Commentary: A radical future for public health

Douglas L Weed

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radical\(^1\) adj 1. of or relating to the root or origin: FUNDAMENTAL 2. marked by a considerable departure from the usual or traditional: EXTREME: DRASTIC

With this reprinting of ‘Sick individuals and sick populations’,\(^2\) Rose's ideas deservedly attain the status of ‘not to be forgotten’ in the annals of epidemiology and public health. But let us not wax too historic; we remember his contributions for their staying power, having achieved the rare status of being current and remarkably prescient. Hundreds of references over the past 15 years confirm that his ideas continue to strike a deep resonant chord. Three central themes are most often cited: there are two types of causal explanations, those of individual susceptibility and those of population incidence rates;\(^3\)–23 there are two corresponding strategies for prevention: ‘high risk’ and ‘population’;\(^8,14\)–21 and lastly, applying the ‘population’ strategy of prevention incurs the paradoxical effect of small benefit to each individual and a much greater benefit to the population.\(^17,22\)–28 These ideas have served us well and will continue to do so long into the future.

Rose had a knack for carefully reasoned arguments, rich in theoretical detail and practical significance. His is a radical future, consistent with our deepest convictions about the fundamental nature of public health\(^29\) but also a serious challenge to traditional views. Flowing through Rose’s writings are the roots of public health: prevention and community, science and its methods, and society in all its complexity. His pronouncements about public health’s future, however, are as startling as they are refreshing. The best example is Rose’s assertion that our priority should always (his word, my emphasis) be the discovery of causes of incidence and the population strategy of prevention. Rose even labels this strategy ‘radical’ because it requires wide-ranging changes in social norms of behaviour. But this rhetorical hook pales in comparison to what he articulates about the future of the other, individually based, prevention strategy. Screening and other high-risk prevention strategies are something we may eventually abandon; Rose asserts that individual susceptibility will ‘cease to matter’ if the underlying causes of incidence are removed. This is radical stuff, considering our current and intense interest in genetics and the molecular nature of disease.

So as we rush into the 21st Century, mapping genes, seeking biomarkers, and wringing our collective hands over the dangers and promises of genetic screening, remember that preventing disease and injury in populations crowns our list of priorities. Seat belts, immunizations, folic acid fortification, fluoridation, and anti-smoking efforts are a few obvious examples. And although there is a choice between controlling ‘these’ sorts of causes or ‘those’ sorts of causes—incidence and susceptibility respectively—preventing disease in populations by controlling the causes of incidence is the bottom line. That normative claim is precisely where Rose ends this now-classic contribution to our literature.

Looking back over this paper from its radical perch on the moral high ground, we find a careful examination of the pros and cons of the two approaches to prevention, given a conceptual scientific framework, a theory of disease causation if you will, comprised of two major categories of causes. There are causes that determine susceptibility—genes and the like—and those that we are exposed to: toxins, infectious agents, diet and other lifestyle choices, and a host of environmental factors, some natural, some man-made. The latter category of causes drives population-based incidence events and rates; the former how individuals respond to these same exposures. Rose recognizes the interconnectedness of these conceptual causal pathways to disease and, from what I can gather, would never have recommended that science stop its solipsistic crusade to uncover the origins of disease wherever they are found. Put another way, in epidemiology’s recent ‘black box’ debate about biology versus society in epidemiology,\(^30\) I cannot see Rose taking one side or another. He is neither for biology alone nor for society alone. He is truly an eco-epidemiologist, able and willing to explain the aetiology of disease across the full spectrum of scientific knowledge.

But prevention—how it is to be done and who will do it—is a very different story. When applying scientific knowledge, Rose is clear not only about the priority of the population-based approach but also about who will use it. As one commentator put it, citing Rose, prevention is everyone’s business and everyone’s responsibility.\(^15\) Rose fingers physicians as messengers of prevention\(^2\) and society\(^31\) and each individual ‘subject’.\(^2\) Quoting Dostoyevsky, Rose boldly proposes that everyone bears the responsibility of prevention.\(^31\) It follows that every member of the public health professions—each and every epidemiologist—has an important role to play in participatory decision making, not as just another member of society, but one with special knowledge and training and expertise and, above all, a commitment to public health practice. Once again, Rose fires up a radical future, this time pointing his guns directly at those epidemiologists who, anxious to stay as far away as possible from direct participation in beneficent decisions, avoid with great solemnity...
the practice of public health as they worship at the altar of scientific objectivity.32–35

All this talk of who bears the responsibility for prevention is just another way of saying that there is a prominent ethic at the heart of Rose’s philosophy of public health. It is an ethic congruent with the emerging scholarship from bioethicists and practitioners alike on the philosophical and ethical foundations of public health.29,36–39 It is an ethic of shared, community practitioners alike on the philosophical and ethical foundations of public health.29,36–39 It is an ethic of shared, community responsibility; it is an ethic with beneficence and respect for populations (and people) at its core; it is an ethic of human rights and social justice, of commitment to the ideal inquiry of objective science and to the careful application of technological knowledge. Rose’s ethic, in other words, is radically fundamental, radiating out from the deep root of humanity from which public health derives its sustenance.

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References

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