Justice and the Social Determinants of Health: an overview

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Forthcoming in *Public Health Ethics*

The WHO Commission on the Social Determinants of Health revealed that there is a 28 year disparity between the life expectancy in the poorest postcode and the richest postcode of Glasgow. (CSDH 2008) There are two sets of questions which it is important to ask about health inequalities like these: first, epidemiological questions about the mechanisms which cause inequalities in health and the measures which are effective in reducing them. Second, normative questions about which inequalities in health are wrong and why they are wrong. The papers in this symposium result from the inaugural conference of UCL's Centre for Philosophy Justice and Health (CPJH) and focus on the relationship between these epidemiological and normative questions.

The epidemiological issues

Everywhere in the world we see a strong correlation between socioeconomic status and health. Other things being equal, the poorer and more powerless you are the more likely you are to die young, and the richer and more powerful you are, the more likely you are to have a long and healthy life. This social gradient in health is by no means confined to the groups who are the poorest: for example the famous Whitehall studies showed a gradient in health among British civil servants. (Marmot et al., 1978) So it is not just that that 'the poor', as a group have worse health, but also that, as we go up the social scale, each rung we ascend will increase life expectancy, and decrease the chance of developing many diseases, such as stroke or heart disease.[1]

Epidemiological research into health inequalities seeks to explain why this is.

1 Michael Marmot, who leads the followup Whitehall II Study, provides an excellent overview of the Whitehall studies in his (2004).

There are three potential types of causes which we need to combine to explain the correlation: first, the causal contribution of poor health to lower socioeconomic status; second, the causal contribution of lower socioeconomic status to poor health and finally the causal contribution of other factors which cause *both* lower socioeconomic status *and* ill health. Understanding the different causes of ill health puts us in a better cognitive position to intervene to prevent them, so working out how to parcel out the relevant causal factors is important.

However, as Wolff (2009) points out, knowing the cause of something is not a sufficient condition for being able to reverse or prevent it. The causal chains may be highly complex and so it may not be possible to reverse a particular effect simply by reversing the particular cause. In other cases, the damage done by a particular cause may be irreparable. But without such causal insight our interventions are no better than guesswork. Moreover, understanding when and how we can intervene is also important for judgements of fairness: inequalities in health which we are in a position to prevent or ameliorate are more problematic than those we are not.

While there is undoubtedly some causal relationship between ill health and poverty (in as much as people who have chronic illness will be less likely to be in full-time work than those who do not), it is clear that only a portion of the correlation between ill health and socioeconomic status can be explained by the hypothesis that it is ill health that causes poverty.[2] The rest must be due either to the direct effects of socioeconomic status on health, or other factors which are correlated with both.

As is brought out nicely by Sridhar Venkatapuram's contribution to this symposium, the role of causation in epidemiology requires special attention. First, as Geoffrey Rose (1985) argued, in epidemiology we are interested in the determinants of *incidence rates* of diseases. These determinants will often be different from the factors which cause a particular individual to have a disease in a particular case.

Second, we should distinguish between proximal and more distal causes—between for instance the immediate cause of death, and the causes of the immediate cause of death. Thinking in terms of the "causes of causes" will usually give us more explanatory power than confining ourselves merely to proximal causes. However, it is far from clear whether we can determine what the "causes

2 For example, Chandola et al. (2003) argue that in the Whitehall study, the effect of social position on health was over two and a half times greater than the effect of health on social position. Clearly the size of the causal effect of health on socioeconomic status will vary from country to country and from situation to situation, depending on the level of support a society provides for those unable to work through illness. But nowhere is it plausible to attribute *all* the socioeconomic gradient in health to health selection.

of the causes" of ill health are in a way that prescinds from social theory and normative judgements.

Absolute and relative income

A second important point about the epidemiological evidence is that once we get above a certain GDP per capita income, there seems to be relatively little correlation between a country's absolute level of GDP and its average life expectancy. So, for instance, Cuba and Costa Rica have life expectancies very close to the USA despite being much poorer. However *within* each country we do see the same robust correlation between socioeconomic status and life-expectancy that we have been considering. This fact calls for explanation.

There are two chief ways of explaining this: the absolute income hypothesis, and the relative income hypothesis.[3] The absolute income hypothesis thinks of deprivation in the same ways as we think about the air on a mountain: as we get higher, it is more difficult to breathe; as deprivation increases, it is more difficult to maintain the conditions necessary for health. Importantly, just as in the case of the mountain, the position that others are in has no effect on one's own condition: the fact that others are down in the village in comfort does not make it any harder to breather on the slopes of the mountain.[4]

On the absolute income hypothesis, the fact that increasing GDP per capita does not seem to have very much of an effect on life expectancy once we get above a threshold can be explained by two factors. First, GDP per capita tells us only what the total amount of income generated by a country divided by its population is. The resources in richer societies are often distributed in a highly unequal way, with the vast majority of the resources being in the hands of the upper quintile. Second, due to greater commoditisation and other features, it can be much more expensive to maintain a healthy lifestyle in a richer country than it is elsewhere. In short according to the absolute income interpretation, people who are poor in rich countries have worse health because they lack the level of resources necessary to flourish in their particular society.

The relative income hypothesis allows that absolute levels of income and resources make a difference (particularly below the threshold), but maintains that above this threshold questions of *relative* income become particularly important. On this hypothesis, it is not so much that those who are poor in rich countries

3 In their review of the literature, Wagstaff and Doorslaer (2000) and Lynch et al (2004) also consider a number of different variants on these basic ideas.

4 I borrow this analogy from Parfit (1997), though he uses it in the context of explaining the difference between egalitarian and prioritarian theories of distribution.

have less than they need, but rather that the existence of large income inequalities adversely effects social and individual relationships in such a way that it worsens the health of everyone (though in particular the poor). Possible psychological pathways through which this could occur are the destructive effects of income inequality on social capital (Wilkinson 1996, 2000), effort-reward imbalance (Siegrist 1996, Siegrist and Marmot 2004) and decreasing control over the working environment leading to greater stress (Marmot et al. 1997).

Key defenders of the relative income hypothesis (such as Wilkinson 1996) argue that the fact that above the threshold increasing GDP per capita seems to have little effect on life expectancy constitutes strong evidence for the relative income hypothesis. Wilkinson also argues that cross-country comparisons show that societies which have more income inequality have a lower life expectancy than those which are less unequal, and that this further bolsters the relative income hypothesis.

However, as Gopal Sreenivasan argues in this symposium and elsewhere in this journal (2009a, 2009b), things are not so simple. Even if the relative income hypothesis were false and the absolute income hypothesis true, then we would still expect societies with greater income inequality to tend to have worse life expectancies. This is because if we assume (as is plausible) diminishing marginal return from income in relation to health, then more unequal societies will also tend to do worse in terms of life expectancy than more equal societies even on the absolute income approach. So the fact that there is a correlation between greater income inequality and worse average life expectancy does not in itself constitute a reason to favour the relative income hypothesis over the absolute income hypothesis.

Whilst much ink has been spilled within epidemiology over the absolute versus relative income debate, it is far from clear what, from a normative perspective, hangs on it. For both the relative and the absolute income approach imply that if you wish to improve average life expectancy, or improve the condition of the worst off, you should redistribute income and resources in such a way as to make the position of the worst off better. Sreenivasan's article looks at one case where the debate between the relative and absolute income hypotheses does seem to make a difference, namely the dispute between Daniels, Kennedy and Kawachi (2000) and Anand and Peter (2000) about whether the inequalities in health that would remain in a society which distributed its resources according to Rawls's principles of justice would be unfair. As Sreenivasan argues, this whole debate presupposes that the relative income hypothesis is true: if the absolute income hypothesis were true and the relative income hypothesis false, then there could not be any residual inequalities in the relevant sense. For if people's health depends

only on their absolute level of income and of the other social determinants of health, and Rawls's difference principle by definition requires us to distribute the social determinants of health in such a way that the worst off have the biggest possible share, then the inequalities in health which remain under the difference principle will count as unavoidable insofar as we would not be able to remediate them without making the absolute level of the worst off even worse.

Reasons to alleviate health inequalities

Much of the normative debate on health inequalities has focused on questions of justice. However, as Hausman argues in his rich and intricate contribution, there are also other reasons than justice for wanting to alleviate health inequalities. For instance, a concern with wellbeing would also lead us to a policy of equalising incomes, given diminishing marginal utility of extra money; and studying the causes of incidence of disease can allow us more insight into how we should go about intervening to help people attain wellbeing.

The standard move in understanding which inequalities in health are unjust has been distinguishing between health inequalities and health *inequities*, where health inequities are that subset of health inequalities which require social remediation. Whitehead and Dahlgren define these as inequalities which are not only 'unnecessary and avoidable but, in addition are also considered unfair and unjust'. (1990, p.5) Working out what should count as avoidable and what unfair in this context is complex, as all the papers in this symposium attest. The first task is to work out the value of health relative to that of other goods that a society should be pursuing. Whilst it might seem initially tempting to think that health is the most important good that governments should pursue, this is on reflection rather implausible. This is because in our own lives we regularly make tradeoffs between health and other goods; and moreover, we tend to think that it is legitimate to do so on a policy basis as well. (Dworkin 2000, pp. 307-319)

So given that there seem to be goods other than health which matter for the sake of justice, health cannot be the only good that societies should be concerned with. The key question is whether just societies should be interested in the distribution of health for its own sake, or rather whether they should care fundamentally only about different or more basic goods such as welfare, resources or liberty and pursue health only insofar as it is compatible with these more basic goals.[5] Sreenivasan (following Peters 2001) labels these direct and indirect approaches to health inequalities respectively.

5 I discuss these issues at more length in Wilson 2009a and 2009b.

The intuitive importance of health and healthcare lends some plausibility to a direct approach to health inequalities. But if we do adopt a direct approach to health, it seems that we must also adopt a pluralist approach, given that there are goods other than health which matter for their own sake for a just society.

Pluralist accounts (such as the capabilities approach, which Wolff and Venkatapuram use) notoriously face a challenge: if we have plural and incommensurable goods, how can we rank actions and policies? Wolff argues that this need not be a deep problem in practice, if one or both of the following assumptions are true: first, if human beings are in fact capable of reaching a broad consensus about which of the capabilities are most important, or second, if we tend to see clustering of capabilities, so that those who do well on one capability will tend to do well on the others, and those who do badly on one will tend to do badly on the others. In the second case, because the same people will do poorly on a wide range of capabilities, even if individuals rank the different capabilities differently in terms of importance, they will agree about who is worst off overall.

Wolff argues that in societies as we find them, there is reason to think that both assumptions are true, and that because of this pluralism need not prevent us from formulating effective policies. Indeed, if Wolff is correct, it gives us an enlightening new way of thinking about what the purpose of government action should be: declustering disadvantage—where if we successfully decluster disadvantage we make it the case that there is no group in society who are worst off overall.

References

Anand, S. and Peter, F. (2000). Equal Opportunity. In Cohen J. and Rogers J., eds. *Is inequality bad for our health?* Boston: Beacon Press.

Chandola, T., Bartley M, Sackera, A., Jenkinson, C. and Marmot M. (2003). Health selection in the Whitehall II study, UK. *Social Science & Medicine*, **56**(10), 2059-2072.

CSDH (2008). *Closing the gap in a generation: health equity through action on the social determinants of health.* Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.

Daniels, N. (2008). *Just Health: Meeting Health Needs Fairly*. Cambridge: Cambridge University Press.

Daniels, N. and Kennedy, B. and Kawachi, I. (2000). Why Justice is Good for our Health. In Cohen J. and Rogers J. eds. *Is inequality bad for our health?* Boston: Beacon Press.

Dworkin R. (2000). *Sovereign Virtue: The Theory and Practice of Equality*.

Cambridge, Mass.: Harvard University Press.

Hausman, Daniel (2009). Benevolence, Justice, Well-Being and the Health Gradient. *Public Health Ethics*

Lynch, J. et al. (2004). Is Income Inequality a Determinant of Population Health? Part 1. A Systematic Review, *The Milbank Quarterly*, **82**(1), 5-99.

Marmot, M., Rose, G., Shipley M., and Hamilton, P. (1978). Employment Grade and Coronary Heart Disease in British Civil Servants. *Journal of Epidemiology and Community Health*, **32**, 244-9.

Marmot M. et al. (1997). Contribution of job control to social gradient in coronary heart disease incidence. *Lancet*, **350**, 235–240.

Marmot, M. (2004). *Status Syndrome: How Your Social Standing Directly Affects Your Health and Life Expectancy.* London: Bloomsbury.

Parfit, D. (1997). Equality and Priority. *Ratio*, **10**(3), 202-221.

Peter, F. (2001). Health Equity and Social Justice. *Journal of Applied Philosophy*, **18**(2), 159-170.

Rose, G. (1985). Sick Individuals and Sick Populations. *International Journal of Epidemiology* **14**, 32–38.

Siegrist, J. (1996). Adverse health effects of high effort - low reward conditions at work. *Journal of Occupational Health Psychology* **1**, 27-43.

Siegrist, J & Marmot M. (2004). Health inequalities and the psychosocial environment - two scientific challenges. *Social Science & Medicine*, **58**(8), 1463-1473.

Sreenivasan, G. (2009). Ethics and Epidemiology: The Income Debate. *Public Health Ethics*, **2**(1), 45-52.

Sreenivasan, G. (2009). Ethics and Epidemiology: Residual Health Inequalities. *Public Health Ethics.*

Venkatapuram, S. (2009). A Bird's Eye View. *Public Health Ethics*

Wagstaff, A. & van Doorslaer, E., (2000). Income Inequality and Health: What Does the Literature Tell Us? *Annual Review of Public Health*, **21**(1), 543-567.

Whitehead, M. (1990). *The Concepts and Principles of Equity and Health.* Copenhagen: WHO Regional Office for Europe. (Document number: EUR/ICP/RPD 414. Available from: http://whqlibdoc.who.int/euro/-1993/EUR_ICP_RPD_414.pdf)

Wilkinson R. (1996). *Unhealthy Societies: The Afflictions of Inequality*. London: Routledge.

Wilkinson, R. (2000). Inequality and the social environment: a reply to Lynch

et al. *J Epidemiol Community Health*, **54**(6), 411-413.

Wilson, J. (2009a). Not so special after all? Daniels and the social determinants of health. *Journal of Medical Ethics*, **35**(1), 3-6.

Wilson J. (2009b). "Health Inequities", in *Public Health Ethics: Key Concepts in Policy and Practice*, ed. A. Dawson. Cambridge: Cambridge University Press.

Wolff, J. (2009). Disadvantage, Risk and the Social Determinants of Health. *Public Health Ethics.*