Pekka Puska
Director General, National Institute for Health and Welfare (THL), Finland
President, World Heart Federation (WHF)
Vice President, Int. Ass. of National Public Health Institutes (IANPHI)

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THE SUCCESS STORY OF THE NORTH KARELIA PROJECT. WHAT HAVE WE LEARNT ABOUT THE PREVENTION OF NON-COMMUNICABLE DISEASES

Noncommunicable diseases (heart disease, stroke, cancer, chronic respiratory diseases and diabetes), are by far the leading cause of mortality in the world, representing 60% of all deaths. Out of the 35 million people who died from noncommunicable diseases (NCDs) in 2005, 17.5 died of cardiovascular disease, half were under 70 and half were women.

Finland had in the early 1970's the highest mortality rates of CHD in the world. Comprehensive community and population-based intervention, first in the province of North Karelia, and later in the whole country was carried out to reduce the population levels of the risk factors identified in the classical epidemiological studies. This led over years to major positive changes in diet and smoking, and to reduction of the CHD risk factor levels (serum cholesterol, blood pressure) of the whole population. The risk factor reductions were associated with dramatic reduction (over 80%) in age adjusted CHD mortality rates, major reduction in total mortality and increase in life-expectancy – thus with a major improvement in national public health.

The Finnish experience gives many valuable experiences on the question, how to apply the scientific evidence on population level for successful NCD prevention. In spite of all the progress with clinical treatments, the key issue of public health is prevention – i.e. how to influence national risk factor levels. Successful national prevention programmes need to involve good research and monitoring, health services (especially primary health care), educational institutions, private sector, civic society, media and political decision makers. Prevention programmes should help people to make healthy changes and ultimately promote such societal changes that make the "healthy choices the easy ones".

It is often asked, what has been the most important component of the successful action in Finland. There is no "magic bullet". Comprehensive action is needed, with correct and relevant theory frame and practical, flexible intervention. Concerning the theory base, both correct epidemiological/medical and behavioural/social frameworks are needed. The former means that we must target the most relevant risk factors and risk related behaviours. The latter means that in changing lifestyles relevant behavioral/social frameworks must be observed.

At the same time it is important to notice that correct theory alone is not enough. There must be enough practical work for the implementation, i.e. the intervention must reach people in many ways in their everyday living conditions. One could argue that currently there are plenty of good strategies and programme plans, but the implementation is weak. Thus the "implementation gap" is one of the main challenges.

The medical evidence for prevention of cardiovascular diseases and many other major NCDs is strong. These diseases are to great extent and to late in life preventable diseases. Population based prevention is the most cost-effective way and also in many cases the only affordable option for major public health improvements. For prevention of NCDs and for promotion of health a crucial factor is lifestyle change –

for CVD especially dietary changes. Such changes can in relatively short time have major impact and in the long run lead to dramatic improvements in public health.

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