Introduction: Merging Law, Human Rights, and Social Epidemiology

Scott Burris

he mission of public health is to provide the conditions in which people can be healthy, yet the bulk of public health resources are devoted to helping individuals cope with unhealthy conditions that are deemed beyond the scope of public health intervention. Pursuing social change has always been part of public health in the United States, but its place has steadily diminished. Politics is one factor that keeps public health work focused on the individual, but only one: The enormous difficulty of understanding what social change to pursue, and through what means to achieve it, also plays an important role. Research in social or "ecological" epidemiology has strengthened the scientific foundation for the study of social determinants of health. Data have demonstrated relationships between social conditions and health, and have shaped plausible hypotheses about the various biological and social mechanisms through which social factors produce health outcomes in a population. The task ahead is to delineate more clearly what elements of inequality determine health, through what pathways they operate, and what interventions can reduce the causes or block the pathways.

Jonathan Mann was the most charismatic of a group of epidemiologists and lawyers who began during the early HIV epidemic to argue that human rights had important connections to health. The observance of human rights was, he suggested, among the social conditions necessary for a healthy society; the violation of human rights could be a mechanism through which social inequality operates to produce health inequality. Advocacy for human rights, Mann believed, was an effective way to promote healthier public health policies. Mann and his colleagues, by their writing and example, gave human rights an important place in contemporary public health work. The movement they created may not have been

an entirely new thing, as Oppenheimer, Bayer, and Colgrave argue in this issue, but it has been influential. A concern for human rights is evident in the public health work of the United Nations: Agencies like the United Nations Development Programme and UNAIDS now have human rights lawyers serving as "focal points" for integrating human rights into health work; the best practices promoted internationally by the U.N. for disease control emphasize the synergy between human rights observance and good health outcomes. Throughout the world, academics and advocates in health draw upon human rights to explain health problems and how to solve them.²

After Mann's untimely death, the guest editors of this issue set out to channel some of our sense of loss into a project that would help carry his ideas onward. With the support of the Centers for Diseased Control and Prevention, we convened a multidisciplinary group of scholars to think about the health and human rights movement from an empirical perspective. Later, with the help of the American Foundation for AIDS Research, the work of this group of scholars and others was presented at an international conference in Mann's honor. Honoring John Mann provides us with the opportunity to treat human rights — and the broader enterprise of law — as one piece of the puzzle of the social determinants of health. The authors of the papers that follow have set themselves the task of finding what is knowable, testable, and doable at the intersection of health, human rights, and law. They apply existing theory and data to assess how laws, legal institutions, legal practices, and social ideas about law themselves operate as fundamental determinants of health, or as important pathways for deeper determinants; whether or under what circumstances law reform and human rights advocacy are effective political strategies for health; and how law can become better integrated into epidemiological research on both disease causation and intervention.

Journal of Law, Medicine & Ethics, 30 (2002): 498–509. © 2002 by the American Society of Law, Medicine & Ethics. This introduction provides an overview of the conceptual framework in which this project began. The first section summarizes John Mann's writing on health and human rights. The next sets out four basic questions we took from Mann's work, and explains how and why we treat human rights as a species of the larger genus, "law." The last section summarizes key concepts in sociolegal research and social epidemiology, in each case for the nonspecialist in the field, and concludes with a description of the approach we took to integrate them.

MANN'S CLAIMS FOR HUMAN RIGHTS AND HEALTH

Mann and his colleagues identified a number of important relationships between health and human rights. These ideas germinated in the interplay of theory and practice, while Mann was leading the U.N.'s AIDS program. They were still growing when he died. Even taking these ideas as works in progress, however, one can identify at least four distinct roles for human rights in health.

- (1) Public health policies, programs and practices affect human rights. This is true not just in the familiar sense that public health measures sometimes entail infringements of individual autonomy or privacy, but also in more subtle ways: For example, in setting policy priorities or allocating resources, public health agencies may discriminate against segments of the community in impermissible ways.³
- (2) Violations of human rights have health impacts. This, Mann argued, was obviously true of torture or genocide, but

beyond these serious problems, it is increasingly evident that violations of many more, if not all, human rights have negative effects on health. For example, the right to information may be violated when cigarettes are marketed without governmental assurance that information regarding the harmful effects of tobacco smoking will also be available....

As another example, the enormous worldwide problem of occupation-related disease, disability and death reflects violations of the right to work under "just and favorable conditions" (Universal Declaration of Human Rights, Article 23)....

A related, yet even more complex problem involves the potential health impact associated with violating individual and collective dignity.⁴

(3) Promoting and protecting human rights is inextricably linked to the challenge of promoting and protecting health. Mann evidently struggled with this, his most sweeping claim, and his work has two somewhat different formulations of the relationship between human rights conditions and health. At its strongest, the claim is that there is a causal link between health and human rights that goes beyond the immediate effects of particular rights violations:

HIV/AIDS may be illustrative of a more general phenomenon in which individual and population vulnerability to disease, disability and premature death is linked to the status of respect for human rights and dignity.⁵

Vulnerability to HIV reflects the extent to which people are, or are not, capable of making and effectuating free and informed decisions about their health. Therefore, a person who is able to make and effectuate free and informed decisions is least vulnerable. Conversely, the person who is ill-informed, and with quite limited ability to make and/or carry out decisions freely arrived at, is most vulnerable.

Although these passages suggest that the observance of human rights should be seen as a causal factor in health, he also described human rights as a practical analytic tool for better public health work:

> Human rights offers a societal-level framework for identifying and responding to the underlying societal determinants of health.⁷

> The modern movement of human rights, born in the aftermath of the Holocaust in Europe and born of the deep aspiration to prevent a recurrence of government sponsored violence towards individuals, provides AIDS prevention with a coherent conceptual framework for identifying and analyzing the societal root causes of vulnerability to HIV. It also provides both a common vocabulary for describing the commonalities which underlie the specific situations of vulnerable people around the world, and a clarity about the necessary direction of health-promoting societal change.⁸

For example, health professionals could consider the International Bill of Human Rights a coherent guide for assessing health status of individuals or populations; the extent to which human rights are realized may represent a better and more comprehensive index of well-being than traditional health status indicators. Health professionals would also have to consider their responsibility not only to respect human rights in developing policies, programs and practices, but to contribute actively from their position as health workers to improving social realization of rights. Health workers have long acknowledged the societal roots of health status; the human rights linkage may help professionals engage in specific and concrete ways with the full range of those working to promote and protect human rights and dignity in each society.9

Mann and his colleagues thus left a certain ambiguity at the heart of this claim: Is the observance of human rights a causal factor itself in population health — a determinant of health — or is human rights analysis a conceptual tool for better addressing the real determinants of health or is this a distinction without a difference?

There is no doubt that Mann's embrace of human rights as an analytic tool reflected dissatisfaction with prevailing risk-factor epidemiology:

Epidemiology is a powerful tool, though it has important underlying assumptions and limits. Applying classical epidemiological methods to HIV/AIDS ensures, even pre-determines, that "risk" will be defined in terms of individual determinants and individual behavior. Epidemiology has thus far failed to develop models and methods suited to discovering the societal dimensions which strongly influence and constrain individual behavior. ¹⁰

(4) Human rights can serve as an "ethics of public health." Later in his work, Mann added a fourth possible link between health and human rights:

Public health, at least in its contemporary form, is struggling to define and articulate its core values. In this context, the usefulness of the language and structure of ethics as we know it today has been questioned. Given its population focus, and its interest in the underlying conditions upon which health is predicated (and that these major determinants of health status are societal in nature), it seems evident that a framework which expresses fundamental values in societal terms, and a vocabulary of values which links directly with societal structure and function, may be better adapted to the work of public health than a more individually oriented ethical framework.

For this reason, modern human rights, precisely because they were initially developed entirely outside the health domain and seek to articulate the societal preconditions for human well-being, seem a far more useful framework, vocabulary, and form of guidance for public health efforts to analyze and respond directly to the societal determinants of health than any inherited from the past biomedical or public health tradition.¹¹

Mann did not fully explain why human rights, which he elsewhere describes as inhering in the individual, is less individualistic than ethics. He seems to have been thinking that the observance of specific human rights is better measurable than the prevalence of justice or beneficence, but he did not have a chance to address the argument from various

conservative and communitarian thinkers (such as Glendon¹² and Etzioni¹³) that a rights focus is or can be so deeply individualistic as to weaken the community.

HEALTH AND HUMAN RIGHTS FROM AN EMPIRICAL PERSPECTIVE

Four questions about human rights, law, and health

Because we were interested in investigating the extent to which there was empirical support for Mann's claims about human rights, we restated his claims in terms that make it possible for us to frame social science and epidemiological questions. Our most significant step was to place human rights in the larger (to social scientists) category of law. The doctrines of human rights, in both their philosophical and legal forms, are only part of a pervasive regime of social organization and control through law. Tax or patent law, though perhaps less glamorous, may be as or more important than human rights as influences on population health. There is, moreover, a long tradition of research in the social sciences on law, which is absent in human rights, and which provides a solid (if rather theoretically diverse) basis for assessing law as a health factor. In taking this step, we in no way suggest that human rights is unimportant or subsidiary to law, but only that a line between human rights and other law is unhelpful in an empirical framework.

Like Mann, we found that the role of law and human rights as limits on health measures had been well-described elsewhere, and so in this project we generally did not pursue issues related to the effects of health interventions on human rights. ¹⁴ We understood Mann's second and third relationships to propose that the observance of human rights (or other legal practices) be hypothesized to be fundamental conditions influencing population health. Mann's third and fourth claims could together be understood to be that law/human rights analysis or discourse is a useful way to understand public health and make public health policy, regardless of the nature of the causal connection between human rights observance and health outcomes. We thus came to four questions as the starting point for our project:

- Do laws, legal institutions, and legal practices constitute more or less fundamental determinants of health?
- Do laws, legal institutions, and legal practices operate as important mechanisms of more or less fundamental causes of disease?
- Regardless of law's role as a determinant of health, under what circumstances are legal/human rights strategies effective in promoting health-enhancing policies?
- What methodological issues arise in epidemiology and social science when we try to measure the effects of law, or changes in law, on health?

"Law" and "human rights"

In this section, I elaborate on the definitions of "human rights" and "law" that many of the authors in the following articles relied on. Human rights as deployed in the health and human rights movement is a set of positive entitlements and negative immunities, rooted to some extent in international law but more fundamentally in a vision of the basic, essential rights due to any human being.¹⁵

Mann and colleagues wrote:

Several fundamental characteristics of modern human rights include: they are rights of individuals; these rights inhere in individuals because they are human; they apply to all people around the world; and they principally involve the relationship between the state and the individual. The specific rights which form the corpus of human rights law are listed in several key documents: foremost is the Universal Declaration of Human Rights (UDHR), which, along with the United Nations Charter (UN Charter), the International Covenant on Civil and Political Rights (ICCPR) — and its Optional Protocols — and the International Covenant on Economic, Social and Cultural Rights (ICESCR), constitute what is often called the "international Bill of Human Rights." ...

Building upon this central core of documents, a large number of additional declarations and conventions have been adopted at the international and regional levels, focusing upon either specific populations (such as the International Convention on the Elimination of All Forms of Racial Discrimination ...) or issues (such as the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment ...). ¹⁶

As this description suggests, the scope of human activity in some sense regulated or informed by human rights and international human rights law is extremely broad. Indeed, it is this breadth that Mann depended upon in suggesting that human rights could serve as an analytic tool for public health.

Also to be inferred from the quoted description is an important but subtle distinction between "human rights" and "human rights law," the former term referring to the universal entitlements of human beings to certain opportunities and immunities, and the latter to the evolving body of international and state law more or less effectively embodying and implementing these rights. On this view, "law" is a somewhat narrower concept than human rights, at best an instrument of its fulfillment, at worst a violation of human rights, and in many instances simply irrelevant. The fact that a state may not have embodied a particular human right in its constitution, statutes, or judicial decisions does not re-

duce the entitlement of that state's citizens to the observance of that right.

Finally, human rights is not the same as what in the United States are referred to as "civil rights." In the U.S. tradition, civil rights are classically conceived as stating limitations on interference rather than positive entitlements to social goods, and applying to government, rather than fellow citizens. Human rights includes a range of positive social and economic rights, and has come to be understood as creating obligations on states to take affirmative action to ensure their enjoyment, including the regulation of the behavior of citizens toward one another.

[These] government duties may be conceived quite broadly to include: (a) *respect* — the state's obligation not to infringe human rights, (b) *protection* — the state's obligation to prevent private violations (e.g., anti-discrimination laws), and (c) *fulfilment* — the state's obligation to promote human rights (e.g., education and services).¹⁷

As commentators like Stephen Marks and Lawrence Gostin have observed, the term "human rights" is commonly used in the literature in at least three distinct senses: (1) a set of legal obligations of states set out in international and state law; (2) a mode of moral reasoning rooted in or articulating a vision of the good in social relations; and (3) a strategy for attaining specific policy goals in state and international political struggles.

The descriptions of Mann and colleagues above tend to straddle the first two meanings, and in practice to exemplify the third. In its second meaning, human rights underlies both law and political strategy, but is itself no more subject to empirical analysis than any other system of philosophy. The notion that human rights in this moral sense is universal has been somewhat controversial, but that and other philosophical objections to the notion of human rights as a basis of a virtuous civil society were beyond the scope of this project.

Our project adopted as a working starting point a sociological view of law (including human rights) as both (1) state-linked rules and the system of practices and institutions that support them ("state law"); and (2) the social meaning that both produces and is produced by the rules ("legality").

The core of the domain of law is easy to define as "state law." State law is comprised of the explicit, formalized rules governing social life and is understood to be law or enforceable through law — from the decisions of courts to the public international law of treaties. The realm of state law also embraces the institutions and technologies for creating, interpreting, enforcing or otherwise implementing, and studying/teaching law. This is a "narrow" definition of law, in so far as it ties the notion of law to the state and its rules. It is not the narrowest definition in the current literature, ¹⁸ but is workable and useful for present purposes.

If law is just what is written down in the law books, the field is easy to define but does not cover much. A definition of law that limits its scope to state law has been unsatisfactory to many social scientists in the field. What happens within the system of state law is heavily influenced by the characteristics of the society in which the state law system operates. Conversely, the system of state law penetrates society, both in the sense that much if not most legal activity takes place outside the official system of courts, bureaucracies, and legislatures, and in the broader sense that law and legal ideas contribute to the forms of thought and behavior in the society outside the formal legal system. ¹⁹ Ewick and Silbey make the point that sociolegal studies too often focus within the boundaries of the formal legal system — courts, legislatures, police stations.

By focusing our scholarly eye on exchanges within that boundary, we fail to ask how people get to that boundary. We exclude from observation that which needs yet to be explored and explained: how, where and with what effect law is produced in and through commonplace social interactions within neighborhoods, workplaces, families, schools, community organizations, and the like. How do our social roles and statuses, our relationships, our obligations, our prerogatives, and responsibilities, our identities, and our behaviors bear the imprint of law?²⁰

On this view, law is not separate from the society within which it operates; we do not have law *and* a society, but law *in* society. Law can be seen as of the same ilk as religion or education, as at once a product and a producer of meaning and behavior in a population.

Sociolegal scholars use the terms "legal consciousness" or "legality" to refer to a population's set of ideas about the law. Ewick and Silbey define "legality" as:

the meanings, sources of authority and cultural practices that are commonly recognized as legal, regardless of who employs them or for what ends.... Legality ... operates through social life as persons and groups deliberately interpret and invoke law's language, authority and procedures to organize their lives and manage their relationships. In short, the commonplace operation of law in daily life makes us all legal agents insofar as we actively make law, even where no formal legal agent is involved.²¹

This "law in everyday life" or "constitutive" approach "seek[s] to trace the way legal power and legal forms exist in social relations."

Adopting a broad definition of law that includes both overt state law and legality has both advantages and disad-

vantages. At the most abstract level, this approach threatens to make everything "law," swallowing up virtually all forms of social control and ordering.23 We take a pragmatic approach to addressing this problem, recognizing, as Paul Kahn puts it, that the "rule of law shapes our experience of meaning everywhere and at all times. It is not alone in shaping meaning, but it is rarely absent."24 At the same time, we also believe that it is possible to think of some states, and even some populations within states, as being without law in at least some important respects. A country in the midst of civil strife, whose governing institutions have largely broken down, may well have no real state law. In a similar way, there may be populations in a country generally governed by state law who are not governed or protected by law in significant aspects of life, and whose sense of legality is the very absence of law. Inhabitants of South African townships, for instance, are subject to certain elements of a rule of law, particularly in matters of security, but are for all practical purposes excluded from the state's mechanisms for civil dispute resolution.25

LAW, SOCIETY, AND SOCIAL EPIDEMIOLOGY

This section describes briefly how law is thought to influence behavior, and sets out the main points of social epidemiology. It concludes with some thoughts about integrating sociolegal theory into a health framework.

How law influences behavior

Just as there is disagreement among legal researchers about what should be considered "law," there are also diverging views about how law - however defined - operates to influence behavior. Sarat and Kearns contrast two different approaches to studying law's social role, the "instrumental" and the "constitutive." The instrumental approach takes an external stance. It posits a relatively sharp distinction between legal standards, on the one hand, and nonlegal human activities, on the other. It then explores the effects of the former on the latter. By contrast, the constitutive perspective contends that social life is run through with law, so much so that the relevant category for the scholar is not the external one of causality (as the reference to effects would suggest), but the internal one of meaning. In bold outline, the constitutive view suggests that law shapes society from the inside out by providing the principal categories that make social life seem natural, normal, cohesive, and coherent.26

The instrumental approach tends to be associated with a focus on state law, while constitutive researchers explore the broader terrain of legality or legal consciousness. Despite the academic strife among adherents of these two broadly painted approaches, it is possible to see these views as aspects of the same inquiry, even as complementary.²⁷

The instrumental approach

Sociolegal scholarship of an instrumental cast has identified three modes through which a specific law, legal institution, or legal actor (such as a judge or a policeman) can influence behavior: coercion, compliance, and reliance.

"Coercion," by which I mean the immediate and direct application of force to compel behavior, is straightforward, theoretically and in practice. Law legitimizes violence, ²⁸ and violence or the threat of violence is a means through which the legal system influences behavior.

"Compliance" refers to voluntary obedience to law, and is by far the dominant mode through which law has a behavioral effect. It is much more complicated than coercion as a behavioral phenomenon, and here the supposed line between instrumental and constitutive approaches has long been blurry. Today there are two well-established strands of theory explaining compliance with law, both of which have been well-tested in empirical research.

"Instrumental" compliance theory, rooted in the idea of deterrence, assumes that individuals rationally weigh the expected costs and benefits of disobedience to legal commands. Although scholars differ to some degree on their relative importance, instrumental theories commonly posit rational actors for whom the likelihood of detection and punishment, and severity of the punishment, are the two main determinants of compliance.²⁹ In recent years, norms have crept into even these rational-actor approaches. A trend in legal and law-and-economics scholarship, calling itself "the New Chicago School," has tried to integrate norms into economic accounts of behavior.³⁰

"Normative" compliance theory discounts rational calculation and deterrence among people subject to law. It posits instead that people obey the law because they believe the law and the behavior it requires to be appropriate and consistent with their internalized norms ("fairness"), or because they believe that the authorities making and enforcing the law have the right to do so ("legitimacy"). Normative theory, which has been heavily influenced by social psychology, has received new attention and empirical support in the past 15 years in studies focusing on the influence of perceptions of fairness on compliance.31 Tyler's large-scale study of obedience to routine rules such as traffic law found that compliance was strongly linked to individuals' sense of how fairly the rules were made and enforced, as determined through the nature and quality of their own interactions with "the system." 32 By the same token, extensive studies have documented the many ways, large and small, that people disobey in resistance to rules they regard as unfair or imposed by an illegitimate system.³³

Reliance is a category of my own devising.³⁴ It emerges from the recognition that laws are sometimes, if not often, passed with the intention of influencing people who are not the direct objects of the law's regulatory commands or prohibitions. For example, securities laws are intended not simply to govern the behavior of securities dealers, but to embolden

the public to buy and trade stocks in the expectation that dealers are governed by rules and that effective remedies exist to make whole the victims of lawbreakers. Reliance has been an important, if not fully understood, component of the human rights approach to HIV prevention: Laws protecting the privacy of HIV-related medical records, or people with HIV from discrimination, were intended in significant part to increase the willingness of the protected parties to seek testing and otherwise cooperate with public health efforts. Unlike compliance, this does not amount to obedience to a command or prohibition, but the willingness to run a risk in the expectation that other, regulated parties will obey the law, or that the law will provide a meaningful remedy if the risk materializes. From a normative point of view, the idea of reliance emphasizes the sort of status, security, and similar benefit that comes from assuming that one is safe or protected by the legal system.

The constitutive approach

Constitutive theory has a great deal to offer to the analysis of how people react to particular legal commands; few of us will have a view of the fairness of traffic court that is entirely unconnected with our view of the fairness of the "system" as a whole, or our understanding of the very meaning of fairness itself. As Sarat and Kearns observed, however, the attention of constitutively oriented researchers is usually directed at the overall operation of legality as a system for the production of meaning in a society.35 This does not represent so much a rejection of the findings of instrumental research about the influence of specific laws on behavior as a different view of the most important mechanisms of social control. Constitutive scholars believe that law influences behavior not through the operation of one or another specific laws, but through its contribution to the construction of the possible and acceptable in the minds of the population. On this view, law as a mode of social control operates most effectively when it is least visible. This form of social control is often termed "hegemony":

The hegemonic character of law in everyday life cannot be seen in those instances in which law actively intervenes in people's lives to change behavior, or where some discrete legal mechanism is available for use. Law is hegemonic in everyday life where it works unobtrusively, inseparably from social practices themselves. "Law is omnipresent in the very marrow of society.... [T]he legal forms we use set limits on what we can imagine as practical options." Here law may be hardest to see and to differentiate from the social norms by which people go about their daily lives. By helping to constitute routine life, law is associated with particular visions of order, justice, goodness and so forth.

And because people generally go along with legal prescriptions, law's vision becomes ordinary practice. Law establishes its moral, political, and cultural values as conventional.... Because law is constitutive of the very forms that social relations and practices take, it is embedded in them, so much so that it is virtually invisible to those involved. This invisibility, this taken-for-grantedness, makes legality and legal forms extremely powerful."36

Hence, legality as a set of accepted truths about the world can be seen to continually shape and be shaped by the operation of the institutions, laws, and practices more commonly recognized as law. It follows that two views of law's operation—an instrumental approach that focuses on the operation of specific laws, and a constitutive approach that examines how legality constructs the social environment—are complementary rather than antagonistic.

Social epidemiology and structural interventions

There is a growing recognition throughout the disciplines of public health that what are variously called "structural," "environmental," or "fundamental social" causes of disease must be more effectively identified and addressed if we are to make substantial improvements in population health. ³⁷ Ranging from specific social policies to the overall distribution of socioeconomic status, ³⁸ these conditions influence health by constituting the physical and social context in which individuals and communities behave, defining options and influencing choices. Although not all the researchers I will describe would necessarily adopt the label, I will refer to this school of ecologically oriented analysis of disease causation as "social epidemiology."

The analysis of causation is the other side of the coin of intervention. If social conditions are the ultimate, and most powerful, determinants of who gets sick and who remains well, then efforts to improve health should be directed at changing those conditions or blocking the intermediate pathways along which they operate. I will distinguish such interventions from the usual measures aimed at individuals by referring to them as "structural interventions."

Social epidemiology

Leonard Syme describes how Emile Durkheim's study of suicide presaged the field of social epidemiology:

Durkheim demonstrated the importance of the social environment by studying one of the most individual and intimate behaviors imaginable — suicide. In his work, Durkheim noted that suicide rates in countries and groups exhibit a patterned regularity over time, even though individuals in

these groups come and go. If suicide is a product of anguishing intimate and deeply personal problems, it is puzzling to see that rates of suicide in these groups remain higher or lower even though individuals move in and out of groups. These social factors in the environment would not, of course, determine which individuals in the group would commit suicide but they would help to explain group differences in the rate over time.

The perspective of Durkheim was to see that the health and well-being of a community were affected by the social milieu within which people lived. [Yet] most research in epidemiology today nevertheless continues to focus on the individual. We tend to study risk factors in individuals and we tend to focus interventions on individual behavior. The problem with this approach is that even if these interventions were completely successful, new people would continue to enter the at-risk population at an unaffected rate since we have done nothing to influence those forces in the community that caused the problem in the first place.³⁹

At least three key ideas emerge from this passage: that community characteristics are important determinants of health of the people who live within it; that health itself may be seen as a characteristic of populations as much as individuals (the differences in suicide rates are telling us indeed more about the population and its social and physical environment than about their individual members); and that addressing the immediate causes of illness and death (like suicide) does not necessarily address the deeper causes operating through the proximate ones, and so may not substantially alter the distribution of well-being in the population.

Geoffrey Rose did much to invent social epidemiology in his celebrated essay *Sick Individuals and Sick Populations*. Rose drew a distinction between two kinds of epidemiological inquiries: into the causes of cases — "Why do some individuals have hypertension?" — and the causes of incidence — "Why do some populations have much hypertension whilst in others it is rare?" He illustrated the point by comparing the distribution of systolic blood pressure in two populations, Kenyan nomads and London civil servants. Both form a bell curve, but the curve for the London civil servants is shifted to the right, so that far more civil servants are in the morbid range.

The familiar question, "Why do some individuals have higher blood pressure than others?" could be equally well asked in either of these settings, since in each the individual blood pressures vary (proportionately) to about the same extent; and the answers might well be much the same in each instance (that is, mainly genetic variation, with a

lesser component from environmental and behavioural differences). We might achieve a complete understanding of why individuals vary, and yet quite miss the most important public health question, namely "Why is hypertension absent in the Kenyans and common in London?" The answer to that question has to do with the determinants of the population mean; for what distinguishes the two groups is nothing to do with the characteristics of individuals, it is rather a shift of the whole distribution — a mass influence acting on the population as a whole. To find the determinants of prevalence and incidence rates, we need to study characteristics of populations, not characteristics of individuals.⁴¹

Individual genetic and behavioral characteristics may account for why a particular person gets cancer, but the overall burden of cancer in a society can only be explained by identifying the factors that members of the population are all more or less uniformly exposed to.

There is hardly a disease whose incidence rate does not vary widely, either over time or between populations at the same time. This means that these causes of incidence rate, unknown though they are, are not inevitable. It is possible to live without them, and if we knew what they were it might be possible to control them. But to identify the causal agent by the traditional case-control and cohort methods will be unsuccessful if there are not sufficient differences in exposure within the study population at the time of the study. In those circumstances all that these traditional methods do is to find markers of individual susceptibility. The clues must be sought from differences between populations or from changes within populations over time.⁴²

Social epidemiology conceives of illness not primarily as the result of a discrete pathogen or toxin, nor as a function of personal choices, but rather as a product of the interaction of people with their social and physical environment. ⁴³ This understanding of public health does not see diseases that are listed on death certificates as "causes" of death at all, but merely as "pathways" along which more fundamental causes have exerted their effect. ⁴⁴ Research in social epidemiology suggests looking for these fundamental causes of health in what we may loosely call a society's distribution of social status. ⁴⁵

In a 1995 article, Link and Phelan offered a nomenclature informed by social psychology that highlighted some important aspects of the workings of social factors in health: Link and Phelan suggested that "factors that involve a person's relationships to other people" should be seen as "fundamental social causes" of disease. 46 These causes, defined "broadly

to include money, knowledge, power, prestige and the kinds of interpersonal resources embodied in the concepts of social support and social network," work through intermediate factors such as drug use and immediate ones such as communicable disease to influence multiple risk factors and disease outcomes.⁴⁷ This transitivity of mechanism and effect explains the durability of social factors in health outcomes: "In the context of a dynamic system with changes in diseases, risks, knowledge of risks, and treatments ... [socioeconomic] resources ... are transportable from one situation to another, and as health related situations change, those who command the most resources are best able to avoid risks, diseases, and the consequences of disease."48 Similarly, if one immediate cause of death or disease is removed, but the more fundamental social causes are not addressed, overall morbidity and mortality in the population will not be reduced for the same reason that Syme alluded to in his discussion of Durkheim's findings on suicide.

By definition, fundamental social causes of disease do not leave a distinct fingerprint in the manner of a specific disease, but rather operate through the accumulation of less dramatic events: Societies "structure the life experiences of their members so that the advantages and disadvantages tend to cluster cross-sectionally and accumulate longitudinally." It is therefore necessary to apply what is called by some a "life-course" perspective to the analyses of causation, 50 an analysis that tries to understand how small, daily life factors can accumulate over time to produce socially determined differences in health outcomes. Krieger proposes an "ecosocial theory" to this end:

Taking literally the notion of "embodiment," this theory asks how we incorporate biologically — from conception to death — our social experiences and express this embodiment in population patterns of health, disease, and well-being.... [T]his theory draws attention to why and how societal conditions daily produce population distributions of health.... Ecosocial theory thus posits that how we develop, grow, age, ail, and die necessarily reflects a constant interplay, within our bodies, of our intertwined and inseparable social and biological history.⁵¹

From the point of view of social epidemiology, a society's pattern of ill health is a mirror: Disease reflects how a society produces and distributes wealth, creates conditions for human health (or its antithesis), constructs social norms, and organizes its peoples and communities.

Structural interventions

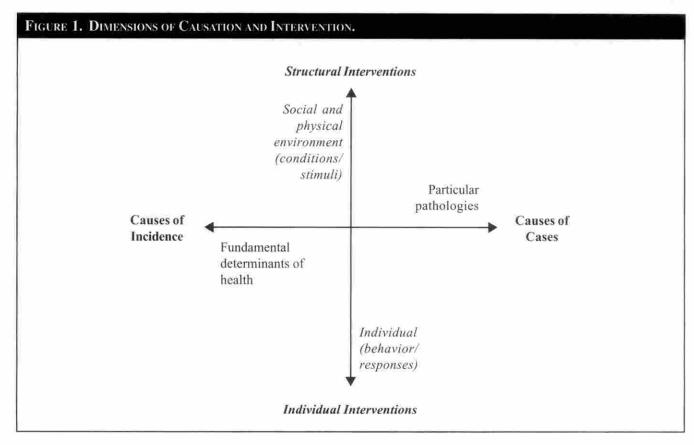
The adoption of a social theory of the determinants of health implies, if it does not compel, public health interventions aimed at the social conditions that produce unhealthy behavior or environmental hazards. Blankenship, Bray, and Merson defined "structural interventions in health" as "interventions that work by altering the context within which health is produced and reproduced." Structural interventions can take a variety of forms, including policy implementation (broadly defined to include legislation, litigation, regulation, law enforcement, and the setting of administrative, organizational, and product standards) and community advocacy or organizing.

Structural interventions rest on the premise that even fully informed individuals may not make healthy choices because contextual factors may prevent them from doing so: Individuals may know they should use condoms but be unable to find them or afford them, or fear that their partner will harm them for suggesting it. As Lazzarini and Klitzman suggest in this volume, a structural response to HIV would address the social construction of sexual behavior and sexuality. Such a response suggests the need to support strong gay relationships and recognizes the negative impact of stigma and discrimination on gay men's willingness and ability to engage in behavior that protects themselves and others. Smoking provides another example. Structural interventions include restrictions on advertising, taxes on cigarettes, and withdrawal of direct and indirect tobacco subsidies.

Figure 1 illustrates the place of social epidemiology and structural interventions within epidemiology and public health generally. Public health work guided by risk-factor epidemiology and bounded by political limitations tends to operate within the lower right quadrant, providing interventions that help at-risk individuals cope with a given set of more or less pathological conditions. The value of this, as Rose suggested, is certainly not to be underestimated. Long-term change in social conditions provides little immediate protection; for most individuals at any given moment in time, coping effectively with adverse social conditions is the best hope of maintaining health. Yet the aggregation of individual coping will rarely achieve a major change in population outcomes, which requires the replacement of unhealthy with healthy conditions. This sort of work takes place in the upper left quadrant.

Toward a "social epidemiology of law"

If disease is a product of social organization, and social causation implies social change as an intervention, then interest in law and human rights is doubly justified. Law both contributes to the formation and maintenance of social structures and practices, and is potentially a tool for changing them in healthier ways. Yet these relationships are undoubtedly complex to conceptualize and to study, requiring the integration of law as just one factor in a range of social and biological determinants of health. Michael Marmot has succinctly summed up the general problem facing social epidemiology:



A model that showed all the possible ways that all the possible social influences might affect the variety of diseases would be impossibly complex. Further, its complexities would be such that it would not be a useful guide to scientific study.

At the other extreme, a model along the lines of "poverty causes disease" is likely to be too simple for scientific understanding, although it might be argued that it is sufficient for policy, if alleviation of poverty reduces disease rates. Perhaps. But what if the model were "inequality is associated with disease"? Here the policy options are not so clear. Which inequality? Income? Wealth? Social status? Social capital? Even if the evidence were that it was income inequality that was driving the health inequalities, then what? Fiscal policy can effect post-tax income inequalities but has no impact on pretax inequalities. If the source of these were understood better, we might conclude that they were not within easy grasp of government policy.

To reduce inequalities in health, we do need to understand better the mediators. Further, a case can be made that in order to demonstrate that a particular psychosocial factor is both a cause of ill-health and a contributor to social inequalities in health, an understanding of biological mechanisms is important.⁵⁶

Marmot suggests a two-step approach. Step one is the development of models of causation at different levels, from the biological processes of the individual organism, through social processes localized within a particular time or place, to large scale social phenomena influencing whole populations. These models may be developed within individual disciplines, or serve to integrate work from several disciplines, but the "research task is to give an account of what links social structure to health outcomes - to ask, what are the intermediary steps."57 If one starts from the premise that health outcomes are influenced by a wide range of biological and social factors, a model seeking to incorporate everything would be impossibly - and unhelpfully - complex. "Rather than construct one megamodel to take into account all possible strands of the causal web, it is almost certainly more useful to construct different models for different purposes."58

This leads to step two, integrating research models and results from different levels:

The more specific and focused the research the greater the likelihood of providing a useful answer to a question. The point of integration is to put the specific questions in a context so that they may help provide answers to the broad questions related to the social determinants of health in popu-

lations. Further, by having the broader question in mind to provide context, the nature of the specific questions might change. It is therefore not a matter of choosing between specific focus and integration: both are required."⁵⁹

Conclusion

Epidemiologists like Marmot and Susser and Susser urge the importance of a transdisciplinary effort to understand how deep social factors are transformed in social and physical environments into health outcomes. This view of the epidemiological task invites, even demands, attention to law, which throughout social space operates in many and complex ways to structure the life experiences of a population. Social science researchers in law are invited to consider health as an outcome of the operation of law, and to develop and test hypotheses about the way law can shape health in large and small ways. This is a large undertaking. The articles in this issue of the Journal of Law, Medicine & Ethics represent an attempt to begin the task. Law is rarely if ever a predominant influence, and very often is likely to have only negligible effects on health. But as both health and human rights and public health law scholars have argued, there are plausible reasons to think that law can be an important factor in both the causation of disease and its prevention, reasons that support a greater coordination and collaboration between sociolegal scholars and other researchers within public health.

REFERENCES

- 1. Office of the United Nations High Commissioner for Human Rights and the Joint United Nations Programme on HIV/AIDS, HIV/AIDS and Human Rights: International Guidelines, HR/PUB/98/1 (New York: United Nations, 1998), available at http://www.unaids.org/publications/documents/human/law/JC520-HumanRights-E.pdf.
- 2. See, e.g., J. Mann, S. Gruskin, and M.A. Grodin, Health and Human Rights: A Reader (New York: Routledge, 1999); L. Gostin and Z. Lazzarini, Human Rights and Public Health in the AIDS Pandemic (New York: Oxford University Press, 1997); M. Susser, "Health as a Human Right: An Epidemiologist's Perspective on the Public Health," American Journal of Public Health, 83 (1993): 418–26; S.D. Jamar, "The International Human Right to Health," Southern University Law Review, 22 (1994): 1–68.
- 3. See J.M. Mann et al., "Health and Human Rights," *Health* & *Human Rights*, 7 (1994): 7–23, at 13–16.
 - 4. Mann et al., supra note 3, at 18.
 - 5. Mann et al., supra note 3, at 21.
- J.M. Mann, "Human Rights and AIDS: the Future of the Pandemic," John Marshall Law Review, 30 (1996): 195–206, at 199–200.
- J.M. Mann, "Medicine and Public Health, Ethics and Human Rights," Hastings Center Report, 27 (May–June 1997): 6–13, at 10.
 - 8. Mann, supra note 6, at 203.
 - 9. Mann et al., supra note 3, at 21.
 - 10. Mann, supra note 6, at 198.

11. Mann, supra note 7, at 9.

12. M.A. Glendon, Rights Talk: The Impoverishment of Political Discourse (New York: Maxwell Macmillan, 1991).

13. A. Etzioni, "Law in Civil Society, Good Society, and the Prescriptive State," Chicago-Kent Law Review, 75 (2000): 355-77.

- See, e.g., L.O. Gostin, Public Health Law: Power, Duty, Restraint (Berkeley: University of California Press, 2000); L.O. Gostin, S. Burris, and Z. Lazzarini, "The Law and the Public's Health: A Study of Infectious Disease Law in the United States," Columbia Law Review, 99 (1999): 59–128.
- 15. See Gostin and Lazzarini, supra note 2; accord L.O. Gostin, "Human Rights of Persons with Mental Disabilities: The European Convention of Human Rights," International Journal of Law and Psychiatry, 23 (2000): 125-59, at 125, 126-27.

16. Mann et al., supra note 3, at 10-11.

17. Gostin, supra note 15, at 126 (citations omitted).

- 18. See, e.g., D. Black, The Behavior of Law (New York: Academic Press, 1976): at 2 (defining law as "governmental social control").
- 19. See, e.g., P. Ewick and S. Silbey, The Common Place of Law: Stories from Everyday Life (Chicago: University of Chicago Press, 1998): 18-23.

20. Ewick and Silbey, supra note 19, at 20.

Id. at 20–23.

22. A. Sarat and T. Kearns, "Beyond the Great Divide: Forms of Legal Scholarship and Everyday Life," in A. Sarat and T. Kearns, eds., Law in Everyday Life (Ann Arbor: University of Michigan Press, 1993): 21-62, at 50.

 This is the view associated today with people like Donald Black and Robert Ellickson. See, e.g., R. Ellickson, "A Critique of Economic and Sociological Theories of Social Control," Journal

of Legal Studies, 16 (1987): 67-99, at 72-73.

24. P. Kahn, The Cultural Study of Law: Reconstructing Legal Scholarship (Chicago: University of Chicago Press, 1999): at 124. For an elegant philosophical argument for a broader definition of law in social science, see B.Z. Tamanaha, Realistic Socio-Legal Theory; Pragmatism and a Social Theory of Law (New York: Oxford University Press, 1997).

25. See S. Aral, S. Burris, and C. Shearing, "Health and the Governance of Security: A Tale of Two Systems," Journal of Law,

Medicine & Ethics, 30, no. 4 (2002): 632-43.

26. Sarat and Kearns, supra note 22, at 21-22 (emphasis added).

27. See Tamanaha, supra note 24.

28. See R. Cover, "Violence and the Word," Yale Law Journal, 95 (1986): 1601-28, at 1601 ("Legal interpretation takes

place upon a field of pain and death.").

29. See F.E. Zimring and G.J. Hawkins, Deterrence: The Legal Threat in Crime Control (Chicago: University of Chicago Press, 1973); G. Becker, "Crime and Punishment: An Economic Approach," Journal of Political Economy, 76 (1968): 169-217.

30. See A. Etzioni, "Social Norms: Internalization, Persuasion, and History," Law and Society Review, 34 (2000): 157-78; L. Lessig, "The New Chicago School," Journal of Legal Studies,

XXVII, no. 2, part 2 (1998): 661-91.

31. See K. Kuperan and J.G. Sutinen, "Blue Water Crime: Deterrence, Legitimacy, and Compliance in Fisheries," Law and

Society Review, 32 (1998): 309-37.

- 32. See T.R. Tyler, Why People Obey the Law (New Haven: Yale University Press, 1990); T.R. Tyler, "Public Trust and Confidence in Legal Authorities: What Do Majority and Minority Group Members Want from the Law and Legal Institutions?," Behavioral Sciences & the Law, 19 (2001): 215-35.
 - 33. See Ewick and Silbey, supra note 19.
 - 34. S. Burris, "Law and the Social Risk of Health Care: Les-

sons from HIV Testing," Albany Law Review, 61 (1998): 831-95.

35. Sarat and Kearns, supra note 22.

36. Id. at 51 (citations omitted).

- 37. See G. Rose, "Sick Individuals and Sick Populations," International Journal of Epidemiology, 14 (1985): 32-38; G. Rose, The Strategy of Preventive Medicine (New York: Oxford University Press, 1992); B.G. Link and J. Phelan, "Social Conditions as Fundamental Causes of Disease," Journal of Health & Social Behavior, extra issue (1995): 80-94. See also J.M. McGinnis and W.H. Foege, "Actual Causes of Death in the United States," JAMA, 270 (1993): 2207-12; M. Susser and E. Susser, "Choosing a Future for Epidemiology: I. Eras and Paradigms," American Journal of Public Health, 86 (1996): 668-73; M. Susser and E. Susser, "Choosing a Future for Epidemiology: II. From Black Box to Chinese Boxes and Eco-Epidemiology," American Journal of Public Health, 86 (1996): 674-77; N. Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," American Journal of Public Health, 86 (1996): 678-83; M. Turshen, The Politics of Public Health (New Brunswick: Rutgers University Press, 1989); K.M. Blankenship, S.J. Bray, and M.H. Merson, "Structural Interventions in Public Health," AIDS, 14, suppl. 1 (2000): S11-21; S.O. Aral et al., "Overview: Individual and Population Approaches to the Epidemiology and Prevention of Sexually Transmitted Diseases and Human Immunodeficiency Virus Infection," Journal of Infectious Diseases, 174, suppl. 2 (1996):
- 38. See J.S. Feinstein, "The Relationship Between Socioeconomic Status and Health: A Review of the Literature," Milbank Quarterly, 71 (1993): 279-322; J. Lynch and G. Kaplan, "Socioeconomic Position," in L. Berkman and I. Kawachi, eds., Social Epidemiology (New York: Oxford University Press, 2000): 13-35. See also J.S. Kibirige, "Population Growth, Poverty and Health," Social Science & Medicine, 45 (1997): 247-59.

39. S.L. Syme, Foreword, in L. Berkman and I. Kawachi, eds., Social Epidemiology (New York: Oxford University Press, 2000):

ix-xii, at x.

40. See Rose, "Sick Individuals and Sick Populations," supra note 37, at 33.

41. Id. at 33-34. Cf. B.G. Link and J.C. Phelan, "McKeown and the Idea That Social Conditions Are Fundamental Causes of Disease," American Journal of Public Health, 92 (2002): 730-32 (noting related distinction between causes of health disparities and determinants of the absolute level of population health).

42. Id. at 34.

43. See, e.g., Pearce, supra note 37; Susser and Susser, "Choosing a Future for Epidemiology: I. Eras and Paradigms," supra note 37; Susser and Susser, "Choosing a Future for Epidemiology: II. From Black Box to Chinese Boxes and Eco-Epidemiology," supra note 37.

44. McGinnis and Foege, supra note 37.

- 45. See, e.g., I. Kawachi, "Income Inequality and Health," in I. Kawachi and L. Berkman, eds., Social Epidemiology (New York: Oxford University Press, 2000): 76-94, at 77; Lynch and Kaplan, supra note 38.
 - 46. Link and Phelan, supra note 41, at 81.
 - 47. Id. at 87.
- 49. D. Blane, "Editorial: Social Determinants of Health: Socioeconomic Status, Social Class, and Ethnicity," American Journal of Public Health, 85 (1995): 903-04.
- 50. See, e.g., E. Brunner, "Toward a New Social Biology," in L. Berkman and I. Kawachi, eds., Social Epidemiology (New York: Oxford University Press, 2000): 306-51, at 307.
- N. Krieger, "Discrimination and Health," in L. Berkman and I. Kawachi, eds., Social Epidemiology (New York: Oxford

- University Press, 2000): 36–75, at 38–39. See also L. Berkman and I. Kawachi, "A Historical Framework for Social Epidemiology," in L. Berkman and I. Kawachi, eds., *Social Epidemiology* (New York: Oxford University Press, 2000): 3–12, at 8–9 (describing three current hypotheses of how early life influences the onset of disease in later life).
- 52. Blankenship, Bray, and Merson, *supra* note 37, at S11. See E. Sumartojo, "Structural Factors in HIV Prevention: Concepts, Examples, and Implications for Research," *AIDS*, 14, suppl. 1 (2000): S3–10.
- 53. Z. Lazzarini and R. Klitzman, "HIV and the Law: Integrating Law, Policy, and Social Epidemiology," *Journal of Law, Medicine & Ethics*, 30, no. 4 (2002): 533–47. See also E. Drucker, "Epidemic in the War Zone: AIDS and Community Survival in New York City," *International Journal of Health Services*, 20 (1990): 601–15, at 601, 602; G. Marks, S. Burris, and T. Peterman, "Reducing Sexual Transmission of HIV from Those Who Know They Are Infected: The Need for Personal and Collective Responsibility," *AIDS*, 13 (1999): 297–306.
- 54. See G.M. Herek and E.K. Glunt, "An Epidemic of Stigma: Public Reaction to AIDS," American Psychologist, 43 (1988): 886–91; S. Burris, "Gay Marriage and Public Health," Temple Political & Civil Rights Law Review, 7 (1998): 417–27. See also M.L.

- Rosenberg et al., "The Role of Behavioral Sciences and Health Education in HIV Prevention: Experience at the U.S. Centers for Disease Control," in J. Sepulveda, H. Fineberg, and J. Mann, eds., AIDS Prevention Through Education: A World View (New York: Oxford University Press, 1992): 175–198, at 175; K.H. Choi and T.J. Coates, "Prevention of HIV Infection," AIDS, 8 (1994): 1371–89; T.J. Coates et al., "HIV Prevention in Developed Countries," Lancet, 348 (1996): 1143–48; D.R. Holtgrave et al., "An Overview of the Effectiveness and Efficiency of HIV Prevention Programs," Public Health Reports, 110 (1995): 134–46.
- 55. See L.O. Gostin et al., "FDA Regulation of Tobacco Advertising and Youth Smoking: Historical, Social, and Constitutional Perspectives," *JAMA*, 277 (1997): 410–18.
- 56. M. Marmot, "Multilevel Approaches to Understanding Social Determinants," in L. Berkman and I. Kawachi, eds., Social Epidemiology (New York: Oxford University Press, 2000): 349–67, at 353.
 - 57. Id.
 - 58. Id. at 354.
- 59. Id. at 357. Susser and Susser suggest a similar approach. See Susser and Susser, "Choosing a Future for Epidemiology: II, From Black Box to Chinese Boxes and Eco-Epidemiology," supra note 37.

Copyright © 2003 EBSCO Publishing