



Research Summary

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Tackling the wider social determinants of health and health inequalities: evidence from systematic reviews

A synthesis of reviews of interventions to improve health and reduce health inequalities published by the Public Health Research Consortium

The authors (Bambra C., Gibson M., Petticrew M., Sowden A., Whitehead M. and Wright K.) have produced this study as part of the Public Health Research Consortium, which is funded by the Department of Health Policy Research Programme. The study seeks to add to current knowledge of interventions that address the social determinants of health and health inequalities, and finds some suggestive evidence that certain categories of intervention may impact positively on health and help to reduce inequalities, in particular in the fields of housing and employment, but that the impacts may be small and that more evidence is still required. This note summarises the key messages from the study.

Report Findings:

Overall

- 'Tackling the wider social determinants of health and health inequalities: evidence from systematic reviews' is a synthesis of existing evidence relating to interventions to improve public health and reduce health inequalities. It is funded through the Public Health Research Consortium, which itself is funded by the Department of Health Policy Research Programme.
- The paper identifies existing systematic reviews and relevant primary studies and uses these to identify priorities for further primary and secondary research, and to draw some tentative conclusions about categories of intervention that appear to have the potential for positive impacts on health outcomes, including the reduction of health inequalities.
- The paper is based on a review of research relating to health outcomes of interventions largely within the living and working environment arena. There are some significant gaps in the research apparent, perhaps most significantly in respect of interventions to improve

access to health and social care, and in respect of the relationship between education and health outcomes in the adult population.

- The evidence is quite suggestive of some positive impacts principally within the fields of housing and employment, although the evidence base is quite thin and some of the impacts appear quite small.

Housing and regeneration

- Within the housing arena the effects generally appear to be quite small, which may be partly due to the time lag in the improvement of physical health (mental health improvements are more consistently apparent in the research). It may also be because the effects are genuinely small, particularly within high-income countries ('ceiling effects').
- Evaluation of housing tenure change and desegregation interventions finds improvements in perceptions of neighbourhood safety and some improvements in mental and physical health.
- Much of the existing evidence relates to interventions to change the tenure mix within communities and to physical improvements to homes

The work environment

- With respect to some interventions within the employment environment, such as organisation of work (shifts) and privatisation, it was found that there were differential impacts, suggesting that the workplace was likely to be a significant setting for addressing inequalities of health. However, it should be noted that in the case of privatisation the impacts on mental health were found to be negative.
- There is a growing body of evidence relating to the wider impacts of work on health and general wellbeing, with significant interest in psychosocial factors.

Unemployment and Welfare

- With regard to unemployment and welfare, there is already significant longitudinal data on the links between unemployment and health. Most of the impacts of welfare entitlement interventions, however, were found to be financial, with limited evident effects on health outcomes.

Access to health and social care

- Evaluations of interventions relating to access to health care were also found to be scarce. Policy examples meriting such study might include lay health workers, outreach clinics and culturally-targeted provision.

Transport and health

- With respect to transport there is very little evidence on how transport policies might promote more healthy lifestyles and reduce inequality effects, and it is only very recently that there has been a shift in focus away from the health risk aspects of transport (physical injury and pollution) towards a wider health promotion potential.

Agriculture and food

- There are very few reviews and primary studies found for this category. There appears to be little evidence to support the notion that food retail interventions might tackle diet-related health inequalities. The example intervention in respect of a food desert neighbourhood in Leeds was, however, seen to be of potential value in addressing social exclusion.

Water and sanitation

- Only one review is identified (the water fluoridation programme), making the evidence scarce and inconclusive. The study identifies a knowledge gap that would merit further study, in relation to the effects of water metering, which, it has been suggested may lead to poorer families economising on water to the detriment of child health.

Education

- Adult health outcomes of educational interventions appear not to have been systematically reviewed anywhere. One review of literacy and health is mentioned, but was not included in the study as it did not meet the criteria for inclusion (as it focussed on observational evidence). It is nevertheless worth noting that it did find that literacy does relate to health, health care, hospitalisation and some chronic disease, albeit with little evidence in respect of inequalities.
- The paper did not include studies on education and health in children, but it does acknowledge that this is widely accepted to be an important arena for tackling health inequality in children, and does provide a list of policy options that should promote equity in health through the education system.

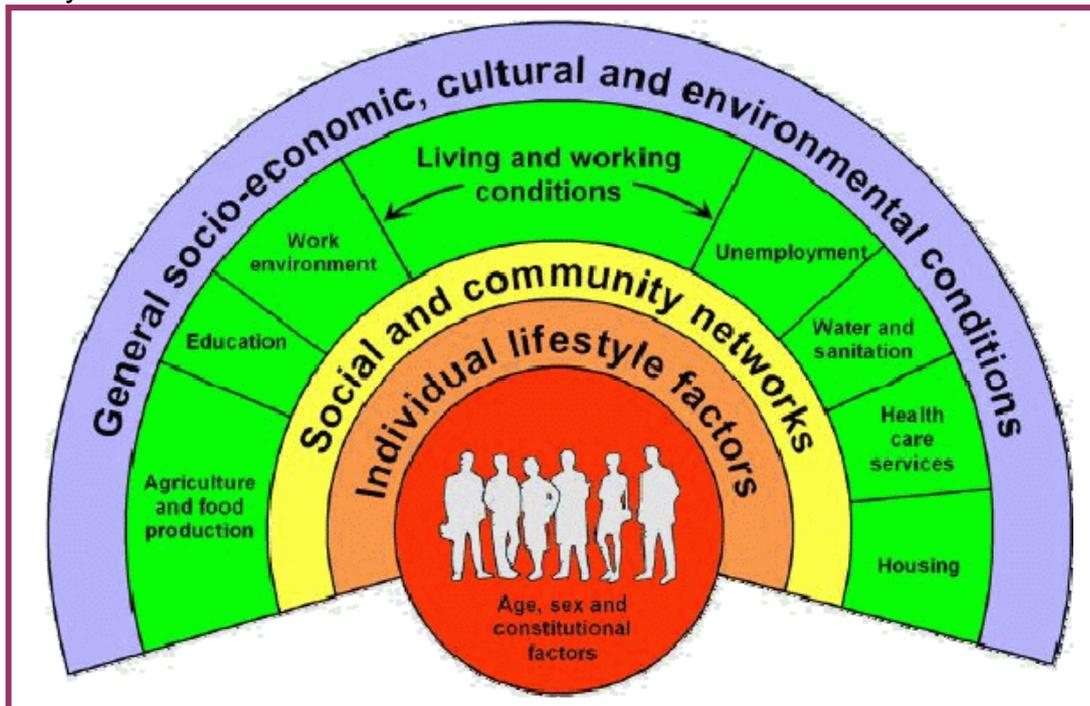
Promoting equity in health through the education system includes the following options.

- Identify and reduce economic, social and other barriers to gaining access to education at all levels, and provide life-long learning, to increase access to education and training for disadvantaged groups.
- Introduce comprehensive support programmes for children in less privileged families, to promote preschool development
- Promote efforts to reduce social segregation within the school system. This calls for policies to reduce social segregation in general between different residential areas and also for specific policies within the educational sector to strengthen the general public school system.
- Ensure that schools in less privileged areas receive extra resources to meet the greater needs for special support to children from low-income and poor families.
- Provide extra support to students from less privileged families. The goal should be that educational achievements do not differ due to socioeconomic background.
- Prevent children from becoming early dropouts from formal education and training, by early actions and support.
- Provide extra support in the transition from school to work – in particular, for those with a weak position in the labour market.
- Develop and secure comprehensive adult-education programmes for those with very limited basic education or vocational training.
- Maintain and develop Healthy Schools programmes, with a focus on equity. This, in addition to the policy options for individual schools above, could include:
 - increased attention to (and actions on) the physical and psychosocial work environment of schools, with healthy work environments in schools given at least the same attention and resources as any other work environments;
 - free healthy school lunches;
 - promotion of physical activities that also can attract obese children and that promote sound habits of everyday exercise for life;
 - improved nutritional education and cooking skills;
 - health education that takes into consideration that special efforts and approaches may be needed to reach those at greatest risk;
 - equity-oriented injury prevention programmes, where students, teachers and parents are engaged to secure a safe school (including safe transport and walking to the school).

Original source: Dahlgren and Whitehead, 2007

Methodological concerns

- One issue that may be very significant in carrying out such a review of evidence is the possibility of bias towards lower level interventions that are easier to evaluate (those which are 'downstream', small-scale and local). Large-scale, macro-level influences on health tend to be under-represented as they are so difficult to evaluate through epidemiological methods. However, these may well be the greatest overall influences on health. This creates problems with respect to the 'what works' paradigm for social and economic interventions.
- Dahlgren and Whitehead's 'rainbow' of social determinants has been used by the study to analyse the themes of interventions.



Model of the social determinants of health. Original source: Dahlgren and Whitehead, 2001

- It is the living and working conditions layer that has been the principal focus of this paper. The impact of macro-level policies that would fall in the outermost layer is a key area where more robust evidence is required.

Conclusions

- The conclusions of the study reiterate the finding that the public health evidence base is sparse, and that evidence in respect of differential impacts on different socioeconomic groups is largely absent. One aim of the study was to map such gaps in the research and make recommendations for further study.
- Housing and employment are the two areas identified from the evidence where it does appear that interventions may be able to impact positively on inequalities, although more evidence is needed.
- The workplace, in particular, is identified as “an important setting in which inequalities may be addressed”.
- The evidence for the impacts within the housing arena, whilst persuasive, is not overwhelming and may indicate that physical health improvements resulting from housing change may actually be small. This may be a profoundly significant finding for policy-makers within the national and local contexts, since received opinion is that housing is a very important determinant of health and health inequality within the population. It may be

that the impacts that present through the evaluation are insubstantial because physical health improvements take a long time to materialise, but it certainly warrants further investigation. In this respect, the study alludes to a further as yet unpublished systematic review, which may shed further light on this key area of interest.

- The paper concludes by making a number of recommendations for further research, in order to address the significant gaps in the evidence base uncovered by the review of existing studies. It is hoped that researchers will respond to the invitation to direct their resources according to these specific recommendations. They are reproduced below.

- Research aimed at understanding the *mechanisms* which link social determinants with health outcomes;
- New reviews and primary research on the social and economic returns to education;
- Primary and secondary research on the effects of educational policies on health and health behaviours;
- New reviews (requiring methodological development) of the effects of nationwide changes in health systems to improve geographic, economic or cultural access for the population as a whole, and for groups in greater need in particular;
- Primary Research on the effects of macro-level policies on health and health behaviours; in particular food policies, given their under-representation in the evidence base;
- Primary research on the effects of community-level interventions to promote food access;
- Primary research on the effects of transport policies on physical activity;
- Primary research on the effects of changes in the work environment on health and health inequalities;
- New primary research on the health effects of welfare rights and welfare to work interventions;
- Evaluations of interventions to promote access to healthcare, including lay health workers, outreach clinics and the provision of culturally-relevant healthcare;
- Primary research on the effects of traffic calming, given that existing studies are now old and mostly non-UK based; and
- Primary research on the effects of transport infrastructure on health and non-health outcomes (e.g. health, and other services), and
- Further methodological research on the conduct of effective searches in the field of health inequalities.

The paper is published on the Public Health Research Consortium website, and can be downloaded from <http://www.york.ac.uk/phrc/D2-06%20Final%20Report.pdf>.

Document produced by:
Alex Hawley
Research and Information Manager
alex_hawley@sandwell.gov.uk

 Research Sandwell
www.researchsandwell.org.uk

 Sandwell
Metropolitan Borough Council