

# Health Equity Pilot Project (HEPP)

Scientific reports on evidence based interventions to reduce socio-economic inequalities in diet, physical activity and alcohol

> Executive Summary and Background



Health

#### EXECUTIVE SUMMARY

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# Executive Summary

# Main points and recommendations

#### Diet

Although targeted interventions may indicate the responsiveness among low socio-economic status (SES) participants, they cannot claim to reduce or increase the SES differentials across all social groups (the social gradient) on a population-wide basis. One solution to this is to consider 'proportionate universal' interventions in which actions are universal, but with a scale and intensity that is proportionate to the level of disadvantage.

# First thousand days of life

The evidence in the literature is generally weak. However, there are a number of policies that warrant further consideration and exploration. These are as listed below.

#### Interventions with women of reproductive age

A very weak evidence base suggests that improvements in self-assessed motivation and reported behaviour leading to improved diet and more physical activity are achievable through counselling and educational sessions in targeted lower-income groups. The only evidence of improved adiposity measures is reported in a small-scale study involving personalised counselling over a one-year period.

#### Interventions for weight gain during pregnancy

Interventions targeted at lower-income women during pregnancy are potentially effective at reducing the level of weight gained during pregnancy and reducing the likelihood that weight gain exceeds national recommendations.

#### Interventions on birth weight

Counselling and personalised nurse advice given to lower-income, ethnic minority women during pregnancy can reduce the incidence of low birth weight and small-for-gestational age babies.

#### Interventions on breastfeeding

Peer-support and specialist counselling in group and one-to-one sessions, among lower-income mothers may be effective in producing better breastfeeding initiation and duration outcomes.

#### Interventions on complementary feeding

Professional, peer-group and other forms of counselling, health education and skills training might improve infant feeding practices. This advice needs to be reinforced through better market regulation.

#### Interventions among fathers / fathers-to-be

Of two interventions identified, one stated that the benefits of intervention were greatest for men with intermediate or higher educational level, and the second found benefits of an intervention for low education adolescents with obesity but did not differentiate the results between the male and female adolescents.

#### Diet beyond the first 1000 days

The results indicated a remarkable lack of detailed evidence. It should also be noted that while targeted interventions may indicate the responsiveness among low SES participants, they cannot claim to reduce or increase the SES differentials on a population-wide basis.

#### Child obesity interventions

School- or pre-school interventions in younger children combined with parental/family involvement and sustained over several years may have a benefit for lower SES groups, but not for older children. Changes to environmental and social barriers to adopting healthy behaviours may have benefits for low SES groups.

#### Adult obesity interventions

Environmental and fiscal measures may reduce SES health-related inequalities, such as those that facilitate physical activity, reduce exposure to advertising of unhealthy products and change price differentials between healthy and unhealthy foods. Targeted interventions may be effective at improving health behaviours, but only in the targeted group. These include weight-loss programmes targeting low SES women.

#### Sugar-sweetened beverages

Multicomponent school- and family-based interventions may achieve a shortterm narrowing of the SES gap in consumption among children. SSB taxation appears to be more effective in real-life situations although unintended consequences, such as substitution with other unhealthy products, should be considered.

#### Dietary patterns

Narrowing of SES differentials in dietary behaviour may be achieved through price adjustments, for example combined taxation and subsidies to encourage switching to healthier products, or the provision of free healthier foods at schools.

# Fruit and vegetables

The provision of free fruit in schools may achieve a short-term narrowing of the SES gap in consumption levels among children. Maintaining family income may prevent a widening of the SES gap in consumption, at least in adults, by avoiding the adverse impact on affordability of food products that is associated with loss of income.

# Trans fats

Reformulation may achieve a narrowing of the SES differentials in trans-fat consumption.

#### Salt

Reformulation can have a population-wide effect and can narrow SES differentials in consumption.

# Marketing

Interventions in marketing would benefit all groups without affecting SES health-related differentials. Interventions to reduce TV advertising should have greater impact in lower SES groups. Colour-coded packaged food labelling may also benefit lower-income purchasers.

# Physical activity

An EU-wide approach to increasing physical activity without increasing health inequalities should contain the following components:

- A focus on creating high quality physical environments, emphasising the regeneration of deprived communities, and the development of infrastructure that prioritises walking and cycling over motorised transport
- Universal school-based interventions that take a `whole school approach' to improving the health and wellbeing of students
- Workplace interventions in areas of greatest need and among employers of people from lower socio-economic groups
- Counselling in primary care, with an emphasis on people from lower socio-economic groups and deprived communities.

# Alcohol consumption and harm

The best evidence is for policies which affect affordability (e.g. minimum pricing policies), which have the potential to narrow the socio-economic gap in alcohol-related harm and have been deemed highly cost effective.

There is limited, mixed evidence on the effectiveness in reducing SES differences by:

- restricting outlet density
- screening and brief interventions
- skills-based school education programmes

# Introduction

The intention of the Health Equity Pilot Project (HEPP) is to maintain focus on and mainstream action on health inequalities. This forms a basis for and is complementary to work on developing the new Joint Action on Health Inequalities in 2017. This is being achieved by focusing work on health inequalities related to the major policy themes of nutrition, physical activity and alcohol.

Evidence reviews undertaken by the project provide an update on the scientific evidence on the status of health inequalities in Europe relating to the following determinants of health:

- Nutrition and diet in the first 1000 days
- Nutrition and diet beyond early years
- Physical activity (and sedentary behaviour)
- Alcohol consumption and harm

In each case, reviews of the literature were conducted on the **impact and efficiency of policies and actions** on health inequalities related to these lifestyle determinants, including evidence on the **effectiveness and efficiency of interventions** in reducing inequalities as well as the existing **behavioural economics** literature. **Topics covered** 

Nutrition and diet in the first 1000 days

- Socio-economic status and breastfeeding up to 6 months
- Socio-economic status and childhood obesity at different ages

Nutrition and diet beyond early years

- Socio-economic status and adult obesity
- Socio-economic status and salt (sodium) consumption
- Socio-economic status and trans fats consumption
- Socio-economic status and sugar-sweetened beverage consumption
- Socio-economic status and fruit and vegetable consumption

Physical activity (and sedentary behaviour)

- Socio-economic status and physical (in)activity
- Socio-economic status and access to green spaces

- Socio-economic status and active travel (walking and cycling)
- Geographic indicators of deprivation and adult obesity
- Geographic indicators of deprivation and childhood obesity
- Geographic indicators of deprivation and physical (in)activity
- Geographic indicators of deprivation and traffic speed (and traffic calming measures)

Alcohol consumption and harm

- Health impact of alcohol
- Patterns of behaviour
- Evidence for interventions that reduce inequalities in alcohol-related harm

#### Social determinants of health inequalities

There are marked differences in the social determinants of health across EU Member States and inequalities in health between social groups based on these determinants. In 2008, the World Health Organization (WHO) Commission on Social Determinants of Health (CSDH)<sup>1</sup> concluded that social inequalities in health arise because of inequalities in the conditions of daily life and the fundamental drivers that give rise to them: inequities in power, money and resources. They argued that social and economic inequalities underpin the determinants of health: the range of interacting factors that shape health and well-being.

Recent analyses of health inequalities and their causes in Europe have supported the findings of the CSDH1 that social inequalities in health arise because of inequalities in the conditions of daily life and the fundamental drivers that give rise to them. These include associations between risk factors for health, including tobacco use and obesity<sup>2</sup>, and socio-economic circumstances<sup>3,4</sup>. This reflects the influence that lack of control, stress and reduced capabilities — all strongly associated with social disadvantage — have on both health and health-related behaviours in lifestyles and behaviours, such as the proportion of people smoking or who are overweight or obese<sup>2,5,6,7,8,9</sup>.

#### Policy context

The European Commission issued a major communication on health inequalities in 2009 'Solidarity in health: reducing health inequalities in the EU'<sup>10</sup>. This followed a resolution, passed by the World Health Assembly<sup>11</sup> (Resolution WHA62.14) on reducing health inequalities through action on the social determinants of health and urging its Member States to take action.

The Commission communication outlined the extent of the challenge of health inequalities and set out a range of actions to address them. This initiative has

been taken forward by the Commission and Member States in a number of ways — including joint action by Member States and the  $EU^{12}$ .

Wider recent developments have included the publication of a health strategy for the WHO European Region, Health 2020, which is built on the two pillars of improved governance of health and addressing the social determinants of health<sup>9</sup>.

# Literature searches

The literature searches that form the basis for this report focused on data and literature from the last 10 years, principally in English. Key documents in other languages were however identified - from research, snowballing, citation searches, or discussion with experts. We have additionally sought expert views on grey literature from those known to the policy leads.

#### Findings

In general, the results of literature searches indicated a remarkable lack of detailed evidence on the effectiveness of interventions in addressing inequalities, even where there is strong evidence for overall health improvement, or at least having a positive influence on behaviour change (such as exists for the WHO "best buys"). Most interventions or policies related to diet, physical exercise and alcohol harm do not have the specific aim of reducing SES differences Despite the fact that many studies of interventions do collect data about the participants' economic, educational or occupational status, they tended to report their data after controlling or adjusting for SES, thus providing no evidence of differential effects. Even if they are effective at a population level (for example, restricting alcohol advertising).

It should also be noted that targeted interventions which are undertaken only with lower SES groups may have an impact which the authors interpret as reducing the SES health gap or the SES health gradient. This may be true, but if the same intervention were to be rolled out equally across SES groups, the response of higher SES groups might exceed that found in the lower SES groups, which would widen the gap or increase the gradient.

People from higher socio-economic groups tend to engage more in health interventions, for a number of reasons, including being more likely to hear about available interventions, having greater agency, or having fewer barriers to becoming involved and maintaining that involvement. Thus targeted interventions may indicate effectiveness among low-SES participants but cannot claim to reduce or increase the SES differentials on a population-wide basis. For example, one evaluation of targeting school-based skill development programmes in more deprived communities reported effectiveness in lower socio-economic groups only. One solution to this conundrum may be 'proportionate universalism' in which actions are universal, but with a scale and intensity that is proportionate to the level of disadvantage13.

It also needs to be recognised that unhealthy behaviours tend to cluster in the same individuals and social groups, with health impacts likely to be greater than would be predicted from the combination of individual risk factors. Single factor interventions are less likely to be effective in these groups than more holistic approaches to change the causes that lead to the combination of adverse behaviours.

Specifically, in regard to alcohol, individuals in lower SES groups report consuming equivalent or even less alcohol than those in higher SES groups, though rates of alcohol-related morbidity and mortality in lower SES groups are higher.<sup>14</sup> This has been referred to as the "alcohol harm paradox".<sup>15</sup>

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