

## Health inequalities and social inequalities in health

In vol. 77, issue no. 7 of the *Bulletin*, published in July 1999, Murray, Gakidou, & Frenk (1) recommend assessing "health inequalities" by categorizing individuals only according to their health, without reference to other characteristics except perhaps geographical location. They repeat this recommendation in vol. 78, issue no. 1, published in January 2000 (2). In both articles, they contrast studying what they term "health inequalities across individuals" with studies of *social* inequalities in health, which examine the health of different population groups categorized a priori by their social position, typically reflected by measures of social class or material or social deprivation or well-being. In the first of these articles they advance the serious claims that studying social inequalities in health inherently prejudices causality, masks intra-group variation, and "does not allow for scientific inquiry into other key determinants of health inequality" (1).

It is unfortunate that Murray et al. felt a need to discredit research on social inequalities in health in order to recommend their approach; the two approaches are not only not mutually exclusive, but ask very different questions. We believe their argument is based on misconceptions, as illustrated by the recommendation to compare health inequalities across geographical regions but not social groups. Geographical comparisons are similar to social group comparisons in that both involve a priori selection of a categorizing variable based on knowledge indicating its likely relevance. Furthermore, differences between geographical areas are likely to reflect social characteristics to an important extent, and studying geographical variation in relation to socioeconomic and other social conditions can provide important insights into population distributions of health (3–6). By suggesting that their approach to "health inequalities", rather than what they term the "social group" approach, ought to guide public health policy, Murray et al. create a situation in which their claims could be used (despite good intentions) to prevent social inequalities in health from occupying an important place on the global research and policy agenda. We also are concerned about

the implications of the ethical perspective propounded in the article in vol. 77 for setting public health priorities.

Studying social inequalities in health does not mean prejudging causality or obscuring intra-group variation, any more than comparing health between geographical areas prejudices causality or prevents studying variations within the areas. Observing mortality gaps according to educational level obviously cannot be interpreted to mean that education per se is the cause; however, it points one in a promising direction by prompting questions such as: Why is educational level persistently associated with diverse health measures across time and diverse settings? How do people with different levels of educational attainment differ from each other in ways that could potentially explain the observed mortality disparities? And: Among people with low education, what might account for differential risks of mortality? In contrast, the univariate approach that Murray et al. propose, examining the distribution of health without considering other population characteristics, leaves one, after the initial descriptive step, only with the general question: What factors differ between individuals with better or worse health? This does not suggest even a general direction to look towards for an explanation of those inequalities. Comparing groups with each other imposes neither conceptual nor methodological limitations on examining variation *within* those groups; we do not understand why Murray et al. imply that these are mutually exclusive.

We also are unclear as to why Murray et al. deem the "social group" approach a hindrance to the scientific study of population health. The basis for using certain social factors as categorizing variables is the overwhelming evidence of their importance as health determinants, across diverse health outcomes, settings, and time periods (7–20). Relevant variables include measurable factors reflecting social position and material resources, such as income, wealth, education, or occupation; gender, race/ethnicity, and other social categories are also likely to be relevant (21). We agree with Murray et al. that a lack of conceptual clarity in the use of terms describing social position, coupled with historical changes in work and distributions of occupations within the global economy, has made it difficult to compare

groups over time and between countries; however, we see this as reason to support rigorous work to achieve greater clarity (22) — not to abandon social description in favour of a technical solution that discards the key questions. Although knowledge about the specific causal mechanisms and most proximate causal factors explaining diverse associations between social position and health is lacking, it is critical to grasp that social position is often a crucial determinant of the more proximate causes and, as such, a key determinant of health. Available evidence amply documents that one cannot understand health and illness in individuals or populations without examining social position (7–15, 17, 23). Studying social inequalities in health does not prejudice causation. Rather, it ensures that the role of social factors is systematically and explicitly considered.

To be practical, public health science must help identify health determinants and ways to modify them to improve population health. That means selecting relevant variables (whose specification requires categorization) based on prior evidence, describing associations among variables, and determining which associations are causal. The issue is not whether or not to categorize social groups a priori in studying health inequalities, but whether a given categorization is informative in understanding and ultimately improving patterns of population health. One should always expect significant variation within a given social group, and some categorizations may be too crude to be helpful; but this applies to any categorization, not only social categorization. We contend that the risk of obscuring important information is greater when the appropriate a priori, i.e. prior evidence-based, social categorization is *not* performed than when it is. The solution proposed by Murray et al. is to array health across individuals without initial categorization: this delays categorization but does not avoid it.

As far as practicality is concerned, it should also be noted that the variables frequently used to categorize social groups can be useful in targeting policy, indicating identifiable population groups requiring particular attention because their underlying social characteristics (e.g. poverty) are likely to make it more difficult for them to be healthy. Furthermore, in focusing on social inequalities in health one is consciously

focusing on disparities that are highly likely to be modifiable; even if all health inequalities were ultimately remediable (2), which is questionable, some are far more remediable than others.

Murray et al. also question the ethical basis for studying social inequalities in health, expressing concern that this approach entails caring more about ill-health among the poor than the rich (7). Individually and clinically, one certainly should be equally concerned about suffering, regardless of who is affected. However, at the population level, priority-setting in public resource allocation must consider the markedly unequal burden of ill-health and its major risk factors that are persistently borne by some groups, particularly when they have fewer resources or more obstacles to improving their health without assistance. The data amply document that, despite some exceptions, a disproportionate share of ill-health and premature mortality is borne by the socially disadvantaged. Similarly, it is well known that the needs of those with the least political and economic clout can more easily be overlooked or disregarded when reliable information is not available on social inequalities in health. Without information routinely and systematically describing the health of more and less socially advantaged groups, one cannot begin to ascertain the differential impact of policies on these groups.

Few countries routinely monitor social inequalities in health. New interest in this area has recently emerged partly because of concern over marked widening of disparities in wealth globally, and recognition of the strong links between wealth and health. In this global context, WHO, with support from the Swedish International Development Cooperation Agency (Sida) and extensive international input, launched an initiative in 1995 to help bring concerns about social inequalities in health higher up on the agendas of governmental and nongovernmental organizations, and to promote relevant policy-oriented research. One objective was to assist countries in developing capacity to routinely examine social inequalities in health, focusing first on poor/non-poor comparisons (24, 25). Despite disclaimers at the end of their July 1999 article, the criticisms made by Murray et al. leave the strong impression that they propose their approach to replace, not supplement, studies of social inequalities in health on the WHO agenda. That impression is reinforced by the recognition that, to our knowledge, this is the only public statement on social disparities in health that Murray et al. have made since taking

up influential positions at WHO in July 1998, in a unit whose mandate includes producing evidence to guide global health policy as well as taking a lead in research on health inequalities.

WHO resources are needed to help countries face the technical challenges of studying social inequalities in health in ways that are useful for forming policies. Information on the extent of "individual health inequalities" in the abstract, without information on the social patterning of their distribution, may or may not make a different contribution but cannot replace information specifically quantifying and seeking to explain social inequalities in health. We therefore believe that the rejection by Murray et al. of research on social inequalities in health and their proposal to replace it — at least on WHO's agenda — with studies of "health inequalities" in the abstract, represents a setback, not an advance, in scientific inquiry directed at improving the public's health. ■

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## Response to P. Braveman et al.

In the above commentary, Braveman et al. criticize our papers (1, 2) for taking health inequalities across individuals as the starting point for efforts to standardize and promote the comparable measurement of inequality in health across populations. They interpret our approach as an attempt to “discredit research on social inequalities in health” and a “rejection of research on social inequalities”. It is neither. Nor is it “univariate”, as Braveman et al. suggest. What we have attempted is to construct a better *dependent* variable than the literature has provided so far: the *distribution* of health expectancy. With this dependent variable one can then analyse in a more rigorous fashion its social determinants. Far from “discrediting” or “rejecting” the scientific quality of research on social inequalities in health, our approach aims at improving it.

Braveman et al. seem to imply that the only valid way of carrying out social analysis is by constructing an a priori categorization of the population through a social attribute such as occupation or education. In contrast, we maintain that social research is introduced as part of the theoretical framework from which social variables are derived in order to explain the distribution of health. Using the distribution of health expectancy across individuals as the dependent variable is perfectly compatible with a theoretical framework where social variables such as income, education and occupation are used to explain that distribution.

Furthermore, we explicitly recognize the usefulness of the study of social group differences in health in developing estimates of the underlying distribution of health expectancy across individuals in a population (1).

Below we respond to some of the more specific concerns raised by Braveman et al.

### 1. Geographical groups are social groups

Braveman et al. argue that “geographical comparisons are similar to social group comparisons in that both involve a priori selection of a categorizing variable based on knowledge indicating its likely relevance”. We agree with this statement, and have pointed out that “small area analyses may hold out the greatest promise for studying the extent to which social group health differences vary across countries”(2) and that “one particular approach to defining social groups, namely community location, has been much underutilized” (2). We also proposed that despite the limitations that small area analyses face, they do “hold out the promise of being one of the most refined methods for revealing the underlying distribution of health expectancy in a population” (1).

### 2. Health inequalities in the policy agenda

Braveman et al. argue that promoting the measurement of health inequality across individuals rather than the “social group” approach, “could be used ... to prevent social inequalities in health from occupying an important place on the global research and policy agenda”. This claim is very hard to understand. We believe that our efforts will place the critical problem of health inequalities prominently on the global agenda. The absence of comparable measures of health inequality across countries, such as those our approach is designed to achieve, is a major obstacle to placing health inequality more prominently on the global agenda. Thus WHO’s efforts to develop such a standard, comparable measure that can be used to make meaningful comparisons across countries is likely to bring more rather than less attention to the issue.

### 3. Determinants of health inequalities

Braveman et al. have misunderstood our statement that “defining health inequality as the difference in health status between social groups ... does not allow for scientific inquiry into other key determinants of health inequality across individuals”(2). If health inequality is measured only through social group differences, such as differences in education, health inequality that is not correlated to the social variable chosen will simply not be measured. If it is not measured then determinants of that population’s inequality cannot be investigated.

Braveman et al. claim that looking at differences in health status across individuals does not provide “even a general direction to look towards for an explanation of those inequalities”. We believe that the study of the determinants of health inequality across individuals in different countries will be a very interesting research question, which we hope that WHO and other researchers and institutions will be deeply involved in. Explaining why some countries do better in reducing health inequality is the logical step that will follow our current agenda of measuring health inequality across individuals.

### 4. Ethical basis for the study of health inequality

Braveman et al. criticize our approach in that it does not put more emphasis on caring for the poor than for the rich. They present the empirical, and most certainly true, claim that disadvantaged groups have on average worse health than advantaged groups. This fact will emerge and be fully captured in our efforts to measure and explain differences in health inequality across populations.

### 5. WHO and health inequality

In contrast to what Braveman et al. imply, WHO *is* placing renewed emphasis on the description and explanation of health inequality as a basis for developing more effective policies to reduce it. As an example of such emphasis, health inequality occupies a central place in the WHO framework for assessing health system performance. Through this instrument, WHO is promoting the routine measurement and reporting of health inequality across countries. The resulting evidence base will bring the important problem of health inequality clearly into the centre of the policy debate. ■

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