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Ethics and public health

Science, ethics, and professional public health practice

D L Weed, R E McKeown

Competing values and obligations

PUBLIC HEALTH PRACTICE

At the core of professional public health practice is a promise to help society by preventing disease and promoting health. Public health is a calling, as much an art as it is steeped in scientific theory, method, and evidence. We, the public health professionals, learn theory and practice in the classroom and hone them in experience. We define core values and embrace integrity, prudence, honesty, and trust. We develop standards of excellence and codes of ethics to guide our professional pursuits.[1 2] Our practice is a complex blend of acquiring scientific knowledge and participatory policymaking. We study communities and individuals, the healthy as well as those who suffer from disease, injury, malnutrition, and untimely death. We recommend and advocate policies with others, for others, and for ourselves.

Ethics as an academic discipline and as a pragmatic dimension of our daily professional lives offers a conceptual framework and methods for thinking about and improving the practice of public health. Inevitably, we encounter situations marked by tension between competing values and obligations. Of the many problems that require attention, we choose three: evidence to action; the pitfalls and promise of public advocacy, and the balance between individual freedom and the common good.

EVIDENCE TO ACTION

The scientific knowledge that matters to public health interventions extends from the physical and biological sciences to epidemiology and on to the environmental, social and behavioural sciences. The problem of deciding when to act on the basis of that knowledge is as much synthetic as it is analytic. We collect evidence and use methods, both qualitative and quantitative, for its interpretation. We recommend actions in a climate buffeted about by politics, economics, and religious beliefs.

We cannot act in a vacuum. For primary prevention, we need to know *something* about how people are exposed, some semblance of a mechanism of action, how well the factor explains disease occurrence, and how that factor is connected to other determinants that make up the complex tapestry of causation. We need to know *something* about the expected changes in incidence, morbidity or mortality if the factor is removed, how much such interventions cost, the trade offs in risks and benefits, and how well such changes are tolerated by the public and their cultural institutions.

How much do we need to know? We rarely have the luxury of waiting for a complete understanding of causation. With every new shred of evidence we ask the question: *now* is it time to act? Sometimes the answer is obvious. Other times we swing back and forth on the pendulum of uncertainty. The scholarship of ethics suggests that such judgments are a product of circumstances—including the current scientific evidence—and ethical principles, obligations, guidelines, and maxims. The principles that guide such decisions are multiplying by the hour. Bioethics gave us four: non-maleficence, beneficence, respect for persons, and justice. Twelve so called principles of public health ethics recently appeared.[1] The precautionary principle suggests that actions should be taken when the evidence is somewhere below that of the unachievable levels of certainty or proof.[3] But what is the *least* amount of evidence needed to warrant action to reduce risk, minimise harm, respect the autonomy of others, achieve justice, and maintain the public trust in our profession?

ADVOCACY, OBJECTIVITY, AND VALUES

As public health professionals we debate the pitfalls and promise of public advocacy. There are those in the profession who warn us away from advocacy in the hope that we can maintain an objective scientific neutrality. But science alone will not get the work of public health done and objectivity is less a characteristic of the scientist than it is the property of scientific methods. Besides, we are obliged to come to the aid of communities.[4] Thoughtful, just, and reasoned advocacy is as much a part of our practice as is science.

Ultimately we seek balance between the dispassionate description of scientific findings and a persistent plea to use those findings for public health action. Call it finding a balance between the pursuit of truth for its own sake and solidarity with others for whom we advocate. Call it the balance between realism and pragmatism[5] or between objectivity and subjectivity. Mix in the values that cut across science and its application. That is the second problem for public health professionals.

INDIVIDUAL FREEDOM AND THE COMMON GOOD

In mission and means, public health strives for healthy communities and for healthy individuals in communities.[6] Historically, even when public health activities were directed to individuals (for example, immunisation), there was a

dual intent: to protect both the individual and the health of the community. More recently, public health professionals have recognised the importance of focusing on higher levels of societal organisation and broader concepts of health.

There is in public health an inherent tension between the freedom, rights, and desires of the individual and assuring the optimal conditions for well being of the community. With mandatory immunisation, self determination is in conflict with coercion. Chlorination and fluoridation of water inflict an intervention on individuals without consent. Programmes aimed at transforming social conditions, redistribution of resources, changing policies, or influencing lifestyles or cultural values can also threaten individual freedom and autonomy.

One can argue that these examples are merely reasonable trade offs of living in any community. Being a part of society, after all, entails constraints on freedom. Nevertheless, we wonder whether the goods presumed to justify those constraints are valued and shared by the community as a whole, whether some suffer a greater burden while others gain a disproportionate benefit, whether the coercion is so great as to violate fundamental human rights and dignity, whether the risks imposed are sufficiently large as to require voluntary and informed consent, and finally, whether there should be, or can be, something like informed community consent.[7–9]

SUMMARY

Public health is a multidimensional entity: a complex of concepts and concrete institutions, both quest and practice, a desired goal and a present vocation. Its domain is extensive, stretching horizontally from providing preventive services as a safety net for individuals to promoting the health of communities, and vertically spanning policies, interventions, and research ranging from fundamental physiological processes to the social forces that change society.

It is inevitable that public health professionals will encounter, even engender, tension between competing values and obligations. We have suggested only three areas where tensions seem particularly pressing.

The first is deciding when to act in public health, given a synthesis of the current knowledge gained from applying scientific methods to cells, individuals, communities, and society at large. It is a balancing act between what needs to be known and what needs to be done.

The pursuit of scientific knowledge (value laden as it is) and the dedicated application of what we know to achieve ends we value are both mutually reinforcing and potentially in conflict. Discerning and maintaining the proper balance, especially in the face of diverse personal and public values and political adversity, is the second of our challenges.

The third problem requires us to determine when and whether the presumed goods of promoting health and preventing disease justify constraints on fundamental rights, and to balance closely held individual values of self determination, privacy, and freedom with community values and wellbeing.

We have not proposed how these three areas of ethical tension are resolved. Indeed their resolution in specific cases is the very stuff of ethical reasoning. What we have hoped to show is that our fundamental commitments as public health professionals impose upon us ethical dilemmas unique to our calling.

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Ethics and public health

Self care and consumer health. Do we need a public health ethics?

L D Castiel

Bioethical principlism is not enough for dealing with global public health issues

Bioethical principlism places an emphasis on autonomy. In a certain analogous way, modern promotional public health emphasises the role of self care as a key element to achieve healthy states. One of the many presumed available sources of guidance in health is information provided on the internet. Both this information's quality and the tools to measure it are considered highly inconsistent. This topic has become a matter of bioethical concern, because of the possibilities for harm (maleficence) to potential users. On the other hand, there are large contingents worldwide consisting solely of non-consumers unable to dedicate themselves to self care practices. This brief commentary considers some issues related to a global perspective towards what may be considered pertinent to a public health ethics.

The domains of health ethics have been occupied by new issues. Emerging circumstances clearly call for the field's revalidation. One example is the discussion of a so called "global" bioethics, not focused exclusively on problems in the economically strong nations.[1] Other emerging ethical issues involve "e-health", or the availability of health related content through electronic information networks. New specialties such as telemedicine and cybermedicine are thus appearing in the area of medical informatics. There are already specialised journals on e-health and literature on corresponding ethical issues.

Under such circumstances it becomes untenable to insist on the traditional