Bridging the gap in health inequalities with the help of health trainers: a realistic task in hostile environments? A short report for debate

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ABSTRACT

Background From a public health theoretical perspective, there is acknowledgement that synchronized policies, which address both individual and area level risks to health, are important to reduce inequalities and improve health. Despite this, much research focuses on just one of these two approaches (often pitting them against each other) and much practice tends to focus on individual level interventions. Efforts to address health inequalities between rich and poor in the UK continue to focus on individual-based interventions, with the most recent initiative being health trainers.

Methods In this debate piece, we will use health trainers as a specific example, and focusing primarily on levels of physical activity, we will argue that neither individual level interventions nor environmental change alone are likely to improve levels of activity or reduce health inequalities.

Conclusions We argue that synchronized policies that tackle both individual and neighbourhood environmental barriers to improving health behaviours are essential.

Keywords area effects, health inequalities, individual effects, physical activity

Introduction

Addressing the gap between the health of people living in the most disadvantaged areas and of those living in the rest of the country has been the target of the UK government, whichever party has been in power, for the last 30 years. As one of its headline targets New Labour in February 2001 announced its plans: ‘Starting with health authorities, by 2010 to reduce by at least 10% the gap between the quintiles of areas with the lowest life expectancy at birth and the population as a whole’.1 Despite the government’s commitments to reducing area-level inequalities, evidence shows that for the last 5 years differences in life expectancy between the best and the worst areas of the country are expanding.2 Using data on life expectancy and income inequality from 1980 to 2000, Shaw et al.2 demonstrated that inequalities in life expectancy between areas were improving somewhat in the early 1990s, but had increased since the mid-1990s, with evidence that widening inequalities in income, wealth and housing quality had contributed to this, and that these inequalities were likely to be transmitted to the next generation and hence relatively long-lasting.

In this paper, we will examine ‘health trainers’, a new initiative by the UK government, and set out our arguments as to why we believe that these trainers are unlikely to have an impact upon improving health behaviours, in particular on levels of physical activity, without simultaneous policy focusing on changing features of neighbourhoods to make them more health promoting.

Context or composition: does area matter over and above the individual characteristics of the people who live in the area?

The idea that where one lives is important for ones’ health is not new, however there is a debate regarding whether the characteristics of where people live (contextual effects) have an important influence on health independent of the

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characteristics of the people living in these areas (compositional effects). The relevance of this issue is that if variations in health between areas can be entirely explained by the personal characteristics of the inhabitants of these areas, then policy makers need act only on improving the circumstances of individuals. Conversely, the demonstration of independent area-level effects would emphasize the need to focus interventions on features of the areas where people live, and not just the individuals living there. This is important since the widening gap between the rich and the poor appears to be mirrored by a growing divergence of their residential environments, such that affluent people are increasingly living and interacting with other affluent people in affluent areas, whereas the poor increasingly live and interact with other poor people in more deprived areas.

**Health trainers—a new initiative to improve levels of physical activity and health in those living in the most deprived areas of the UK**

Health trainers are a new initiative, launched in 2004, that aims to improve health behaviours of those living in the most deprived areas, and thus reduce disease and health inequalities. The scheme was first implemented across 12 pilot sites, targeting disadvantaged areas. Each area received £200,000 additional funding to provide personalized plans for individuals to improve their health and prevent chronic diseases. Health trainers offer a health ‘stock take’ identifying behavioural characteristics, primarily physical activity, diet and smoking, that need change. They aim to help people access support, both from their local community and from specialized services encompassing a range of issues from dietary and physical activity advice, smoking cessation and health screening. The programme does not include any support for changing the physical or social environment in which individuals live and as such seems to support an idea that these behaviours are primarily determined by individual characteristics that can be remedied by accessing the appropriate services, such as reduced or free gym access or counselling and treatment from a primary care smoking prevention clinic.

**Individuals and neighbourhoods in relation to levels of physical activity**

It is likely that the extent to which area level (contextual) factors influence health-related behaviours and disease outcomes will vary for different outcomes. In this debate piece, we have focused specifically on levels of physical activity, because of their importance to public health and because they may be specifically affected by neighbourhood (area level) characteristics. Low levels of physical activity have been associated with increased risk of all-cause mortality, cardiovascular disease, diabetes, some cancers and mental ill health. Physical activity levels tend to be lower among those from lower socio-economic groups and those living in the more deprived areas. Most interventions to promote physical activity to date have targeted individual behaviour, implying that individuals are the main avenues for behaviour change, with area and community factors less relevant. Evaluations of individual level approaches to increasing levels of physical activity show that they have failed to show important sustained increases in activity. In one important example, individuals from an inner city area of Newcastle who were randomly allocated to six motivational interviews and free access to a local sports centre and gym compared to controls, with either no or a less intense intervention had increased levels of activity in the short term, but this was not sustained beyond the 12 weeks of the programme.

The failure of individual-based initiatives to result in sustained increases in physical activity may not be surprising since these interventions are in effect trying to persuade individuals to participate in activities in environments that are (or are perceived to be) hostile to the very activities they promote.

There is evidence that the nature of the physical environment affects levels of activity and in some respects it seems obvious that features of the physical environment are more or less supportive of regular activity such as walking (see Fig. 1 and consider which of these neighbourhoods is most likely to support you to undertake regular physical activity). In ecological studies, the number of safe and convenient facilities is associated with higher levels of regular walking. In one study, after adjustment for potential confounding factors, residents who lived in coastal areas were 23% less
likely to be sedentary and 27% more likely to participate in levels of activity that were adequate for health improvement, than residents in similar but inland areas.9 In a US study, residents in areas of Los Angeles that were laid out in a ‘traditional grid system’ were up to 25% more likely to regularly walk to work compared with residents in socio-economically similar areas that were laid out specifically for cars.10 However, traditional approaches to health evaluation—in particular the gold standard randomized controlled trial—are not feasible for assessing the health impact of a physical change to the environment since such changes (e.g. creating equal pedestrian and motorized vehicle space in a neighbour- hood, increasing green recreational areas) are beyond the scope of research funding and random allocation.11 Nonetheless it is essential that the best level evaluations are undertaken of planned changes to areas amidst neighbour- hood renewal programmes in order to determine whether such interventions have any impact upon levels of physical activity or other health outcomes and whether they do indeed reduce health inequalities.

Despite observational studies showing an association of neighbourhood environmental characteristics with levels of physical activity, the small number of studies that have undertaken more formal evaluations of the effects of changes to the physical environment have not particularly been promising. Evaluation of schemes such as Walking the Way to Health, and Green Gyms, which take advantage of the existing environment to encourage the uptake of physical activity, has demonstrated poorer uptake and sustainability in disadvantaged areas. Indeed these schemes once more appear to attract ‘keen walkers/exercisers’, rather than sedentary individuals or those new to exercise.12 These examples, to us, suggest that for marginalized communities synchronized policies that target individual and neighbour- hood barriers at the same time are likely to offer the best means of promoting health and reducing inequalities.

Our conclusion: stop the composition versus context debate and commit to synchronized policy

Health promotion theory has always emphasized the need for simultaneous support of individuals and improvement of environments in order to improve health and reduce inequalities. Despite this much research focuses on just one of these two approaches (often pitting them against each other) and much practice tends to focus on individual level interventions. It seems to us that individual level interventions, such as health trainers, are unlikely to have an important impact if the environment in which someone lives presents major barriers to behaviour change. At the same time, simply changing the physical environment in the most deprived areas is unlikely to improve health without support for individuals living in the area. While we have focused specifically on levels of physical activity in this piece and acknowledge that the relative impact of individual and neighbour- hood characteristics on health outcomes is likely to vary by outcome, we would argue that for many health beha- viours, combined efforts to remove both individual and environmental barriers to behaviour change are essential. As such we believe researchers and policy-makers should cease to argue about the relative importance of compositional and contextual effects, and should work together to develop and evaluate synchronized policies.

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Competing interests

The authors have no competing interests to declare.

References


