ESC says 50 percent of CVD deaths in Europe could be avoided with proper regulation

July 24 2012

Up to 50% of deaths from cardiovascular disease in Europe could be avoided by implementing population level changes such as taxation and regulation of advertising. Population level prevention will produce greater impacts on CVD than individualised approaches, according to the European Association for Cardiovascular Prevention & Rehabilitation (EACPR) of the European Society of Cardiology (ESC).

Cardiovascular disease is still the main cause of death in Europe, leading to more than 4.3 million deaths each year and costing at least €190 billion. But 80-90% of all cardiovascular disease is preventable, according to the 2012 joint European Societies guidelines on cardiovascular prevention (1).

Societal factors such as advertising, salt and fat content of processed foods, and agricultural policies which support unhealthy diets have created a harmful environment which induces unhealthy behaviours. Until now, efforts to prevent cardiovascular disease have focused on changing individual's lifestyles but the impact has been minimal.

The EACPR has therefore recommended a paradigm shift in CVD prevention towards a population approach. Writing in the *European Journal of Preventive Cardiology*, the EACPR's official journal, they recommend population-based interventions from local and national governments aimed at unhealthy diets, physical inactivity, smoking and

alcohol (2).

There is increasing evidence that small changes in the whole population can have a larger impact on CVD and save more lives than lifestyle changes in individuals at high risk. Cardiovascular mortality declined rapidly in the Czech Republic and Poland after the breakup of the Soviet Union when subsidies on unhealthy animal fat were removed and subsidies on vegetables were introduced. Similarly, smoking bans rapidly reduced the number of heart attacks.

"Population interventions make the environment healthier and change happens automatically whereas with an individual approach you need an active response," said Professor Simon Capewell (UK), co-author of the paper and a member of the ESC's European Affairs Committee.

Individualised approaches to smoking require motivating addicts to quit, whereas a smoking ban changes the environment and nudges people in the right direction. "If you ask a minor group of the population with bad habits or unhealthy lifestyles to change them, it's difficult because the surroundings push them in another direction," added Professor Torben Jørgensen (Denmark), first author of the paper and a member of the EACPR.

Individualised prevention also exacerabates social inequalities in health whereas structural changes aimed at the population decrease them. Structural changes influence the whole population and because levels of disease are higher in disadvantaged groups, they will benefit from bigger reductions. "The relative inequality may stay the same but the absolute inequality decreases; it's just simple mathematics," said Professor Capewell.

On the other hand, individual prevention relies on each citizen to take action. Affluent, educated people generally find it easier to make

behavioural changes because of self confidence, self efficacy (the belief that they can do something), education, disposable income and time, and having health as a top priority. Professor Jørgensen said: "In general, those with the best education and highest income will have more intellectual and financial resources to make the changes than poor people with poor education. It also may be easier for industry to nudge poor people with poor education in the wrong direction of buying unhealthy products."

The authors argue that responsibility for structural changes at population level rests with politicians, administrative authorities and health professionals at international, national and local levels. Strategies include taxation, subsidies, statutory regulation and 'nudging' (pushing mildly) by setting the 'default' to healthy (see box of recommendations). The default is the option that requires people to do nothing; national and local authorities can regulate society to the more healthy default. The authors calculated that up to 50% of deaths from cardiovascular disease in Europe could be avoided if their recommendations were followed.

Recommendations: • Healthy dietary habits will be supported by changes in agricultural policies, tax on products with free sugar and saturated fat and subsidies for fruit and vegetables, reduction of salt and trans-fatty acids in processed foods, clear labelling of foods, and limiting advertising for junk food. • Completely smoke-free environments are the only way to protect non-smokers. Smoking and second-hand smoking can be regulated by taxation, restrictions in sale and use, banning advertising, plain packaging, and warning labels. • Physical activities should be integrated in daily life by subsidies to public transport and re-allocating of road space to cycle and footpath lanes. Changes in schools, worksites, and built environment can make physical activity a more natural part of daily life. • Alcohol intake can be reduced by taxation, low availability, regulation of advertising, and low social and legal tolerance of drink driving.

Professor Jørgensen said: "Health professionals should help politicians to make the right decisions, but it's only politicians who can actually make these major structural change in society."

In the paper the authors state: "Opponents allege that the 'nanny state' hinders the free choice of people, but the fact is that people today are nudged in the wrong direction by corporations' de facto setting of the default option. Yet corporations do not have responsibility for population health – this is the responsibility of governments."

While the nanny state ensures that the population has clean water and air, sanitation and safe roads, it also acts in ways that damage population health. Professor Capewell said: "Much of the nanny state is manipulated by industry which leads to the nanny state generating very cheap junk food through subsidies at Common Agricultural Policy level, and an environment with advertisng and marketing seducing us to buy junk food and sweet drinks. In this case the nanny state is malignant rather than benign and we're looking to government to redress the balance."

When health authorities spend €1 on health information, the industry spends ten times more on advertising unhealthy products. Governments can redress the balance by regulating advertising on junk food, soft drinks and alcohol.

Governments should use the income from increased tax on fat and sugar to subsidise fruit and vegetables, enabling people to eat more healthily at the same cost. They also need to avoid relying on income generated from taxes on tobacco. "Many governments earn a lot of money on this taxation which could make them reluctant to introduce strategies to reduce smoking," said Professor Jørgensen.

"Kids are a good way to introduce the issue because even right wing governments recognise that they have a duty of care to children," added

Professor Capewell. "Local authorities can pass local statutes to stop fast food outlets being built by schools and can pass regulations so that kids don't get offered junk food in the school breaks."

More information: 1 European Guidelines on cardiovascular disease prevention in clinical practice (version 2012): The Fifth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts) * Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR). Eur Heart J. 2012;33(13):1635-1701.

2 Population-level changes to promote cardiovascular health. *Eur J Prev Cardiol.* 2012 May 9. [Epub ahead of print]

Provided by European Society of Cardiology