to identify its hidden moral dimension. Explicitly or more commonly implicitly, blame (rather than sin) accompanies the ostensibly non-judgemental focus upon risk and probability in modern healthcare.

If you want an overview of the ‘risk perspective’ a good starting point is Heyman et al. (2010). There are a number of risk journals that are an important source of research and theory, _Risk Analysis, Journal of Risk Research_, and _Health, Risk & Society_. As Editor of _Health, Risk & Society_ I ensure it publishes readable articles that contribute to our understanding of how health risks are articulated and managed. There are two special issues a year, including one which focuses on risk theory, and these enable you to explore issues in depth.

The work of the Australian sociologist Deborah Lupton (n.d.) provides an accessible introduction to many of the health risk issues. Her blog, This Sociological Life, provides a list of her publications, many of which are open access.

**References**


