
Summary report of a WHO Mission to
Estonia
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to evaluate the Estonian National Strategy for the Prevention of
Cardiovascular Diseases 2005-2020

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1. Introduction

The Estonian National Strategy for the Prevention of Cardiovascular Diseases (CVD) 2005-2020 was approved by the Government on 14th February 2005. The overall goal of the strategy is to achieve a permanent decrease in premature cardiovascular (CVD) morbidity and mortality among the population. The first activity plan is for the period 2005-2008 and thereafter the activity plan will be extended by four year cycles.

The Ministry of Social Affairs (MoSA) requested an evaluation of the CVD strategy during 2006-07 within the framework of the Biennial Collaborative Agreement signed between the Ministry and the World Health Organization Regional Office for Europe. This first evaluation was carried out during the period November 2006 – February 2007 and comprised review of materials, interviews and site visits during a mission 20-22 November 2006. A full draft report was delivered to MoSA on 18 February 2007. Following review and discussion, this full report was revised and this shorter summary report was prepared.

2. Findings and Recommendations

1. Coordination

An intersectoral, multi-stakeholder, multi-disciplinary programme such as this requires clear, sustainable leadership and coordination. Someone needs to have an overview of all the things being carried out under the umbrella of such a strategy and who is contributing what. Such a person would need to understand the full breadth of a comprehensive CVD prevention programme and what constitutes a contribution to CVD prevention; without this, it would be difficult to have an overview of relative strengths, need for shifts and to assess what is missing.

The Strategy has been successful in bringing together the input of a number of actors and contributions. Different bodies accept responsibility for implementation of different Areas of the CVD strategy. There are separate sources of funding for health promotion activities and health care and this can be seen as an advantage as they are not apparently in competition for the same source. The piecemeal approach to funding can also be useful in that each partner contributes and controls its own input. Further the strategy acts a key reference point for policies and actions – it “legitimises” activities.

While there are advantages in different bodies having different roles, there can be a risk that efforts are “compartmentalised” with opportunities for synergy and “cross-fertilisation” being missed. The disadvantage of separate sources of funding can be that common activities are not funded nor strategically directed. It can also mean that stakeholders do not see the overall budget from all sources for the CVD strategy implementation which can be useful for maintaining the strategic overview and progress over time.

Implementation of the strategy would benefit from having a named focal point or coordinator in charge to strategically drive and coordinate this multi-stakeholder effort. A clear task would be to better integrate the health promotion, disease prevention and health care components of the CVD strategy. There may also be an opportunity to draw in those stakeholders or groups who are so far not involved.

Recommendation 1: Assign a clear leader or named focal point responsible for overseeing, coordinating and strategically driving the CVD strategy and its implementation.

2. Strategy Council and Partnership-working

There were many positive comments about the CVD Strategy throughout the interviews, not least for its achievement in bringing together many different pieces of work under one umbrella. The strategy was appreciated for contributing to good collaboration between Ministries, for linking different strategies and developments together, and for developing common ground.

The representatives of Ministries that were interviewed perceived that they had a role in the implementation of the Strategy and could see their contribution towards it. The collaborative work for the CVD Strategy appeared to lay a good foundation for intersectoral working for other common issues. Health was now a consideration of other Ministerial strategies.

Overall, the bringing together of existing, potentially parallel activities into a more coordinated approach was seen to be a more efficient use of resources. An achievement of the strategy was seen to be that it had brought together those relevant activities active in Estonia to avoid “parallelism”. The inter-Ministerial working, promoted through the intersectoral Strategy Council, had served to reduce potential duplication and to fund activities of mutual benefit from different budgets.

Building on these successes, the Strategy Council could be strengthened with the potential involvement of other Ministries. Ministries responsible for transport, environment, defence and justice are all potential partners.

The partnership base in general could be strengthened and efforts made for better NGO engagement or private sector involvement. For example to be able to meet food and health targets (such as reducing the salt content of processed food), food producers should be approached to reformulate popular foods.

Recommendation 2: Broaden membership of the Strategy Council to include other relevant actors such as other ministries, other professional groups and the private and voluntary sectors.

3. Comprehensiveness

Designing a programme to prevent heart disease and stroke requires an understanding of the development and course of cardiovascular disease and the points at which effective interventions can be made. Unfavourable social and environmental conditions give rise to the adoption of adverse behavioural /lifestyle patterns (tobacco use, unhealthy diet, physical inactivity) that may lead to the development of the major biological risk factors (obesity, hypertension, dyslipidaemia, raised blood sugar/diabetes mellitus) for heart disease and stroke. Next, first events, many of which are fatal occur in the population. Survivors are at risk for recurrent events, disability, decompensation and death. Intervention can be made at any point in this process and efforts are required across the full spectrum of cardiovascular health promotion and disease prevention with consideration of primary, secondary and tertiary prevention opportunities – although the greatest emphasis should be on population-level interventions. The primary tool for implementing a population strategy of cardiovascular disease prevention is a community-based programme. This uses education and environmental change to promote and facilitate the lifestyle and behaviour change necessary, backed up by facilitative policies, legislation and regulation.

The overall goal set for the Estonian cardiovascular disease prevention strategy is comprehensive, that “the premature CVD morbidity and mortality of the population will decline steadily”. The strategy is to be implemented through five strategic areas (physical activity; nutrition; smoking; health care; dissemination of information and securing local capacity), each with its own strategic subgoal. Achievement of the goal and its outcome indicators would require a comprehensive CVD prevention programme such as that outlined above.

Overall, the scope of the strategy appears intended to cover the components of a comprehensive cardiovascular prevention programme aiming to reduce mortality and morbidity, however, the areas relating to treatment and rehabilitation within it are the least developed within the document itself. As mentioned earlier, there are advantages in different bodies having different roles or contributions to the implementation of the strategy but there also needs to be a systematic approach for ensuring, monitoring and reporting that all components of a CVD prevention programme are in place and functioning. All components of a comprehensive effort should be visibly linked.

Production of a common annual report that brings together the separate efforts of different stakeholders and the health promotion, disease prevention and health care components of the CVD strategy could have the benefit of making common efforts more visible. At present, there are a number of separate reports which contain relevant information; for example those produced by the National Institute for Health Development and the Estonian Health Insurance Fund. There is an advantage in producing a report, at least periodically, that brings together the full range of activities carried out in the name of CVD prevention in Estonia. This helps to maintain the complete picture, the interdependence of some activities in an integrated approach, the continuum of prevention. It also allows a system of checks and balances to enable later readjustments and a refocus to be made between activities when needed.

Furthermore, as the strategy moves to its next phase, it would be useful to review data from a wide range of sources to assess needs and priorities and inform the planning across the whole spectrum of possible interventions. In addition to the epidemiological data on mortality and morbidity, there are other useful data for assessing needs and situation analysis when planning a CVD strategy such as case-fatality rates, use of health services, prescriptions etc. It can be seen from other reports that some of this data exists and it could be brought together to inform the programme as a whole.

Recommendation 3: As the strategy moves towards the end of its first four years of functioning, to take the opportunity to revise it towards a more comprehensive programme that better integrates the health promotion, disease prevention and health care efforts and more systematically covers all the points of effective intervention

4. Monitoring and evaluation

A surveillance system to support CVD prevention needs to track progress towards achievement of goals in a systematic manner. Using the framework of a comprehensive programme for CVD prevention, the system would essentially be monitoring progress along points of intervention: social and environmental conditions; behavioural /lifestyle risk factors (tobacco use, unhealthy diet, physical inactivity); biological risk factors (obesity, hypertension, dyslipidaemia, raised blood sugar/diabetes mellitus); early identification and treatment of heart attacks and strokes and prevention of recurrent events.

Systematically going through the elements of a surveillance system for a comprehensive CVD prevention programme can be useful to identify what is visibly in place in Estonia and the apparent gaps. Such an exercise can also demonstrate the value of bringing together multiple sources of information into one place for reporting on progress. At present, all relevant information on monitoring and evaluation is not brought together into one single report for evaluation of achievement of objectives.

There is much reporting of activity within the implementation of the CVD strategy. For example, health promotion professionals report through the Health Councils to the County Governments

on a quarterly basis, and they, in turn, report to the NIHD on a quarterly basis. In terms of monitoring overall progress in implementation, more focus should be placed into measuring outputs and outcomes that provide feedback on behaviour change for example.

Routine data collection opportunities are under-utilised. Data already collected is not being visibly linked into the CVD prevention effort, for example the prescribing data. Better use should be made of data showing variations in health across geographical areas, subgroups of population etc in order to better prioritise interventions

Recommendation 4: Strengthen the monitoring and evaluation framework so that it systematically covers all aspects of a comprehensive programme and draws together key sources of information into a common report.

There is capacity for further analysis and further use of already available data to inform prioritisation, targeting of interventions and planning. Local priorities are apparently being assessed in different ways, for example some apparently do SWOT analysis, some community capacity index, some have local health profiles. The local level was interested in receiving more locally applicable data, of which some should be soon available from the national surveys, but there is also the issue of better equipping local actors to use data in their own planning and evaluation. While data from the Health Behaviour survey, the Health Behaviour of School-aged Children survey and Health Insurance Fund data would be available shortly at county level, there is also a need to strengthen capacity at the local level in use of this data as evidence for priority-setting and planning.

Universities and academic support seemed relatively under-utilised and those active in implementation need support in evaluating their own efforts, as well as support from some standard approaches. Greater use could be made of universities to support local research, monitoring and evaluation. Qualitative methods should be utilised to better understand local attitudes and barriers to behaviour change. While voluntary organisations and those applying for funds have to “prove positive results”, there may be insufficient time to evaluate for impact and they are reliant shifts in attitudes and participation.

Recommendation 5: Support local efforts to plan, monitor and evaluate work in ways that are useful for community action.

The best indicators of a fall in CVD mortality will be a decrease in mean serum cholesterol levels and in mean blood pressure measurements. Establishing such data should be a priority in a future comprehensive surveillance system in Estonia.

There are no subgoals in place relating to reductions in prevalence of the major biological risk factors and there are no routine systems in place to measure and report on these. As far as could be ascertained, neither national nor subnational population surveys of biological risk factors take place and none of the existing behavioural surveys incorporate physical or biochemical measurements. It is essential that biomedical data is made available through a randomised sample of the entire Estonian population. Measurement of biological risk factors is necessary but missing.

Recommendation 6: Set up a national system for monitoring biological risk factors. A national population-level survey of biological risk factors is recommended. It may be possible to add physical measurement and biological markers to existing behavioural risk factor surveys at periodic intervals.

5. Disease-specific approach

Over half (51%) of deaths in Europe are caused by cardiovascular disease: it is the leading cause of death and, together with deaths from external causes, the main contributor to the almost 20 years difference in healthy life expectancy between countries of eastern and western Europe. Up to 80% of people with diabetes will die of cardiovascular disease. In tackling noncommunicable diseases (NCD) as a whole, it can make sense to have a specific focus on CVD.

Nevertheless, population-based prevention and screening for high risk groups can also be a means of addressing a number of NCD and their common risk factors at the same time. Many noncommunicable diseases share risk factors, underlying determinants and points for intervention. These leading risk factors are common to many of the leading conditions in Europe. Each of the seven leading risk factors in Europe, for instance, is associated with at least two of the leading conditions and, in return, each of the leading conditions is associated with two or more risk factors. Furthermore, in many individuals, particularly the socially disadvantaged, risk factors frequently cluster and interact, often multiplicatively.

The strategy does not address the individual characteristics or different requirements of specific diseases beneath the CVD umbrella such as heart disease and stroke. Although this is a CVD strategy, stroke is rarely mentioned and its specific needs not addressed; similarly the relationship between diabetes and CVD is under-utilised. In terms of population-level interventions and primary prevention, many of the risk factors are shared and there will be common interventions. A more close analysis of mortality and incidence data and trends for ischaemic heart disease and stroke for example could enable a fuller understanding of the trends and their implications for policy and interventions, for example. Furthermore, moving into care and the prevention of recurrence and prevention of disability, some important differences may emerge which require particular attention and, crucially, different partnerships, professional and patient groups, to be involved in implementation. Recognising the similarities and the differences between the diseases and the partnerships and services involved in implementation can be useful now for heart disease and stroke and also later as a national cancer programme receives further attention.

Lessons learnt from the CVD strategy can be applied to other upcoming disease-specific programmes such as cancer to promote a more comprehensive, integrated approach across the Noncommunicable disease groups as a whole. Indeed, when strengthening action on CVD, it would be useful to consider how systems put in place for CVD will benefit a wider group of noncommunicable diseases, for example, systems for monitoring quality of care, chronic care delivery mechanisms.

Recommendation 7: Differentiate between heart disease and stroke and consider the specific needs for prevention and control of stroke, particularly in terms of care, as well as the specific actors who need to be involved

Recommendation 8: Apply lessons learnt from the CVD strategy to other upcoming disease-specific programmes such as cancer so that a comprehensive, integrated, systematic approach is taken.

Recommendation 9: When strengthening action on CVD in the light of this and other reports, consider how systems put in place will benefit a wider group of noncommunicable diseases, for example, systems for monitoring quality of care, chronic care delivery mechanisms.

6. Tackling inequalities in health

Attention should be focused on reducing health inequalities. Males between 20 and 64 years of age in semi- and unskilled manual occupations run a three times higher risk of premature death from CVD compared to those in professional and managerial positions. Evidence of the impact of social gradients and health inequalities is overwhelming. Interventions built on the implementation of policies tackling the wider health determinants like economic growth, income inequalities and poverty, as well as education, the working environment, unemployment and access to health care, represent the main options for substantial health gains. This broad range of population-wide measures requires broad societal efforts, with both health and non-health sectors working together.

It is important to ensure that when interventions are applied they do not further increase inequalities in health. When improvements to health do occur, the benefits are unevenly distributed within society, with few exceptions. When all groups in society are exposed to some extent to health interventions, those in higher socioeconomic groups have tended to respond better and benefit more. Mortality rates are declining proportionally faster in the higher than lower socioeconomic groups, particularly for CVD, widening further the differences in life expectancy between the two groups.

The Estonian CVD Prevention Strategy document does not explicitly tackle inequalities in health. Although minority groups exist within the Estonian population (such as migrants of Russian origin) these are not explicitly targeted in the strategy, although it is noted that a number of materials are available in both Estonian and Russian.

There are rich sources of data in Estonia which could support targeting of efforts and monitoring impact across different population groups. The Health Behaviour among the Estonian Adult Population, for example, routinely gathers relevant data such as educational status, although it was not apparent that this was being utilised in prioritisation and planning. Disaggregation and utilisation of data according to gender, socioeconomic class etc would assist in targeting action and measuring impact of different groups in society.

Some activities of the Strategy, in their present form, might contribute to an increase in inequalities in health. If health education methods are overutilised and delivery is measured through the distribution of materials alone, this can increase inequalities as those on higher incomes are likely to make behaviour change before those from more vulnerable groups.

Recommendation 10: Be aware that a number of measures already in place may actually increase inequalities in health and seek to address this.

7. Targeting efforts

In preparing the next strategic plan, it would be good to review the epidemiological situation and needs assessment. Since the strategy was prepared in 2004, new information has come to light which would be useful for targeting efforts. Examples are the report from the stroke registry.

In addition, valuable information that could be gained from disaggregation of data according to socioeconomic status and geography as well as more careful analysis of age /sex trends is not referred to, and does not seem to be influencing strategic subgoals, although it appears to exist in studies such as the Health Behaviour among Estonian Adult Population 2004.

There was no clear evidence that the strategy was targeting any inequalities in health and responding to specific needs of the population. Although the Health Behaviour among the

Estonian Adult Population routinely gathers relevant data such as educational status, it was not apparent that this was being utilised in prioritisation and planning. Comments have already been made on how the activities of the Strategy might contribute to an increase in inequalities in health.

Recommendation 11: Strengthen the collection and analysis of data that is useful for prioritisation, targeting efforts and planning. This may require less time being spent on monitoring activities and more time in selective evaluation.

8. Strengthening action on diet

As has previously noted, the greatest impact on reducing CVD mortality and morbidity in Estonia is likely to be through improving nutrition in addition to tobacco control.

The emphasis of the Estonian CVD strategy is rightly placed on policy, legislation (e.g. Tobacco Act), community interventions and population-wide prevention of risk factors through interventions to influence smoking, nutrition and physical activity. However, there is greater potential impact to be achieved through population approaches to reduce cholesterol and hypertension through targeting salt and saturated fats, for example.

Thus it is critical that an outcome indicator is added with a target based on serum cholesterol linked with saturated fat consumption, most of which derive from animal sources (for example dairy products and meat). Further it may be appropriate that the salt Outcome indicator is related to overall salt intake (by grams) rather than “the proportion of people using common salt” which seems unnecessarily vague. Intake of salt is directly linked to levels of hypertension, a key risk factor for CVD.

Overall therefore, the relationship with the Ministry of Agriculture is very important in the future implementation of the Strategy. There has been particular emphasis on fruit and vegetables. There has been much less emphasis on the more critical heart health dietary issues: salt and saturated fat. There needs to be systematic approaches to tackling these two issues, particularly given that the food and dairy industry are involved. One example could be in the provision of only low fat or skimmed milk through the school milk programme. At present 2.5% fat level milk is used in the Estonian school milk programme; in comparison, in England, milk is widely available at 1.7% and 0.2% and full fat milk is no longer available in schools.

Although Measure 3 mentions the “systemisation and implementation of a labelling system for foodstuffs” there is no reference to it in the National Strategy Annual Report 2005. This should be a higher priority in the future as it is likely to encourage food producers to reformulate their products to reduce levels of saturated fats, salt and sugars at the same time as better informing producers, caterers, food merchandisers and the public in general to improving eating habits.

It is good to see that there is an appropriate focus on children and young people as important lifestyle choices pre-determining health risks at adult age are made during childhood and adolescence. Activities are already underway to improving standards, training and quality control in the catering industry on choosing ingredients and improve nutritional standards in schools.

Further progress could now be made on:

- Increased public awareness of the need to reduce saturated fats and salt in their diets;
- Adoption of a single, simple government approved food labelling system;
- Work with the food industry and the Ministry of Agriculture to reformulate products reducing saturated fats, salt and sugars;
- Introducing restrictions on advertising ‘unhealthy’ products to children;

Finally, it is critical that a clear position is taken to understand where industries such as agriculture and major pharmaceutical companies can seek to influence policy and to ensure that this potential influence is resisted. Internationally, the food industry has long sought to resist governmental pressures towards moderating the high levels of salt, saturated fats and sugars in their products. These issues will become more important as other new health challenges such as obesity appear. Some change is only possible through state involvement (through legislation for example) and this is particularly important with regard to children, where the state has a particular responsibility to protect.

Recommendation 12: Strengthen the population approach to reducing cholesterol and blood pressure with focused action on salt and saturated fats through engagement with food producers, and the agricultural sector amongst others.

9. Strengthening action on physical activity

The Strategy notes that the physical activity of the population is inadequate mainly amongst adults and the exercise habits of the young people need to be shaped. It recognises that not only sport but also simple activity is important for health. It can see that a range of measures are needed including raising awareness of the importance of physical activity, physical education in schools, development of a supportive environment and infrastructure, and a transport development strategy that favours walking and cycling.

The Estonian Strategic Development Sport for All Programme 2006-2010, makes explicit reference to the CVD Strategy and funds have been made available to support youth sports organisations and through the administration level of counties for construction of sports facilities. The programme of the Ministry of Culture links to the Ministries responsible for transport and environment and promotes physical-activity promoting environments.

A Physical Activity Action Plan could be beneficial bringing broader scope, linking Ministries and in ensuring that there is due emphasis on increasing daily physical activity in everyday life. An over-emphasis on sport can be excluding of certain groups in society and can increase rather than decrease inequalities in health opportunity. There need to be measures in place to prevent this happening. An overall strategic plan for this Area could also be useful in indicating how and when the full range of physical activity measures originally proposed in the CVD strategy document will be brought into action, the relative speed of implementation across measures and an indication of the rationale for prioritisation. Some activities will need longer to achieve and need to be put in place now.

Internationally, interventions promoting walking may be more successful than those requiring attendance at a facility. Community wide campaigns, school based interventions and individually adapted health behaviour change programmes may be effective together with transport policies promoting walking and cycling. Conditions in the built environment, such as recreation spaces and transport systems, can both negatively and positively affect participation in physical activity. For example, walkable neighbourhoods allow people to make travel on foot an enjoyable part of their everyday lives. Achieving this may require broader intersectoral working and empowerment of the role of local government. The Health Councils and Local governments offer considerable opportunities for local engagement and activities. It may also need the greater engagement of the Ministry responsible for transport and an integrated transport plan that reduces the reliance on car use and promotes walking and cycling.

Recommendation 13: Broaden the public health approach to better address the social, economic and environmental determinants with greater engagement of the key sectors such as transport, economy, urban planning and environment.

The MoSA has a key advocacy role in making the case for investment in health in the strategies of other sectors and this could be possibly further utilised. There was still potential for increasing the health focus of other sectoral strategies and to assessment of their impact on health through systematic use of health impact assessment for example. This was hardly mentioned at all and not as a tool for promoting intersectoral working and health in all policies. Agriculture is a key issue and food production issues are relatively untapped.

Recommendation 14: In support of this, strengthen the advocacy role of the health sector at national and subnational levels in making the case for action (working with the voluntary sector where appropriate) and in promoting the use of health impact assessment as a tool for increasing health in all policies.

10. Social marketing

Traditional public health approaches have frequently tended to assume that improving an individual's knowledge about – and attitude towards – a particular behaviour automatically leads to a change in that behaviour. Over recent decades, it has become clear that while knowledge and attitude change may be necessary precursors of behaviour change, in isolation, they do not necessarily have any direct impact on the individual's behaviour .

Good health education materials have been produced for the Estonian CVD strategy but health education methods in isolation only have limited impact and it is important to balance with health promotion approaches to develop policies to create healthier environments to encourage behaviour change.

When securing support for the strategy, it is important not focus on just the individual and the provision of information and the publication of health education materials. Approaches in Finland and the United Kingdom for example have engaged the media as a partner in campaigns at an early stage. There is also a growing awareness of using social marketing techniques i.e. using the approaches used to advertise and sell commercial products for the benefit of social messages. This approach often takes a 'consumer-led' approach using a wide variety of methods (including quantitative and qualitative research) to address behavioural change.

Recommendation 15: Shift from health education to health promotion and place more emphasis on health supporting environments, enabling, empowering and facilitating behavioural change . A social marketing approach can assist in this.

11. Identity

The Estonian CVD Strategy is popular and appreciated by those interviewed. This positive image could be built upon, and the partnership base widened, through the establishment of a stronger 'identity' which organisations and individuals could easily identify with. This could be possible through the creation of a more high profile and easily identified 'brand' for the Strategy. The Annual Report 2005 gives information on the development of a logo, health portal and media campaigns and this should be encouraged. There is an opportunity to relaunch the Strategy with a stronger identity and brand.

Recommendation 16: Strengthen the image, visibility and identity of the strategy and the contribution to a common effort.

3. Conclusions

The Estonian National Strategy for the Prevention of Cardiovascular Diseases has many positive features and achievements. Estonia has successfully put in place a CVD strategy that has a strong emphasis on primary prevention and community programmes, while at the same time engaging health professionals in disease prevention and improvements to care. The principal strength of the strategy is in its integrated approach involving three key risk factors (tobacco, poor nutrition, physical inactivity) and its ability to draw together the work of different ministries to focus attention and resources on the high level of CVD in Estonia.

Implementation of the strategy has increased health promotion capacity and training and boosted health promotion infrastructure. It can be seen as a first step in decentralisation of health promotion programmes that will benefit health improvement efforts beyond CVD prevention in the long-term.

There is a monitoring and evaluation system in place, albeit limited, and longstanding national surveys in place that will monitor changes in behavioural risk factors over time.

Trends over the last 25 years show declining standardised death rates for ischaemic heart disease and cerebrovascular disease in men and women in those aged less than 65 years and these declines might be expected to continue. Population-level health promotion and prevention programmes need to be supported, strengthened and be supplemented by approaches to target individuals at high risk. More systematic approaches to reducing inequalities in health and tackle social determinants in relation to CVD and other noncommunicable diseases will yield greater health gain.