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GLOSSARY

A typology of actions to tackle social inequalities in health

Margaret Whitehead

"If your only tool is a hammer, all your problems will be nails." Mark Twain.

There is a growing acknowledgement that many countries face serious social inequalities in health, identified as one of the greatest challenges to public health today. Social inequalities in health in this article are defined as systematic differences in health between different socioeconomic groups within a society. As they are socially produced, they are potentially avoidable and are widely considered unacceptable in a civilised society. This paper uses the British convention of referring to "inequalities in health", which commonly has the same meaning in the UK as the term "inequities in health". That is, "inequalities" in the British context—and increasingly also across Europe—carries the same connotations of unfairness and injustice as the term "inequities".

Previous articles in this series have dealt with how to measure health inequalities and socioeconomic position, together with the associated concepts. The central question remains: what can be done about these social inequalities in health? A growing number of countries are wrestling with this question and devising policies and interventions in attempts to tackle the challenge. This article organises some of the most prominent types of actions that have been devised in this field into a typology. The aim is to help broaden the understanding of the range of different interventions available and their potential effectiveness for the task in hand, and to avoid the tendency to focus on one type of intervention neglecting the others. As Mark Twain cautioned: "If your only tool is a hammer, all your problems will be nails".

IDENTIFYING THE THEORY UNDERLYING INTERVENTIONS

Over the past two decades, theory-based approaches to the assessment of public policy and interventions have been elaborated in the general evaluation literature. The idea, as originally proposed by Wholey, is to analyse, for the purposes of evaluation, the logical reasoning that connects intervention programme inputs to intended outcomes, and assess whether there is any reasonable likelihood that programme goals could be achieved. This literature acknowledges that all intervention programmes are based on theories, whether implicit or explicit, of how the measures proposed in a programme are expected to have their impact. These programme theories are sometimes referred to as "professional logic". Making these programme theories explicit helps in the design of an evaluation, but also draws attention to the existing literature on the probable effectiveness of the proposed mechanisms for change.

Such theory-based approaches have been used in particular to evaluate the effectiveness of health promotion and risk prevention interventions, and latterly have been adopted for the evaluation of complex community interventions in the UK, such as the English Health Action Zones. Their value lies in assessing the effectiveness of the various components of existing interventions, and also in the design of future initiatives, by generating plausible programme theories and designing programmes to test them under real-life conditions. Can these approaches help in the assessment of the various endeavours to tackle health inequalities?

APPLYING THEORY-BASED APPROACHES TO HEALTH INEQUALITIES INTERVENTIONS

Figure 1 illustrates schematically the logic—whether explicit or implicit—in the formulation of interventions in this field. Every proposed intervention to tackle social inequalities in health starts with recognition of the existence of a problem. Take for example the observed poor nutritional status in children living in poor families, which has been an acknowledged problem in the UK for many years. When the decision is taken that "something must be done" about the problem, the nature of the proposed action will depend on the prevailing notions of what is causing that problem. More precisely, the question is "what is causing the problem to be more severe with decreasing socioeconomic status?" In the case of poorer nutrition in poorer children, for example, it is not the cause of inadequate nutrition in children in general that is the focus of interest, but the causes of the gradient in nutritional status which result in an increasing problem as one goes further down the social scale. In the nutritional example, notions about why poor children have poor nutrition may range from lower knowledge or skills in the parents about healthy diet or food preparation, to differences in cultural attitudes between groups, to relative lack of income for nutritious food, to greater difficulty in gaining access to, and affordability of, appropriate food supplies and so on. These notions of the causes of this problem will in turn govern the choice of interventions to tackle the causes.

The interventions proposed are based on theories of how and why they will bring about a change in the identified cause. To follow through with the nutrition example, if the cause is seen as weaker nutritional knowledge in poorer groups, then educational programmes may be devised targeted at low-income parents to improve their
knowledge. If lack of income to buy nutritious food is the dominant cause, then interventions to increase social security benefits for low-income families with young children, or controls on the price of essential foodstuffs may be the proposed solution. Assumptions about causes and solutions may be uncovered during this process, which may turn out to be too simplistic or just plain wrong, when the empirical evidence is assessed. Ideally, this should lead to reconsideration of proposed action.

A crucial task in relation to tackling health inequalities, therefore, is to discern what the theories are about how and why the proposed interventions might work, and what their expected effectiveness could be. When such questions are applied to past and current activity in this field, distinct types of intervention can be discerned, which form the basis of the typology below.

**A TYPOLOGY OF ACTIONS TO REDUCE HEALTH INEQUALITIES**

This typology of policies and interventions to tackle health inequalities is based on the underlying programme theory of how the action is expected to bring about the desired change.\(^{19}\)\(^{20}\) It asks: what is the underlying theory about the cause of the problem? What is the reasoning about how the proposed intervention will work to bring about change/ improvement? On this basis, the common interventions tend to fall into one of four main categories. Each category has a distinct aim, ranging from strengthening individuals, to improving living and working conditions, to falling into one of four main categories. Each category has a distinct aim, ranging from strengthening individuals, to improving living and working conditions, to promoting healthy macro-policies.

**Category 1: strengthening individuals**

These interventions are aimed at strengthening individuals in disadvantaged circumstances, and using person-based strategies. The cause being addressed by these types of initiative is essentially a perceived personal deficit in some respect, whether that is a deficiency in an individual’s knowledge, beliefs, self-esteem, practical competence in life skills or powerlessness. Such interventions theorise the problem mainly in terms of an individual’s personal characteristics, and the solution in terms of personal education and development to make up for these deficiencies. Examples include health information campaigns, life skill groups and one-to-one counselling/support. The vehicles for this education may be varied—for example, in relation to anti-smoking education, delivery may be through mass media campaigns, school curriculum programmes or smoking session clinics run by health professionals in disadvantaged areas—but the underlying purpose of these interventions is education of individuals.

Some aim to build up self-confidence and skills in people who are in danger of being swamped by the disadvantaged circumstances in which they live, so that they stand a better chance of maintaining their health and well-being, whatever external health hazards they encounter. Others address the relative powerlessness of the worst-off in society, with strategies to “empower” individuals to gain their rights and to gain better access to the essential facilities and services which could help them improve their health. Recently, there has been a move away from deficit models, towards recognition of the assets and capabilities that individuals with adversity possess (ESRC Human Capability and Resilience Priority Network at http://www.ucl.ac.uk/capabilityandresilience). The logic in this case is that interventions that acknowledged these positive strengths and removed barriers to their realisation would release capacity to act in ways that improved health and quality of life among the worst-off in society.

**Category 2: strengthening communities**

This category covers a wide spectrum of interventions aimed at strengthening communities through building social cohesion and mutual support. The underlying cause of the observed inequalities in this respect is related to greater social exclusion/isolation and powerlessness in hard-pressed communities. In this context, the theory is that some of the most health-damaging effects of social inequality are those that exclude people from taking part in society, denying them dignity and self-respect.\(^{21}\)\(^{22}\)

The interventions at this level fall into two groups: horizontal and vertical. First, there are those that aim to foster horizontal social interactions between members of the same community or group to allow community dynamics to work. These range from community development initiatives that enable people to work collectively on their identified priorities for health, to building up the infrastructure in neighbourhoods—creating relaxing meeting places and facilities for instance—to make it easier for social interaction to take place. How might these initiatives influence inequalities in health? In theory, if people in marginalised communities were working well collectively, they could influence their local environment in small but constructive ways to create healthier conditions in their neighbourhood. These could include, for example, attracting resources to the area to improve community safety, or working together to tackle neighbourhood crime or to limit substance abuse or any other of their chosen priorities. These could lead to improvements in both physical and mental health in specific areas in the long run.\(^{23}\)

Second, there are initiatives that foster vertical social interactions on a societal-wide basis. These are aimed at creating vertical bonds between different groups from the top to the bottom of the social scale, to build inclusiveness and full economic and political participation.\(^{24}\) Examples include building inclusive social welfare systems and initiatives to strengthen the democratic process and make it easier for the disenfranchised to participate in it. The underlying theory behind the vertical initiatives is that fostering solidarity throughout society produces a less divided society, one with smaller social inequalities and hence more equitable access to the resources for health.\(^{25}\)

**Category 3: improving living and working conditions**

The initiatives at this level identify the critical cause of observed health inequalities to be greater exposure to health-damaging environments, both at home and at work, with declining social position. This is coupled with poorer access to essential goods and services such as safe food supplies, education and healthcare. Historically, improvements in the day-to-day living and working conditions and access to services have been shown to be important in improving the health of populations.
Initiatives in this category include some of the classic public health measures to improve access to adequate housing, sanitation, uncontaminated food supplies, safer workplaces, and better access to health and social care. A crucial point as far as addressing inequalities in health is concerned is that such public health measures are perceived as having the potential to benefit the health of the population in general, but especially that of the people living in the worst conditions, bringing about a reduction in the gradient in health.

The new agenda currently at this level is concerned not only with improving conditions in the physical environment, but also tackling the psychosocial health hazards encountered in the present day environment.

**Category 4: promoting healthy macro-policies**

These locate the causes of health inequalities in the overarching macroeconomic, cultural and environmental conditions prevailing in a country, which influence the standard of living achieved by different sections of the population, the prevailing level of income inequality, unemployment, job security and so on. The resulting interventions, therefore, are aimed at altering the macroeconomic or cultural environment to reduce poverty and the wider adverse effects of inequality on society. These include measures to ensure legal and human rights, "healthier" macroeconomic and labour market policies, the encouragement of cultural values promoting equal opportunities and environmental hazard control on a national and international scale (including upholding international obligations and treaties in this field). What these policies have in common is that they tend to span several sectors and work across the population as a whole, unlike some of the ones in categories 1 and 2, which focus on disadvantaged groups and areas, or in category 3, which tend to deal with specific sectors. However, they may have a differential impact on the standard of living, employment and opportunities open to different groups in the population, and as such have the potential to influence inequalities.

The potential for the differential impact of universal programmes is well illustrated by Korpi and Palme, who studied industrialised countries with different types of welfare state programmes, ranging from those targeted at the poor only, to universal basic security and finally to encompassing (ie, universal programmes covering all citizens and giving them basic security combined with generous earnings-related benefits). They found that it was the encompassing systems, covering all citizens, that produced smaller income inequalities, lower rates of poverty and greater redistribution across society. This illustrates that these universalistic policies were more efficient at reducing poverty than the flat-rate or targeted programmes, and that they also tackled the socioeconomic gradient across society, by reducing income inequalities, not solely focusing on the circumstances of those at the bottom of the social scale.

Influencing health inequalities is rarely the sole, or even the main, motivation for the interventions included in category 4. Their potential influence, both positive and negative, however, is profound, and should be assessed explicitly to inform future policy development.27

**Case study A: applying the typology to work environment interventions**

Karasek28 has differentiated similar categories of interventions specifically in relation to reducing stressful psychosocial working conditions. Working conditions are potentially important in relation to social inequalities in health because there is a marked social gradient, with poorer conditions with decreasing occupational position. It has been postulated that part of the association between social position and the risk of cardiovascular illness may be due to differences in psychosocial working conditions.29

Karasek28 has suggested that theoretically there are four main points of intervention in the prevention of stress related to working conditions, and these roughly correspond to the four intervention categories discussed in the typology above. Firstly, there are person-based approaches, offering counselling and education to increase an individual's skill and capacity to cope with the stress produced by the work set-up (strengthening individuals). These interventions treat the symptoms rather than the cause of the problem. Secondly, there are improvements in communication patterns and human relations, providing more opportunities for making decisions, joint problem solving with workmates and constructive feedback on how the job is going (strengthening mutual support in the work environment). Thirdly, there are changes in large-scale organisational issues in a company or organisation—re-designing production processes and management strategies which influence the tasks individual workers are asked to do (changes in facilities and improvements to the physical environment). Fourthly, there are entry points for interventions to influence the outside pressures imposed on workplace organisations. Market conditions and rules about competition, national labour relations programmes which influence employment rates, job security, wages, national levels of unemployment, etc, potentially have a huge impact on the psychosocial stress experienced in individual workplaces, even though these macro-policies are outside one organisation's control (promoting healthy macropolicies).

This example illustrates the diversity of possible intervention points for a single problem of higher workplace psychosocial stress levels for lower occupational classes, depending on theories about the cause of the problem and feasibility of different actions by different actors.

**Case study B: applying the typology to smoking interventions for inequalities**

Cigarette smoking has become the focus of interventions to tackle health inequalities because in many (northern) European countries there is such a stark social gradient, both in smoking prevalence and in cessation rates. In 2001, in Britain, for instance, smoking rates ranged in a stepwise gradient from 15% for higher professional and managerial occupational groups to 35% for people in routine occupations.30 Furthermore, nicotine dependence is higher in people experiencing disadvantage, and they find it more difficult to quit once they have become addicted.31 The strong social gradient in cardiovascular diseases and lung cancer reflect to a certain extent the social patterning of smoking.

Interventions to tackle the problem are apparent in all four categories, although category 1 is the most popular by far. Activities under the heading of “strengthening individuals” include mass media information campaigns targeting disadvantaged areas, anti-smoking education programmes in schools in disadvantaged catchment areas, and smoking cessation clinics and individual counselling by health professionals targeting poorer patients or areas. Pregnant women with low income are often singled out for intensive help and support of this nature.

Interventions under strengthening communities are less common, but those aimed at enhancing horizontal social interactions have included community development initiatives among low-income women to encourage greater community participation, build confidence and stimulate mutual support. Some of these may not address smoking directly—their aim is to boost mutual support and participation, and, through that, to generate more conducive circumstances for participants to quit smoking.
Category 3 includes interventions to create supportive environments for becoming smoke-free, ranging from regulations and laws to control smoking in public places and ban the supply of cigarettes to children, to curbing the promotional activities of the tobacco industry through restrictions on paid advertisements and brand sponsorship. Given that the environments in disadvantaged areas are often the most polluted by tobacco smoke, coupled with the tactics of some tobacco promotions of targeting poorer areas specifically, these interventions, although universal, have the potential for a greater impact in poorer groups and areas. Another intervention in this category is to increase access to goods and services to help quitting, such as providing free nicotine replacement treatment to smokers faced with a barrier in cost. This work indicates that these processes are dynamic, with socially patterned generation of health inequalities. It is increasingly recognised that preventive or curative healthcare interventions, so this is not a criticism solely of preventive and promotional activities. This makes it absolutely imperative to adopt a preventive approach to guide the development and implementation of actions aimed at tackling social inequalities in health. We must make the best use of (a) the literature on causes of specific inequalities in health, (b) knowledge about the different contexts in which different socioeconomic groups live and (c) intervention programme theories, to come up with plausible mechanisms for bringing about the desired change.

All interventions in the future, whether preventive or curative, should ideally be assessed for differential impact by socioeconomic status. In addition, gender-specific and ethnicity-specific analyses need to be carried out when assessing differential impact by socioeconomic status. This is of critical importance because both the magnitude and causes of observed social inequalities in health may be very different for men and women, and for different ethnic groups.

Even without this ideal situation, however, some conclusions can be drawn about the likely effectiveness. The evidence concerning category 1 interventions, for example, indicates that educational programmes to strengthen individuals rarely work in isolation, particularly for disadvantaged populations and areas. When combined with initiatives to create enabling environments that take account of structural barriers to healthier lifestyles, however, there is evidence of effectiveness at meeting educational goals.

In addition, interventions in categories 1 and 2—strengthening individuals and communities—have been focused predominantly on deprived groups only, and have not involved wider sections of the population. They have also tended to treat the symptoms rather than the underlying cause of the problem, which may be located in the socioeconomic environment. There is only so much that these types of interventions can achieve if stronger influences, out of local control, are operating on inequalities.

By contrast, interventions in categories 3 and 4 involve every section of the population, although the crucial point in relation to tackling health inequalities is that they can have a differential impact, for better or worse.
improvements to living conditions and access to services, for example, can be seen to have benefited everyone, but most especially those subject to the worst conditions. The major public health works started in the industrial revolution to provide clean water and sanitation, the measures taken to provide universal education and healthcare, and to develop a comprehensive welfare system have played an important part in improving the overall health status. But, crucially for this discussion, they have been of greatest benefit to those who faced financial barriers to access before, and those in the most unsanitary, hazardous conditions. In other words, they operate on the unequal distribution of these important health determinants, and thereby directly tackle some of the causes of the social gradient in health.

Experience with interventions in category 4, to promote healthier macro-policies, also reinforces the importance of looking at the distribution of the effects of policies, rather than relying on overall figures. It is essential to monitor where the human costs and benefits of policies fall across the population. Where this has been done, evidence suggests, for example, that there can be healthy and unhealthy economic policies, which, moreover, have a differential impact on rich and poor people. Economic policies that have protected or improved the standard of living of the poor, for example, have shown beneficial health effects, large enough sometimes to be reflected in health statistics for the population as a whole. Conversely, there are severely health-damaging macro-policies that need to be addressed.

Finally, it is clear that the causes of social inequalities in health are multiple and inter-related. The action to tackle these causes also probably needs to be interconnected, across sectors and across intervention levels. Effectiveness may be hampered by isolated efforts at any of the policy entry points. At a recent consultation on health inequalities action, policy advisors were calling for evidence on “best buys”, asking: which combination of interventions in a policy system would be most cost-effective at reducing health inequalities? The science in this field is far from answering that question and, indeed, an equity lens needs to be applied to the definition of cost-effective. Costs to whom? Benefits for whom? If the costs fall on the worse-off sections of the population and the benefits accrue largely to the government, evidence suggests, for example, that interventions in a policy system would be most cost-effective at reducing health inequalities. The science in this field is far from answering that question and, indeed, an equity lens needs to be applied to the definition of cost-effective.

Yet, the search for effective actions to tackle social inequalities in health highlights more than anything the need for a new kind of evidence synthesis, one that casts its net wide over a broad social science literature base, interprets it against plausible theory and pieces the jigsaw together in a policy-relevant way. Serious efforts to tackle social inequalities in health need such approaches more than ever.

Competing interests: None.

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8. Bartley M. Morale: a broad social science literature base, interprets it against plausible theory and pieces the jigsaw together in a policy-relevant way. Serious efforts to tackle social inequalities in health need such approaches more than ever.

Policy implications
1. To date, most of the interventions to protect and promote health have not been evaluated for their differential impact on different socioeconomic groups, only for the average impact across the population as a whole.
2. This makes it absolutely imperative to adopt a theory-based approach to guide the development and implementation of actions aimed at tackling social inequalities in health.
3. We must make the best use of (a) the literature on causes of specific inequalities in health, (b) knowledge about the different contexts in which different socioeconomic groups live and (c) intervention programme theories, to come up with plausible mechanisms for bringing about the desired change.

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