ARTICLES

Virtue ethics and public health: A practice-based analysis

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ABSTRACT

Public health plays an important, albeit often unnoticed, role in protecting and promoting the health of populations. The activities of public health are complex, performed by multiple professionals, and range from the innocuous to the intrusive. Ethical analyses in public health reflect some of this complexity and fragmentation, with no one approach able to capture the full range of ethical considerations raised by public health activities. There are however, good reasons why we should pursue such analyses. Providing a robust ethical framework for public health may promote the identity and function of public health, address some of the shortcomings of utilitarianism, and help to combat the threat that public health faces through lack of political will in many parts of the world.

In this paper I argue that Alasdair MacIntyre's account of practices and virtues can make a valuable contribution to public health ethics. The first part of the paper argues that public health may properly be described as the type of practice that provides an arena for the exercise of virtues. This is followed by an analysis of the three virtues of honesty, courage and justice in public health practice. Using virtue theory captures morally important elements of public health and helps to maintain awareness of significant moral values in the practice of public health. Such awareness is crucial in maintaining and defending the integrity of public health.

Introduction

The activities of public health encompass a wide range of ethical issues that are subject to increasing interest and analysis. This is evident in a number of ways. There is steadily growing debate about public health ethics, particularly in public health journals.[1] Professional associations are developing codes of ethics for public health, such as that published by the American Public Health Association.[2] Public health ethics is starting to appear on conference agendas, either as the main focus or as part of wider programs.[3]

Some of these analyses focus on the shortcomings of clinical ethics in providing a framework for public health.[4] Other contributions have included rights-based analyses,[5] communitarian accounts,[6] and

applications of virtue ethics to public health.[7] Empirical research has identified the ethical challenges of public health from the perspective of practitioners.[8]

One common thread from this material is that public health is complex. The workforce is often fragmented, and the achievements go largely unnoticed by the population and politicians alike, making public health very much the Cinderella of the health care family. If this is the case, a plausible account of public health ethics may be of value not only for any utility it may bring in addressing the ethical challenges, but also for its role in consolidating the identity of public health as an area of activity with its own moral authority and expectations. A strong moral identity for public health would offer some unity to the wide range of professionals involved in public health activities, foster greater public understanding of the role of public health, and provide some justification for demands on both the public's trust and its financial resources. Given the potentially intrusive nature of some public health activities, with their threat of police powers, being trustworthy (and being seen to be trustworthy) is particularly important.

As well as these general reasons, there are two further reasons why there is a current need for a strong moral identity for public health. First, the historical framework offered by utilitarianism has become increasingly inadequate in the face of changing patterns of morbidity and mortality. In the past, large health gains for populations could be achieved through measures such as universal vaccination, clean water and sewerage, or child health initiatives. In wealthy countries, the utilitarian calculus no longer serves so well. People already have relatively long life expectancies, the threats of epidemics have retreated, and the multifactorial nature of many of our chronic diseases has limited the scope of relatively simple population-level interventions. In addition, growing emphasis upon patients' rights and personal autonomy have decreased the power of justifications based upon the greatest good for the greatest number. The waning of utilitarianism leaves public health without a clearly identifiable and widely accepted moral framework.

A second reason as to why we need a strong moral identity for public health at present is because, in many countries around the world, public health is under serious threat through lack of funds, lack of trained personnel and lack of political will.[9] The people most affected by failures of public health are those who are already vulnerable through various forms of disadvantage, creating a strong moral imperative to try to reverse this decline. Raising the moral profile of public health may contribute to building a robust international identity for the public health community, which in turn may be a powerful tool in combating these threats.

In this article, I argue that public health fits well within MacIntyre's account of practices and virtues.[10] This approach has merit in that, on MacIntyre's account, virtues are linked to practices, communal identities, and to the traditions from which they derive. This linkage of moral frameworks with practice may go some way towards

the identity-building function discussed above. The first part of the article argues that public health may properly be described as the type of practice that provides an arena for the exercise of virtues. This is followed by an analysis of the three virtues of honesty, courage and justice, that demonstrates how using a virtue ethics approach helps to clarify the ethical challenges of public health as well as pointing to some ways of addressing these.

Public health as an arena for the virtues

MacIntyre has defined virtues as acquired human qualities or dispositions that are characterised by three features. First, possession and exercise of virtues are necessary to enable us to sustain certain practices and to achieve the goods internal to those practices. Second, virtues are dispositions that sustain communal identities within which individuals can seek the good of their own lives. Third, virtues are dispositions that sustain those traditions which provide both practices and individual lives with their necessary historical context. These features appear relevant to public health in important ways, and thus warrant some exploration.

In pursuing this analysis, there is an immediate challenge, that of defining public health. One widely accepted definition is *'Public health is the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society.'*[11] This covers a large variety of activities, ranging from legally enforceable requirements such as seatbelt legislation, through to advertising campaigns to promote the consumption of healthy foods. As well as diverse aims, public health uses diverse methods and employs a wide range of professionals from very different backgrounds. The public health workforce includes medical, dental and nursing staff; members of professions allied to medicine; personnel from a variety of disciplines including epidemiology, biostatistics, economics, health promotion and community development; managers; research staff and others. The methods of public health vary from statistical and epidemiological investigations through to service delivery and evaluations and action research. Despite this heterogeneity, these activities, professionals and methods can be coherently drawn under the umbrella of public health practice by reference to the overarching aims of decreasing morbidity and mortality. No matter whether it is an epidemiologist tracking the links between exposure to environmental toxins and certain diseases, or a community worker running a program of activities for pre-school children, they share the aim of preventing disease, prolonging life or promoting health. Once we add the caveat that these activities take place through the organised efforts of society, rather than as random acts of philanthropy or private research, we have a fairly workable definition of public health that meets MacIntyre's definition of a practice.

A practice is a 'coherent and complex form of socially established co-operative human activity'[12] through which the internal

goods of the practice are realised in the course of trying to achieve appropriate standards of excellence. What are the internal goods of public health? MacIntyre describes goods as internal because such goods can only be specified in terms of the practice in question, and can only be identified or recognised by the experience of participating in the practice.[13] For public health, there are a number of goods that seem to fit these descriptions. These include, for example, identifying threats to health, such as infectious agents or toxins, and containing these; decreasing infant mortality rates through programs in child and maternal health; lowering population rates of cardiovascular disease mortality; or contributions to legislation to ban cigarette smoking in public places. These kind of goods relate to the aims of public health, and to its nature in terms of the organised efforts of society. This latter point is important; the public service aspect of public health is linked to the more general good of the state taking some responsibility for the health and wellbeing of its citizens. Whilst those outside public health can see the good of, for example, containing an epidemic, it is those working within public heath who fully understand the challenges and skills necessary to meet these, and the satisfactions of that particular job well done.

Part of 'doing the job well' involves reference to standards of excellence for that practice, and public health has its own standards of excellence. This is evident in various ways, such as training requirements that are necessary before a person is recognised as professional in their field, the kinds of standards that epidemiologists use to define causal relationships in the aetiology of diseases, or best practice in the use of respectful and robust community consultation mechanisms prior to the development of new services. There are also rules in public health that practitioners must adhere to in order to achieve the relevant goods. These include rules about how to carry out activities, for example contact tracing, or rules about preserving confidentiality in data collection.

Seeking the good of one's own life as part of larger communal identity, and recognising that communal identity as part of a larger historical tradition, are important elements in MacIntyre's account. Does public health provide this kind of communal identity within a historical tradition? Just as public health is a recognisable practice, this in turn creates a kind of communal identity, within which it is possible for a person to seek to be a good public health practitioner (of whatever field or discipline). People working in public health can see themselves as part of an endeavour that exceeds any individual capacities or actions, yet provides the context in which their own capacities and actions form a coherent narrative, and which also provides the appropriate standards of excellence to which a practitioner may aspire. During a life in public health, practitioners may engage in a variety of activities, with diverse aims (decreasing inequalities in access to services, ensuring quality of drinking water, developing stroke rehabilitation programs). The overall purpose of public health, however, provides a unifying theme which serves to explain the intentions behind

these seemingly disparate activities, and which can be used by the practitioner to understand the sum of their life's work. This kind of communal identity is evident in discussions with people working in public health, who describe themselves as part of a recognisable group with a clear purpose that differentiates them from other professional groups.[14]

The historical tradition is strong in public health, playing an influential role in the communal identity of practitioners. Public health today has been shaped by the great actors and successes of the past (identifying the causes of and controlling infectious diseases, making the links between poverty and ill-health, developing systems for measuring the health of the public, improving child health). This is not to imply that public health is static, adhering to the traditions and aims of a past era. Like any living tradition, public health is subject to internal criticisms and debate about its current role and functions,[15] but these debates take place against a tradition of activities aimed at preventing disease and promoting health. Whatever the differences between the new public health and more traditional approaches, there is no suggestion that public health should abandon its aims, and these debates are informed by the history of public health.

To sum up, if virtues are qualities or dispositions that are necessary to sustain the internal goods of practices, to sustain communal identities, and to sustain the traditions that provide practices and individual lives with necessary historical context, then virtues are surely necessary to public health. The next section examines the relationship between the virtues that are necessary to any practice in relation to some of the ethical challenges of public health.

Honesty, courage, justice and public health

One of the drawbacks of virtue theory is the difficulty of drawing up a comprehensive and complete list of virtues, necessary to sustain the practices and traditions in question. There is a tendency for the lists to become over-inclusive and hence unwieldy, if not unworkable. Given this difficulty, there is an attraction in starting with the three virtues claimed by MacIntyre to be necessary to any practice and to see how these serve public health, acknowledging that this account will inevitably be incomplete and require some supplementation.

Honesty

Being honest requires us to tell the truth, and this is valued not only for its practical role in meaningful communication, but also for its role in building or sustaining trust. Both the practical aspects of honesty and its trust-related function are important for public health. A large part of public health revolves around communication: advising of risks and how to minimise them, explaining the rationale behind new initiatives, providing the data to justify interventions and so on. In practice, the seemingly simple requirement to be honest raises significant dilemmas in public health.

One set of dilemmas arises in connection with identifying risks to the public health and communicating these.[16] There may be no clear cut point at which apparently sporadic instances of rare cancers, or congenital defects, or cases of gastroenteritis become a discrete cluster, linked to a possible cause. Data collection and the often painstaking processes necessary to prove causal links take time, during which there is no definitive answer to questions that the public might like to ask, about the safety of foodstuffs, or of environmental toxins and so on. There are risks associated with speaking too soon, as the opportunity for proving or disproving hypotheses may be lost forever, yet if the practitioner remains silent, more people may be exposed to preventable harms while waiting for definitive evidence to accumulate. Perhaps the virtue of honesty requires the practitioner to explain this situation, with all its risks and uncertainties, yet this course also has its drawbacks. The perception amongst public health practitioners is that the media, politicians and the public, have often low levels of information about public health, and little understanding of the complexities. These factors might suggest that remaining silent, if not actually being dishonest, might be preferable to honesty, in terms of minimising public alarm and jeopardising scientific investigations.

Another set of dilemmas arise in the more specific context of providing information for public health programs, for example about vaccinations or screening tests. How honest should one be about rare side effects, or the implications of a positive test? Providing comprehensive information—for example, that if a screening test for chlamydia is positive then all sexual partners of the person involved will have to be contacted—may well deter people from taking the test in the first place. This could result in the overall failure of the program as an effective public health measure. Again, silence might seem the preferable course of action.

There are, however, important reasons why honesty is crucial to public health. First, not being honest feeds into the vicious cycle of not providing information for fear of being misunderstood due to low levels of understanding, due to lack of information in the past. The only way that low levels of understanding about public health can be improved is through honest communication and sharing information, albeit with the recognition that this is not only a long-term task but one that also requires specific skills and dedicated resources.

Second, honesty may serve to temper the sometimes paternalistic tendencies of public health. Paternalism does not necessarily entail frugality with the truth, but a commitment to honesty lays open the reasons for actions, so that the justification of acting for 'the public good' may be subject to scrutiny. Paternalistic claims of knowing best can examined in detail by those affected, and challenged if necessary.

Finally, silence in the face of uncertainty may expose people to risks that they would otherwise act to avoid, thereby endangering rather than protecting health and undermining the very aims of public health. Speaking out may seem to be an unacceptable requirement,

especially if the risks are minimal in terms of likelihood and severity of potential harms, or may in fact cause harms such as anxiety and psychological distress. However, remaining silent whilst in possession of relevant information not only undermines the aims of public health, but also undermines the trust that is essential to effective public health. Once it is known that information is being withheld, public health loses much of its credibility and authority. Honesty is an integral part of building trust, and as such, plays a key role in the practice of public health. Honesty also plays an integral role in constituting the internal goods and communal identity of public health. Finding new knowledge and communicating this is one of the goods of public health, so that to be a good practitioner requires an allegiance to truth and honesty. The tradition of public health could not be sustained in the absence of honesty, as many of its activities would become meaningless if, for example, data collections or research results were fabricated, or populations were not informed of relevant health risks.

Courage

MacIntyre writes of courage: 'We hold courage to be a virtue because the care and concern for individuals, communities, and causes which is so crucial to so much in practices requires the existence of such a virtue.'[17] The care and concern involved in public health requires courage on a number of levels. First, there is the straightforward physical courage that may be necessary to provide public health services in dangerous conditions, such as during epidemics. The public health staff involved in identifying the SARS virus were exposed to danger, leading to deaths that were directly related to the practice of public health. Initially, personnel may not have been aware of the level of risk, but this soon became apparent. Courage is also required in other areas of public health—for example, people who provide abortion services in some parts of the world do so at high risk of personal danger.

Next, there is the courage that may be necessary to confront powerful interests, be they professional, political or commercial. It is part of the role of public health to speak out if threats to the public health have been identified, even though this may lead to harms to the person involved. These harms can range from professional undermining or intimidation, damage to careers, or in more extreme cases, physical danger. The category of speaking out includes whistle-blowing, which is an activity with known risks to the career of the whistle-blower.[18]

Part of the reason why courage is necessary in public health relates to the political nature of public health, as there are situations in which political interests conflict with the interests of public health. Politicians do not necessarily share the same goals as public health, but wield the power to cut budgets or harm the careers of those who identify public health risks with political costs. Working in public health requires the courage to be overtly committed to the aims of public health, especially if, as discussed below, this includes a commitment to egalitarianism.

Another kind of courage is required in persevering in practice in the face of indifference or hostility. Public health practitioners seldom receive recognition or appreciation from the populations they serve, as their work is largely fairly invisible. This puts a different kind of demand on courage, but it requires a kind of courage to take on a lifetime of service in public health when other, more publicly valued and recognised options are available. Courage is also required to be honest, to open up the decision-making processes to scrutiny, and to be prepared to defend unpopular decisions with reasons that can be justified by appeal to the good of public health.

As with honesty, courage is integral to sustaining public health at all levels. Part of the traditional identity of public health practitioners is that of fearless protector of the disadvantaged, taking on foes as necessary to attain this end. People who are fearful, of their standing or career, risk being ineffective actors and thereby failing in the aims of public health. This failure occurs not only at the level of realising the internal goods of public health, but also does damage to the communal identity of public health and strikes at its traditions. Public health would not be the practice it is without the courage of some of its heroes. Courageous examples provide ideals for current practitioners, and knowing that one has acted courageously in the traditions of the best public health, can provide support and meaning to practitioners who may be at risk for their actions.

Justice

Justice is the third virtue considered necessary by MacIntyre for all practices. As conceptions of justice and allegiance to these are partly constitutive of practices and their traditions, the virtue of justice plays an important role.[19] What conception of justice is there in public health? Given the almost invariable restrictions on funding, one of the main ways that justice is played out in public health is in resource allocation decisions. Public health practice often involves weighing up the resources to be allocated to competing, but equally needy groups. Traditionally, utilitarian reasoning has dominated, whereby the action likely to bring the greatest amount of benefit and the least amount of harm to the most people is chosen over other alternatives. As well as the drawbacks of utilitarianism outlined in the introduction, the utilitarian distribution of resources takes no account of the degree of inequality that may result from its distributions. Increasing attention is now focussed upon the role of inequalities in the genesis of poor health.[20] A large part of public health is to do with identifying patterns or distributions of health and illness, and from the very first, such patterns have demonstrated the close links between poverty and ill health.

These two factors—the decreasing power of the utilitarian calculus, and the growing recognition of inequalities in poor health— suggest an evolving role for justice in public health. Against making population gains in, for example, heart disease, diabetes or cancer, justice requires that public health practitioners examine the likely

impact of any proposed interventions on the least well off, and on any existing inequalities. Brock argues that there are at least two justifications for giving priority to the worse off. First, the worse off a person is, the greater the relative benefit any intervention is likely to provide. Second, giving priority to the least well reduces their undeserved reduction in health-related quality of life.[21] A full account of egalitarian theories of justice in public health is beyond the scope of this paper, however, Daniels has offered an equality of opportunity account in which justice requires that, as far as possible, all people have an equal opportunity for lifetime health.[22]

The processes of justice are equally important. Even if there is agreement on overall distribution patterns, the way that decisions are made must also be just. Having transparent and accountable decision procedures will help to ensure that people are treated fairly within the set parameters. Acting justly requires us to treat equals equally; discrimination or favouritism should have no place in public health. The often arms-length relationship between public health and the populations it serves may be an advantage in achieving even-handedness, in contrast to the more personal relationships that occur in other forms of health care.

Justice sustains public health at a number of levels. First of all, if we take an egalitarian position, acting to improve the health of the least well off leads both to direct health benefits, and to reductions in the health gaps between rich and poor. The direct health benefits are central goods of public health. Reducing the health gap leads to what many consider fairer outcomes, as well as fitting with the public health tradition of caring for the needs of the most vulnerable groups in society. The powers of public health are considerable, so that using these justly is necessary to avoid imposing unfair burdens on those who may suffer discrimination from other sources. Fair decision procedures allow practitioners to make and live with the hard decisions that have to be made. Controlling resources and denying some people the treatment that they seek can be an onerous responsibility, and one that often receives little thanks. Having just processes can help to ensure that these responsibilities are more comfortable to bear.

Criticisms of virtue theory

There are several general criticisms of virtue theory, some of which may be levelled at this account.[23] First, what I have sketched out here is by no means a complete account of all of the virtues in public health. Other authors have suggested lists of virtues specific to public health, including honour, patience, modesty, righteous indignation at poverty, commitment to environmental issues and sustainable health care, and sensitivity to conflicts between the needs of individuals and those of communities.[24] One could add others, such as compassion, wisdom, prudence and temperance, all of which would be desirable in public health practitioners. Given the diverse range of activities and professionals gathered into the public health enterprise, it may well be

impossible to define all of the desirable virtues for all of the actors in public health (or any other practice), but this does not detract from the importance to public health of the virtues described here. What this account has tried to do is to demonstrate that public health is a practice that can be sustained by the virtues of honesty, courage and justice, such that internal goods cannot be realised in their absence, nor the traditions maintained.

More serious is the charge that a focus on character and motivations, rather than the outcomes of actions, may ignore important moral consequences. Honesty, for example, in publicising health risks specific to particular communities, may serve to stigmatise those communities rather than secure for them the resources necessary to tackle their problems. This kind of criticism does not take account of the need to balance the virtues, in the understanding that all of the virtues, rather than one alone, are necessary for good actions. Honesty tempered with justice might suggest ways of using information about health risks to support rather than undermine communities.

The virtues alone do not provide a complete account of morality;[25] we also need to know what the good of the practice in question is, or what a person filling the role of public health practitioner has as their aims. In general terms, the good of public health is given by its definition of preventing disease, prolonging life and promoting health. This is a moral aim, given the necessity of health to human flourishing, and the limited opportunities which result from ill health. As discussed above, the virtue of justice requires grounding in a theory of justice, and I have suggested that a version of egalitarianism may be suitable.

If virtues are acquired through training and exposure to role models, we need people in public health who are honest, courageous and just. Lists of ideal virtues can be lengthy, making the requirement for role models to instantiate all of the virtues hard to meet. A person bearing all of the virtues in the list above would be a true paragon. However it does not seem onerous to require our public health practitioners to have the three virtues described here, and we may well be suspicious of practitioners who are dishonest, cowardly or unfair. Exposure to virtuous role models will not necessarily guarantee virtuous conduct in their students, but no form of moral instruction can guarantee this. Being explicit however, about moral expectations in public health, may serve to strengthen communal identity and build high standards of conduct into public health in a robust and meaningful way.

Conclusion

In this paper I have argued that MacIntyre's account of practices and virtues can make a valuable contribution to public health ethics. Defining public health as a practice with a communal nature and strong traditions linked to a set of virtues may help to forge a strong moral identity for public health that will help to address some of the

current challenges. Acting in accordance with the virtues discussed here will not automatically resolve the ethical dilemmas of public health. Public health is complex, both practically and morally, mitigating against simple solutions from any moral theory, be that virtue theory, deontology or consequentialism. However, the approach taken here captures morally important elements of public health and helps to maintain awareness of significant moral values in the practice of public health, not only with regard to the consequences of decisions, but also with regard to the processes. This awareness is crucial in maintaining the integrity, and hence, the trustworthiness of public health. The work of linking this account to a theory of justice remains for another time.

ENDNOTES

[1]   Recent papers include: Callahan D and Jennings B, 'Ethics and public health: Forging a strong relationship', *American Journal of Public Health*, vol. 92, 2002, pp. 169–176; Roberts M and Reich M, 'Ethical analysis in public health', *Lancet*, 359, 2002, pp. 1055–59; Kass N, 'An ethics framework for public health', *American Journal of Public Health*, vol. 91, 2001, pp. 1776–1782; Mann JM, 'Medicine and public health, ethics and human rights', *Hastings Center Report*, vol. 27, 1997, pp. 6–13.

[2]   American Public Health Association, *Public health code of ethics*, 2002, at http://www.apha.org/codeofethics/ethics.htm

[3]   Examples include the 2002 Toronto conference, 'Public health ethics: towards a research agenda', Toronto University, May 17–8, 2002; and the Ethics workshop at the Public Health Association of Australia annual national conference, Brisbane, September 29–October 1, 2003.

[4]   For example, Leck, I, 'Clinical and public health ethics: Conflicting or complementary', *Journal of the Royal College of Physicians*, vol. 27, no. 2, 1993, pp. 161–168.

[5]   Rodriguez-Garcia R and Akhter M, 'Human rights: The foundation of public health practice', *American Journal of Public Health*, vol. 90, 2000, pp. 693–694; and Mann JM, op. cit.

[6]   Beauchamp D, 'Community: The neglected tradition of public health', in Beauchamp D and Steinbock B (eds.), *New ethics for the public's health*, New York: Oxford University Press, 1999; and Mooney G, "Communitarian claims" as an ethical basis for allocating health care resources', *Social Science and Medicine*, vol. 47, 1998, pp. 1171–1180.

[7]   Horner JS, 'For debate: The virtuous public health physician' *Journal of Public Health Medicine*, vol. 22, 2000, pp. 48–53; and Weed DL and McKeown RE, 'Epidemiology and virtue ethics', *International Journal of Epidemiology*, vol. 27, 1998, pp. 343–349.

[8]   Rogers WA, 'Ethical issues in public health: A qualitative study of public health practice in Scotland', *Journal of Epidemiology and Public Health*, forthcoming.

[9]   Garrett L, *Betrayal of Trust:The collapse of global public health*, Oxford: Oxford, 2001; and Beaglehole B and Bonita R, 'Public health at the crossroads: Which way forward?', *Lancet*, 351, 1998, pp. 590–592.

[10]   MacIntyre A, *After virtue: A study in moral theory*, 2nd ed., London: Duckworth, 1985.

11   This is the World Health Organisation definition used in Acheson DE, *Independent inquiry into inequalities in health*, Stationery Office, London, 1998.

12   MacIntyre, op. cit., p. 187.

13   Ibid., pp. 188–9.

14   This observation arises from the field-work leading to Rogers, op. cit.

15   See for example Beaglehole and Bonita, op. cit.; Gori GB, 'Epidemiology and public health: is a new paradigm needed or a new ethic?', *Journal of Clinical Epidemiology*, vol. 51, no. 8, 1998, pp. 637–641; and Baum F, *The new public health: An Australian perspective*, Melbourne: Oxford University Press, 1998.

16   This and the following paragraphs draw upon material in Rogers, 'Ethical issues in public health', op. cit.

17   MacIntyre, op. cit., p. 192.

18   Hunt G, 'Whistle blowing', *Encyclopaedia of Applied Ethics*, vol. 4, Academic Press, San Diego, 1998, pp. 525–535.

19   MacIntyre, op. cit., pp. 253.

20   See for example, Black, D, Morris JN, Smith C and Townsend P, 'The Black report', in Townsend P, Davidson N, and Whitehead M (eds), *Inequalities in health*, London: Penguin, 1992; and Acheson, op. cit.

21   Brock DW, 'Priority to the worse off in health-care resource prioritisation' in Rhodes R, Battin MP and Silvers A (eds.), *Medicine and social justice: Essays on the distribution of health care*, New York: Oxford, 2002, pp. 373–389.

22   Daniels has written extensively on this. See for example: Daniels N, Kennedy BP and Kawachi I, 'Why justice is good for our health: The social determinants of health inequalities'. *Daedalus*, vol. 128, no. 4, 1999, pp. 215–251; Daniels N, *Just health care*, New York: Cambridge University Press, 1985; and Daniels N, 'Justice, health and health care', in Rhodes R, Battin MP, and Silvers A (eds.), op. cit., pp. 6–23.

23   Gert B, Culver C and Clouser K, *Bioethics: A return to fundamentals*, New York: Oxford, University Press, 1997.

24   Horner, op. cit.; Weed and McKeown, op. cit. add self-effacement, integrity, fidelity to trust, excellence and prudence.

25   Pellegrino ED and Thomasma DC, *The virtues in medical practice*, New York: Oxford University Press, 1993.