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Overcoming Barriers to Improved Research on the Social Determinants of Health

Fran Baum PhD

SUMMARY

This paper examines the recommendations of the World Health Organization's Commission on the Social Determinants of Health regarding the need for improved research on determinants of health inequity and discusses the following barriers to implementation of those recommendations: the power of the biomedical imagination in health and medical research; emphasis on vertical health programming; ideological biases outweighing evidence in policy decisions; and academic reward systems, including the inherent conservatism of peer review. The paper concludes with suggestions for changing research funding and assessment systems to overcome these barriers.

KEYWORDS: Social determinants, health equity, health services research, health policy

INTRODUCTION

The World Health Organization's Commission on the Social Determinants of Health (the Commission) in its final report called for a greater focus on research on the social determinants of health and health inequities.[1] Specifically, it declared the overarching need for more research leading to improved understanding of the relationship between social stratification and health outcomes, including the interactions between aspects of stratification (such as gender, ethnicity and income). The Commission also highlighted the need for research to quantify the impact of political, economic and social systems on health and health inequity among and within countries; and called for more research to evaluate interventions and document the social, economic and health costs and benefits of reducing health inequities. It also recommended more policy analysis to enhance understanding of obstacles interfering with actions on the social determinants of health inequities, especially those involving multiple sectors. Finally, the Commission called for better methods of measuring and monitoring health inequities.

The research agenda set by the Commission makes theoretical and practical sense. If implemented, it could generate results detailing the causes of health inequities and what can be done to reduce them, and these results would provide evidence to inform policy and practice globally, nationally, regionally and locally. Yet there are a series of barriers operating through current systems of research funding and assessment that hinder implementation of the Commission's recommendations.

This paper identifies and discusses four such barriers: 1) the power of the biomedical imagination in health and medical research, 2) the dominant focus on vertical health programming, 3) the influence of ideological biases outweighing evidence in policy decisions, 4) academic reward systems that encourage simple research designs on proximal causes of disease, and the inherent conservatism of peer review systems.

THE POWER OF THE BIOMEDICAL IMAGINATION

Health care systems in most countries are dominated by a Western biomedical understanding of health and disease, which has a strong basis in individualism.[2–4] This approach has been used to good effect for clinical treatment of individuals but tends to obscure the value to population health of social and economic interventions acting on the social determinants of health. Foucault pointed out that dominance of the biomedical imagination in the construction of knowledge about health should be regarded in the context of wider social and class relations in which medical, social and political conservatism encourage resistance to heterodox knowledge.[5] Thus, medical research focuses predominantly on causes of illness in individuals rather than searching for patterns of disease in populations that could lead to more effective prevention. So, for example, most breast cancer research focuses on better cures rather than on environmental factors that might cause cancer in the first place.

In the current context, it is not surprising that the priorities of the major health and medical research funding bodies reflect this dominant biomedical approach. Most of the research they fund is concerned with improving ways of treating disease—mainly diseases prevalent in rich countries rather than the mass of infectious diseases that kill people in poor countries.[6,7] Very little of the research effort is focused on ways to keep populations healthy by more equitable means or on population-based implementation research using a variety of methods, including action and participatory research.

Changing this bias in research requires a sound understanding of the way risk factors work in populations. Rose eloquently established that the determinants of individual health are not the same as those of population health by pointing out that treating high-risk individuals or those already suffering from disease does not have much impact on population health, whereas changing a risk factor across an entire population by only a small amount has a substantial impact. For example, if everyone in a population wears a seat belt while driving, the burden of mortality and morbidity from road accidents will be reduced. However, only a few individuals will benefit directly; thus a preventive measure which brings much benefit to the population offers little to each participating individual.[8]

Most actions taken to redress adverse impacts of a range of social determinants have population-level effects that do not bring immediate and discernable benefits to individuals. Detecting population-wide impact is very challenging; even more difficult is attributing any changes detected to particular interventions. These methodological problems partially explain the continued focus on biomedical research, as it comes with the promise of curing disease and extending life in a way that appears to have immediate relevance to individuals. By contrast, research on the social determinants of health will focus on causes of illness that are farther removed from individual experience and do not fit easily within the individualistic biomedical framework.

EMPHASIS ON VERTICAL HEALTH PROGRAMMING

The biomedical bias in health systems tends to encourage vertical, disease-focused programming concentrated on behavioral and medical risk factors. There has been long-standing tension between approaches to improving health that rely on working with communities to define and then tackle risks collectively in order to prevent disease, versus approaches concerned with treating and curing diseases in individuals. This tension is evident in the debate between comprehensive and selective primary health care, dating back at least to the 1970s.[9] and in more recent debates about prioritizing vertical disease programming versus health system strengthening.[10] It is also evident in divergent responses to the chronic disease epidemic: between programs emphasizing treatment of individual lifestyle factors—often with behavioral methods—and programs seeking to alter the environments from which chronic diseases emerge.

The Commission called for research on interventions affecting upstream determinants of health and illness, and this requires that governments be prepared to invest in such interventions. Examples of programs that do this are the WHO's Healthy Cities program[11,12] and the Health in All Policies approach,[13,14] introduced by the European Union and currently piloted in other settings in Australia and Canada. These developments are welcome, but they require investment in appropriate methodologies for examining the complex policy and practice interventions these types of programs involve. For example, using a control or comparison community in evaluating research design is usually not appropriate, and studies must focus on political and bureaucratic processes as well as outcomes. Methods often draw on social sciences, including political science and sociology, rather than biomedical frameworks, and require commitment to a review process involving more eclectic methods than health and medical research bodies are generally willing to fund.

DOES EVIDENCE INFORM POLICY?

The Commission's recommendations make the assumption that evidence from research will be prominent in health policy decision-making. In fact, policy theorists suggest that policy-making environments are subject to multiple streams of influence and that research plays only a minor role.[15–17] Given such complexity, and the fact that evidence must often be interpreted within a specific community and policy environment, and does not transfer readily to other settings, social determinants research cannot be expected to inform policy and practice the way a clinical trial might inform treatment options.

Taking action on social determinants of health inequity involves political processes and relies on actors who value the importance of equity as a policy goal. If there is insufficient political will in favor of designing and implementing policies aimed at improving equity, then it is unlikely that evidence will shift this lack of will. A very clear example of this occurred in the United Kingdom where the Black Report, published in 1980, produced solid evidence of the causes of health inequity and proposed policies that would alter the social determinants of health through poverty reduction, increasing the supply of public housing, and encouraging greater participation in education, among others.[18] The messages from this report were ignored by the Conservative Thatcher government, due to its ideological commitment to individual responsibility for health and well-being, and to minimal intervention by the

State. More recently, Katz has analyzed the reasons for failure to act on evidence regarding social determinants and points to a system characterized by reluctance to put health ahead of the pursuit of profits. She argues that this reluctance has a powerful negative impact on health.[19]

The role of ideology in shaping public health policy has received little research attention, suggesting the need for a thorough examination of the ways in which evidence is rejected on ideological grounds and health policies are based on ideological commitments, even when contradicted by sound evidence.

In situations where governments do commit to interventions on social determinants, these interventions may change mid-course as a result of political decisions (complicating evaluative research); this type of intervention is unlikely to stay static but rather shift in response to changing local social, economic and political contexts. These complications mean that producing evidence from action on social determinants is difficult. Often those using a biomedical lens to view evidence from complex intervention research will judge it to be “unscientific” and “value laden,” even though the research draws on methods and methodologies accepted in the social sciences. The power of biomedical perspectives means that judgments made from that standpoint are often accepted and used to downgrade or even ignore evidence emanating from a different research paradigm.

THE BIAS OF REWARD SYSTEMS FOR RESEARCHERS AND LIMITATIONS OF PEER REVIEW

Most researchers work in universities and are responsive to the reward systems established for academic promotion and recognition, and to incentives built into these systems. In most developed countries, the reward system for academic researchers is based on how much money they raise from research grants and how often they publish in peer-reviewed journals, preferably the most prestigious. This means that most academic effort is invested in studies supported by established funding bodies and expected to result in authorship of articles in a high-impact journal. Impact is determined by the number of times articles in a particular journal are cited. Whether or not an author gets published depends on a system of peer review (also used to assess grant applications). This assessment system has a remarkable hold over the work academics do, despite criticism that it is inherently conservative, as it gives power to long-established researchers, thereby maintaining the status quo and stifling innovation; that evidence of its efficacy is limited; and that it is not transparent and has been shown to be open to fraud.[20,21]

This system means that it makes most sense to undertake research that is methodologically straightforward, does not break new conceptual ground, and does not involve complex community-embedded intervention studies seeking to influence a range of social determinants. Such studies do not yield results quickly; furthermore, writing and presentation of results often have to be negotiated with multiple partners and, for ethical reasons, should be published in a form accessible to a broad audience rather than in a peer-reviewed journal. This means that research on social determinants will generally not fulfill the publishing criteria favored under academic merit systems and so is less likely to be an attractive option.

NEW FUNDING, NEW PARTNERSHIPS, NEW AGENDA

So far, this article has established that there are strong barriers to establishing national and international research agendas on the

social determinants of health. What would a world look like in which such agendas were taken seriously? The following points provide a blueprint.


- International and national agencies funding health and medical research would explicitly acknowledge the special features of social determinants research and allocate protected funds for this work.
- The agenda for social determinants research would be set in consultation with researchers, policy actors and, wherever possible, relevant affected communities.
- There would be strong focus on long-term interventions on social determinants and on policy research, allowing impact assessment of health policies from a range of sectors (including social welfare, housing, employment, urban planning). This work would emphasize the science of intervention rather than that of discovery.[22] It would draw heavily on multi-disciplinary social science methodology and would use techniques such as realist evaluation, qualitative research and comparative policy analysis. Population-wide interventions focusing on the factors that create health as well as those that reduce disease burdens would be encouraged.

Currently, it is rare for governments to provide sufficient research funding to evaluate upstream interventions designed to reduce health inequity through action on social determinants of health. It is important that funding be made available in the short timeframes needed to evaluate new policy initiatives. If researchers have to wait for the drawn-out funding cycles of most government research bodies, then the opportunity to design an effective evaluation is often lost. Systems could be developed whereby governments provide initial funding so that evaluation

can commence at the same time as the initiative, while further funding would depend on applications to competitive funding bodies. Applications would be judged on the suitability of the research design to the particular circumstances of the intervention, as well as the potential impact of the intervention on policy.

- Peer evaluation would be provided by academics with a track record in social determinants research and by policy makers. Where appropriate, communities would be asked to comment on the relevance of the proposed research.
- Academic reward systems would strongly encourage academics to engage in partnerships with governments, civil society and local communities, and conduct long-term evaluations. They would be rewarded for intervention research. Publication metrics would be downgraded as a means of judging the value of researchers' work; instead, their engagement with policymakers and success in conducting evaluations that require significant consultation and work in the 'real world' of implementation would be counted favorably. The system could be weighted to reflect the complexity of the 'real world situation' in which the researcher is working.

CONCLUSION

Research has a vital role to play in ensuring that action on social determinants of health is led by government and results in greater health equity. This will require changes in the ways public health research is funded and assessed, and in the ways researchers are rewarded and recognized for their work. Governments must be willing to open their policy and implementation processes to the critical scrutiny of well-designed implementation research. If enacted, these changes would lead to a research system that supports greater health equity by improving action on the social determinants of health. 

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