UNIVERSITY OF MINNESOTA
TWIN CITIES

Division of Epidemiology
School of Public Health
Stadium Gate 27
611 Beacon Street S.E.
Minneapolis, Minnesota 55455
(612) 624-5400

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TO: Henry Blackburn
FR: Robert Jeffery
RE: Policy Seminar

Your seminar has opened an interesting and, I hope, productive dialogue about the role of epidemiologic science in public health policy. My main comment is that the topic seems too complex to lend itself well to a single set of "principles." I think it would be helpful in articulating these issues to separate various components or steps in policy decisions. These components might include establishing 1) a causal link between disease and its precursors, 2) the modifiability of the precursors and projections of health outcomes, should they be modified, 3) the factors which create and maintain the precursors, and 4) the costs and likely efficacy of various public health strategies. Each domain has an evidential basis. Component 1 is the traditional domain of epidemiology and involves well known inferential rules related to consistency, strength, temporality, biologic plausibility, etc. Component 2 involves epidemiologic concepts such as population attributable risk and addresses concerns such as the payoff for intervention at various points in the temporal sequence of disease development, appropriate target subgroup(s), and the possibility of downside risks. Component 3 involves a broad consideration of biological, environmental, economic, and cultural forces responsible for the precursor in question. The rules of evidence here are not different from those in Component 1, but the selection of independent and dependent variables is different. Component 4 has a scientific aspect and an administrative aspect. The former relates to the predictability with which specific actions will change the factors supporting a disease precursor (e.g., will an education campaign on nutrition change population knowledge of food composition), and the predictability that change in a support factor would change the incidence/prevalence or, in behavioral idiom, the frequency, duration, and intensity of the precursor (e.g., what effect would change in nutrition knowledge have on eating practices). The administrative aspect relates to cost of strategies, sources of financial support, and community institutions through which strategies may be managed effectively.

Although I did not keep detailed notes on your "criteria," I believe all could be dealt with adequately in an expanded framework. The issue of public confusion about conflicting claims, for example, might be recast in terms of the unpredictability of disease endpoints in individuals, low crude rates, and a lengthy delay between the occurrence of a precursor and its disease endpoint. All three in my view would indicate the desirability of collective rather than individual action, since from an individual point of view the immediacy and salience of need may be unclear even when the knowledge base is good.

I hope you find these comments helpful. I find the subject matter intriguing and enjoyed your seminar.

RWJ:sm

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