Section on Epistemology and Health Policy

RISK AS MORAL DANGER: THE SOCIAL AND POLITICAL FUNCTIONS OF RISK DISCOURSE IN PUBLIC HEALTH

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Risk is a concept with multiple meanings and is ideologically loaded. The author reviews the literature on risk perception and risk as a sociocultural construct, with particular reference to the domain of public health. Pertinent examples of the political and moral function of risk discourse in public health are given. The author concludes that risk discourse is often used to blame the victim, to displace the real reasons for ill-health upon the individual, and to express outrage at behavior deemed socially unacceptable, thereby exerting control over the body politic as well as the body corporeal. Risk discourse is redolent with the ideologies of mortality, danger, and divine retribution. Risk, as it is used in modern society, therefore cannot be considered a neutral term.

We live in a society that has become more and more aware of risks, especially those caused by technology and "lifestyle" habits. According to Douglas and Wildavsky, modern individuals are afraid of "Nothing much . . . except the food they eat, the water they drink, the air they breathe, the land they live on, and the energy they use" (1, p. 10). Health risks seem to loom around every corner, posing a constant threat to the public (2). They constantly make headlines in the news media and are increasingly the subject of public communication campaigns. Risk assessment and risk communication have become growth industries. In short, the word "risk" itself has acquired a new prominence in western society, becoming a central cultural construct (3, p. 2).

Risk is a concept with different meanings, according to who is using the term. The proliferation of usages of the term in both vernacular and professional applications means that its meanings are both complex and confusing. In its original usage, "risk" is neutral, referring to probability, or the mathematical likelihood of an event occurring. The risk of an event occurring could therefore relate to either a positive or negative outcome, as in the risk of winning the lottery. Used in the more mathematical areas of the growing field of risk analysis, this strict sense of the term is adhered to. Thus, risk analysts speak of the statistical likelihood that an

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event may occur, and use the mathematical model produced to assist in decision-making in such areas as economics and management. The risk, or likelihood, of an event happening can be calculated to numerical odds—one in fifty chance, one in a hundred, one in a million—as can the magnitude of the outcome should it happen (4, 5).

Most industries devoted to the quantification of risk place a great deal of importance in measuring risk assessment, risk perception, and risk evaluation on the part of individuals in the general population. In the past two decades the field of risk assessment of technologies has grown in prominence in concert with the interest of the public in environmental hazards. Risk assessment applied in this field deals with the complex process of evaluating the hazards of technologies, as well as the communication of information about potential risks and developing appropriate controls (5–8). Risk in this content has been defined as "the probability that a potential harm or undesirable consequence will be realized" (8, p. 321).

This definition points to the new meaning of risk. As Douglas (3) has suggested, the word "risk" has changed its meaning in contemporary western society. No longer a neutral term, risk has come to mean danger; and "high risk means a lot of danger" (3, p. 3). Any risk is now negative; it is a contradiction in terms to speak of something as a "good risk." According to Douglas, the use of "risk" to mean danger is preferred in professional circles because "plain danger does not have the aura of science or afford the pretension of a possible precise calculation" (3, p. 4).

In public health the word "risk" as a synonym for danger is in constant use. A "discourse of risk" has evolved with particular application to health issues. Individuals or groups are labeled as being "at high risk," meaning that they are in danger of contracting or developing a disease or illness. Epidemiologists calculate measures of "relative risk" to compare the likelihood of illness developing in populations exposed to a "risk factor" with the likelihood for populations that have not been thus exposed. State-sponsored health education campaigns in the mass media are conducted to warn the public about health risks, based on the assumption that knowledge and awareness of the danger of certain activities will result in avoidance of these activities.

Risk discourse in public health can be separated loosely into two perspectives. The first views risk as a health danger to populations that is posed by environmental hazards such as pollution, nuclear waste, and toxic chemical residues. In this conceptualization of risk, the health threat is regarded as a hazard that is external, over which the individual has little control. The common response to such risks on the part of the layperson is anger at government authorities, feelings of powerlessness and anxiety, and concern over the seemingly deliberate and unregulated contamination of the environment by industry (9, 10). Risk communication on the part of those in authority is then cynically directed toward defusing community reaction, building trust and credibility for the "risk creator," the "risk regulator," and the "risk analyst," and facilitating "risk acceptance" on the part of the public (11).

Methodologies used to assess health risk perception and acceptance on the part of the layperson are deemed to be objective, systematic, and scientific, able to discern "rational" means to make decisions about health hazards. The layperson's assessment of risk is viewed as a cognitive process that can be measured in the laboratory, divorced from social context. Psychologists in the field of decision analysis employ laboratory experiments, gaming situations, and survey techniques to understand risk perception, attempting to arrive at a quantitative determination of risk acceptance. Individuals are given the names of technologies, activities, or substances and asked to consider the risks each one presents and to rate them (12–14).

The second approach to health risk focuses upon risk as a consequence of the "lifestyle" choices made by individuals, and thus places the emphasis upon self-control. Individuals are exhorted by health promotion authorities to evaluate their risk of succumbing to disease and to change their behavior accordingly. Risk assessment related to lifestyle choices is formally undertaken by means of health risk appraisals and screening programs in which the individual participates and is given a rating. Such health risk appraisals (also termed health risk assessment or health hazard appraisal) are used to counsel individuals about prospective threats to their health that are associated with behaviors deemed to be modifiable. The object is to promote awareness of potential dangers courted by lifestyle choices, and then to motivate individuals to participate in health promotion and health education programs (15, 16).

Research into the layperson's acceptance of personal lifestyle risk again tends to use quantitative methods, usually based upon pen-and-paper questionnaires that incorporate questions such as "How much at risk (from the illness or disease in question) do you think you are personally?", with available responses ranging from "At great risk" to "Not at all at risk." Most questionnaires use only close-ended and pre-categorized items that provide very little opportunity for respondents to give unprompted opinions and to expand upon their answers. These kinds of research methods into risk perception fail to take into account respondents' belief systems relating to causes of disease and health behaviors. Too narrow a range of explanatory variables results in many research studies failing to expose the impact of differing cultural factors upon behavior (17, 18).

As a consequence, the literature on risk acceptance and risk perception in the health domain tends not to account for the influence of the sociocultural contexts within which risk perception takes place and the political uses to which risk discourse is put. Despite the wealth of literature on risk perception, analysis, and assessment, and the extremely common use of the concept of "risk" in public health literature, little critical examination of the meaning and rhetorical use of risk discourse has taken place by scholars within these fields.

In recent years a small number of qualitative sociologists, anthropologists, and philosophers have focused their attention upon other aspects of risk, viewing risk not as a neutral and easily measurable concept, but as a sociocultural concept

laden with meaning. The remainder of this article explores this dimension of risk discourse, which has been largely ignored in the public health and risk analysis literature.

EXTERNAL RISK RHETORIC

Interpretive analyses of the meanings of risk discourse in public health argue that there is more to risk than the disclosure of technical information and the mathematical determination of probabilities, and more to the individual's perception of risk than the assimilation and rational weighing up of impartial technical information (1; 3; 7, p. 96; 19; 20). For example, Douglas and Wildavsky (1) contend with respect to external threats that the selection of risks deemed to be hazardous to a population is a social process: the risks that are selected may have no relation to real danger but are culturally identified as important. People's fears about risks can be regarded as ways of maintaining social solidarity rather than as reflecting health or environmental concerns.

Nelkin argues that "definitions of risk are an expression of the tensions inherent in given social and cultural contexts, and that these tensions frequently come to focus on the issue of communication" (7, p. 96). Definitions of risk may serve to identify Self and the Other, to apportion blame upon stigmatized minorities, or as a political weapon. Risk therefore may have less to do with the nature of danger than the ideological purposes to which concerns about risk may be put (7). In history the scapegoating of ethnic minorities when an epidemic such as smallpox or the plague broke out is an example of how the concept of risk has been used for political purposes in public health discourse (21).

The notion of external risk thus serves to categorize individuals or groups into "those at risk" and "those posing a risk." Risk, in modern society, has come to replace the old-fashioned (and in modern secular society, now largely discredited) notion of sin, as a term that "runs across the gamut of social life to moralize and politicise dangers" (3, p. 4). Although risk is a much more "sanitized" concept, it signifies the same meanings, for, as Douglas comments, "the neutral vocabulary of risk is all we have for making a bridge between the known facts of existence and the construction of a moral community" (3, p. 5).

Douglas believes that "being at risk" is the reciprocal of sinning, for the emphasis is placed upon the danger of external forces upon the individual, rather than the dangers afforded the community by the individual: "To be 'at risk' is equivalent to being sinned against, being vulnerable to the events caused by others, whereas being 'in sin' means being the cause of harm" (3, p. 7). Her analysis of the concept of risk is closely tied to the term as it is used in politics, especially with reference to the risks placed by environmental hazards upon individuals who have little personal power to deal with them.

Douglas's distinction, however, while enlightening, is accurate only when applied to risk that is believed to be externally imposed. The theory is less apt

when viewed in the light of health risks considered to be the responsibility of the individual to control. When risk is believed to be internally imposed because of lack of willpower, moral weakness, venality, or laziness on the part of the individual, the symbolic relationship of sin and risk is reversed. Those who are deemed "at risk" become the sinners, not the sinned against, because of their apparent voluntary courting of risk. The next section addresses the moral meanings ascribed to health risks deemed to be "voluntary."

HEALTH EDUCATION AND LIFESTYLE RISK DISCOURSE

Ironically, there has been an increasing emphasis upon apprising individuals of their own responsibility for engaging in risky behaviors at the same time as the control of individuals over the risks in their working and living environments has diminished. An important use of risk discourse in the public health arena is that employed in health education, which seeks to create public awareness of the health risks posed by "lifestyle" choices made by the individual.

Cultural theorists interested in risk as a sociocultural phenomenon have tended to focus their speculations upon the moral meanings and political function of external risk. However, I would argue that greater attention needs to be paid to the implicit meanings and functions of lifestyle risk discourse. Just as a moral distinction is drawn between "those at risk" and "those posing a risk," health education routinely draws a distinction between the harm caused by external causes out of the individual's control and that caused by oneself. Lifestyle risk discourse overturns the notion that health hazards in postindustrial society are out of the individual's control. On the contrary, the dominant theme of lifestyle risk discourse is the responsibility of the individual to avoid health risks for the sake of his or her own health as well as the greater good of society. According to this discourse, if individuals choose to ignore health risks they are placing themselves in danger of illness, disability, and disease, which removes them from a useful role in society and incurs costs upon the public purse. Should individuals directly expose others to harm—for example, by smoking in a public place, driving while drunk, or spreading an infectious disease—there is even greater potential for placing the community at risk.

Why has lifestyle risk discourse gained such cultural resonance in late-capitalist society? There are historico-cultural roots to this discourse. Rosenberg links the public health discourse of risk with the ancient and powerful "desire to explain sickness and death in terms of volition—of acts done or left undone" (22, p. 50). He suggests that the decrease in incidence of acute infectious disease in contemporary western society has led to an increasing obsession with regimen, and the control of individuals' diet and exercise, to reduce real or sensed risks, to "redefine the mortal odds that face them" (22, p. 50). The other side of the coin, according to Rosenberg, is a tendency to explain the vulnerability of others to

disease and illness in terms of their own acts or lifestyle choices; for example, overeating, alcoholism, or sexual promiscuity.

The modern concept of risk, like that of taboo, has a "forensic" property, for it works backwards in explaining ill-fortune, as well as forwards in predicting future retribution (3). Thus the experience of a heart attack, a positive HIV test result, or the discovery of a cancerous lesion are evidence that the ill person has failed to comply with directives to reduce health risks and therefore is to be blamed for his or her predicament (23–28). As Marantz has commented of health education: "Many within the profession now think that anyone who has a [heart attack] must have lived the life of gluttony and sloth. . . . We seem to view raising a cheeseburger to one's lips as the moral equivalent of holding a gun to one's head" (26, p. 1186).

The current irrational discrimination, fear, and prejudice leveled against people with AIDS is a prime example of the way in which being "at risk" becomes the equivalent of sinning. Research undertaken by the anthropologist McCombie (29) illustrates the moral meanings attributed to the state of being "at risk" in the context of AIDS. She studied the counseling given by health workers to individuals deemed either "high risk" or "low risk" after a test for HIV antibodies had been performed. McCombie noticed that high-risk individuals, whether HIV positive or negative, were treated differently from low-risk individuals: "the high risk person is chastised, admonished and warned, while the low risk person is consoled and reassured" (29, p. 455). She evaluated this behavior in the context of taboo violation, pollution, and punishment for sin. High-risk individuals were being punished for their deviant behavior and were held responsible for their own behavior if HIV positive. By contrast, individuals deemed at low risk were looked upon more as innocent victims. The blood test itself was a ritual, acting an anxiety-reducing measure for those who were concerned that the virus was getting out of control as well as implicitly acting as a tool for detecting social deviance (29).

DEFINING RISK AND THOSE "AT RISK": THE POLITICAL FUNCTION OF RISK DISCOURSE

The rhetoric of risk serves different functions, depending on how personally controllable the danger is perceived as being. Douglas has pointed out that "blaming the victim is a strategy that works in one kind of context, and blaming the outside enemy, a strategy that works in another" (30, p. 59). She believes that both types of attributions of risk serve to maintain the cohesiveness of a society; the first in protecting internal social control, and the second in bolstering loyalty.

The categorization of which risks are deemed to be external and which internal influences the moral judgments made about blame and responsibility for placing health in jeopardy. It is important to consider which institutions have the power to define these categories of risk. Sapolsky (31) suggests that the political system of

industrialized countries is responsible for the current obsession with risk. Because members of the general public do not have access to sufficient information to assess environmental risks, they must rely upon intermediaries such as scientists, government officials, environmental campaigners, and the news media to inform them. These intermediaries have their own agenda, and therefore tend to exaggerate and distort the "facts" to further their own cause, making it difficult for the layperson to conceptualize risk in the face of conflicting perspectives (31, p. 90).

The news media, for example, have an integral role in disseminating information about health risks. The news media can have an important influence on shaping public policy and setting the agenda for the public discussion of risks. They are interested in attracting a large audience or readership, and tend to over-dramatize and simplify information about health risks accordingly. If they are relying upon the news media for information and advice, members of the lay audience can be left feeling panicked and confused (32–34). Politicians must react to new risks in a concerned manner, to avoid the backlash of seeming apathy in the face of a new health scare and to bolster their position: "careers are as much at risk in risk controversies as is the public's health" (31, p. 94). They have the power to gain the attention of the news media, and their opinions are therefore privileged over those of the ordinary person.

Personal health risk appraisals have been shown to have serious limitations in their predictive capabilities. These limitations include their use of epidemiological data produced from population research not designed to be applied to personal health risk, and problems with the available statistical methods for estimating risk as a quantitative score using disparate items of measurement (15, 16). Despite these problems, little research has been undertaken into the practical and ethical consequences of such risk appraisals, including their capacity to arouse anxiety in the well and their appropriate use in patient counseling. Some critics have expressed concern that by instituting such programs as health risk appraisals, drug and other screening, and fitness assessments into the workplace, large corporations are able to maintain control over the worker even when she or he is not at the workplace. Programs such as drug screening may be used as tools to identify the "desirable" employees; in other words, those whose lifestyles are deemed acceptable. They also enable employers to determine what workers are doing in their spare time, casting the net of corporate control ever wider (2, 35, 36).

The use of public information campaigns on the part of governments has increased in recent years. According to Wikler (37) there is danger in allowing governments the power to publicize health risks. Knowledge and risk factors may be misinterpreted; interventions may be ineffective or counterproductive. Health education can be coercive when it gives only one side of the argument, and if it attempts to persuade rather than simply give information to aid rational decision-making. Health education campaigns, in their efforts to persuade, have the potential to manipulate information deceptively and to psychologically manipulate by appealing to people's emotions, fears, anxieties, and guilt feelings (38).

Risk definitions may therefore be considered hegemonic conceptual tools that can serve to maintain the power structure of society. The voice of Everyman and Everywoman is rarely accorded equal hearing with that of big business and politicians. The two latter are in a position both to define health risks and to identify their solutions.

People working in the field of health risk communication tend to hold naive views about the ethics and point of such messages. Analysis of the moral and ethical implications of risk communication tends to implicitly accept that public communication of risk is desirable in most circumstances, with no further need to evaluate the ethical implications other than those posed by the involvement of journalists and public relations firms. Public knowledge, or "general edification," as bestowed by the state, is privileged as being in the public's "best interest" (39). The endeavor of risk communication sponsored by the state itself is rarely questioned in the risk communication literature as a political practice that can serve to maintain the interests of the powerful.

More insightful critics have argued that the use of the term "risk" is rarely neutral or devoid of political implications or moral questions. Risk communication, whether it is made by government, industry, or other bodies, can readily be regarded as a " 'top-down' justification exercise in which experts attempt to educate an apparently misguided public into the real world of probability and hazard" (11, p. 514).

Government-sponsored arguments for public health education campaigns that employ lifestyle risk discourse include: (*a*) a basic responsibility to protect and promote the nation's health; (*b*) providing resources through collective action to help individuals improve their health; (*c*) containing costs; and (*d*) preventing individuals from harming others through their lifestyle choices (38, pp. 33–34). However, the arguments against government health education campaigns are also compelling. Should the minority be forced to bow to the wishes of the majority? Do health education campaigns constitute paternalism, by telling individuals what they should do with their lifestyle choices and reducing personal autonomy? Moral arguments can be brought to bear against the harm to others and cost-containment justifications (37). Implicated in these arguments is the use of health education campaigns as a cynical means of acting in response to a health problem while perpetuating the structural status quo that helps maintain the problem.

Foucault has remarked that "Every educational system is a political means of maintaining or modifying the appropriation of discourse with the knowledge and powers it carries with it" (40, p. 227). Health education emphasizing risks is a form of pedagogy, which, like other forms, serves to legitimize ideologies and social practices. Risk discourse in the public health sphere allows the state, as the owner of knowledge, to exert power over the bodies of its citizens. Risk discourse, therefore, especially when it emphasizes lifestyle risks, serves as an effective Foucaldian agent of surveillance and control that is difficult to challenge because

of its manifest benevolent goal of maintaining standards of health. In doing so, it draws attention away from the structural causes of ill-health.

CONCLUSION

There are ethical questions in the use of risk discourse in public health that have been little questioned. Public health rhetoric has often posited that all individuals should have the right to information about risks. The implication of this assertion is that all individuals should have the right to be warned of the dangers of their behavior. What is left out of this equation is the corollary: that all individuals should have the right *not* to be continually informed of the risks they might be taking when engaging in certain actions, or that they should have the right not to act upon warnings if so preferred. The discourse of risk ostensibly gives people a choice, but the rhetoric in which the choice is couched leaves no room for maneuver. The public is given the statistics of danger, but not the safety margins. The discourse of risk is weighted toward disaster and anxiety rather than peace of mind. Rather than inform the public, for example, that the probability of not contracting HIV in a single sexual encounter is 999 out of 1000, the focus is placed upon the one in 1000 probability that infection will occur.

This emphasis upon a negative outcome, the inducement of anxiety and guilt in those who have received the message about the risks but do not change their behavior, might be said to be unethical. People tend to avoid anxiety by believing that they will not be the victims of a negative outcome. Is the constant assault upon the public's need to feel personally invulnerable ethical? Should employers be allowed to demand health risk appraisals in the name of ameliorating employees' health prospects? Should the discourse of risk give way to more positive statements? Are there ways to induce behavioral change amongst those really at risk other than inciting anxiety?

Risk discourse as it is currently used in public health draws upon the *fin de millennium* mood of the late 20th century, which targets the body as a site of toxicity, contamination, and catastrophe, subject to and needful of a high degree of surveillance and control (41). No longer is the body a temple to be worshipped as the house of God: it has become a commodified and regulated object that must be strictly monitored by its owner to prevent lapses into health-threatening behaviors as identified by risk discourse. For those with the socioeconomic resources to indulge in risk modification, this discourse may supply the advantages of a new religion; for others, risk discourse has the potential to create anxiety and guilt, to promote hopelessness and fear of the future.

There needs to be a move away from viewing risk perception as a rational cognitive process that can and should be influenced by the external efforts of health promotion, to more critical and theoretically informed investigations into the meaning of risk to individuals in contemporary society. Lifestyle risk discourse as it is used in public health should be examined for its ethical, political,

and moral subtext. Recent developments in the sociology, anthropology, and philosophy of risk discourse have pointed the way for such investigations.

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