A strategy for the Prevention and Control of Noncommunicable Diseases in Malta

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One of the Maltese Government's objectives in improving the health status of the population is "To add health to life by increasing years lived free from ill-health, reducing or minimising the adverse effects of illness and disability, promoting healthy lifestyles, healthy physical and social environments and, overall, improving quality of life."[1]

There is a huge burden of illness and death which is preventable. Noncommunicable diseases (NCD) such as coronary heart disease, stroke and diabetes are responsible for about 82% of deaths in Malta[2] compared to 87% of all deaths in the EURO-A region, which includes most of Western Europe, as estimated by the Global Burden of Disease project.[3]

They are also responsible for a similar amount of disability in the form of pain and suffering, reduced mobility and loss of independence. Cardiovascular disease is considered to be the most prevalent of the NCD. In fact, around the Mediterranean basin, a mean of 10.4 DALYs (Disability Adjusted Life Years) per 1000 population are lost due to heart disease, together with another 7.5 DALYs per 1000 population due to cerebrovascular disease. In Malta, these figures were estimated to be 9 DALYs for heart disease and 4 DALYs for cerebrovascular disease. A North-South gradient was observed across the Mediterranean with France, Italy and Spain reporting the lowest rates and North African countries reporting the highest[4] rates.

Affordable solutions exist to prevent 40 to 50% of premature deaths from NCD. We need to move NCDs from important and not urgent to important AND urgent. Hence the Public Health Regulation Department embarked on formulating a strategy for the prevention and control of NCD. The concept of an integrated approach borrowed from the experience gained by the WHO Countrywide Integrated Noncommunicable Disease Intervention (CINDI) Programme as well as from international research on how to cope with major chronic diseases throughout a person's entire life span has served as a solid base for the formulation of this national strategy. The CINDI approach[5] is based on evidence that a small number of risk factors and conditions are common to major chronic diseases. This commonality means that integrated action against selected risk factors implemented within the social context can lead to a reduction of major NCD as well as an improvement in public health.

Presently NCD preventive efforts are targeted at specific risk factors and social and environmental determinants, through health promotion initiatives and primary health care services via an effective information system. The strategy aspires to reduce NCD by implementing population strategies which encourage healthy lifestyles and the creation of a social environment that supports health, as well as targeting high-risk behaviours aimed at improving risk profile through preventive measures at an individual level.

There are a number of factors which contribute to the development of NCD. There are the non-modifiable risk factors such as age, gender and genetics. Other factors which are directly related to NCD are the four main behavioural lifestyle risk factors of diet, physical activity, tobacco and alcohol and the four biological risk factors of obesity, hypertension, hyperlipidaemia and carbohydrate abnormalities.

All these factors are directly contributing to the development of NCDs. For the non-modifiable risk factors we cannot do much but for – in fact a national strategy which was launched in April 2010.[6]
There are various examples where preventive actions have worked. Finland has embarked on a 25 year project in North Karelia and has obtained an 80% reduction in coronary heart disease mortality by a decline in the major risk factors.[7] Ireland has obtained a 48.1% reduction in coronary heart disease mortality in 25 to 84 year olds, attributable to favourable trends in population risk factors.[8]
There are various effective interventions which include:
• Laws and regulations – environment, tobacco;
• Tax and price interventions – increase tax on tobacco, subsidies for healthy choices;
• Lowering the fat, salt and sugar content of processed foods;
• Advocacy – web sites, mass media, lobbying;
• Enhancing the health-enhancing environments in schools, the workplace and the community – promoting exercise facilities, improved nutrition, legislation on sales of alcohol;

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- Enhancing social support for the elderly;
- Training programmes to equip people with problem-solving skills;
- Screening programmes if feasible and effective eg. breast screening;
- Encourage health professionals to promote preventive measures;
- Disease management –evidence-based management, effective information systems, multidisciplinary healthcare teams, patient self-management;
- Clinical prevention – the correct choice of medicines including antihypertensives, lipid lowering medicines etc;
- Rehabilitation and palliative care.

The overall goal of the NCD strategy is to develop a multifactorial approach to NCD prevention by tackling common risk factors targeting both at a population level, and also high-risk groups. In developing such a strategy the main focus is on the prevention of various aspects including the onset of disease, preventing late diagnosis, preventing recurrence and preventing progression. Ultimately if disease has set in, we aim to prevent complications and also prevent disability or premature death. Hence the focus is not only on the prevention of disease but the stategy also looks at the quality of life.

For example, a high-risk intervention for reducing high blood pressure would target the members of the population whose systolic blood pressure lies above 140 mmHg, which is considered hypertensive. How-ever, a large proportion of the population are not considered to be hypertensive, but still have higher than ideal blood pressure levels and thus also face a raised health risk.[8] Although the risks for this group are lower than for those classified as hyper-tensive, there may be more deaths due to high blood pressure in this group because of the larger numbers of people it contains. Considering only the effect of hypertension on population health, as is often done, gives decision-makers an incomplete picture of the importance of the risk factor for the population because it underestimates the full effect of raised blood pressure on population health. Population-based strategies seek to change the social norm by encouraging an increase in healthy behaviour and a reduction in health risk. They target risks via legislation, tax, financial incentives, health promotion campaigns or engineering solutions. However, although the potential gains are substantial, the challenges in changing these risks are great. Population-wide strategies involve shifting the responsibility of tackling big risks from individuals to governments and health ministries, thereby acknowledging that social and economic factors strongly contribute to disease.

This strategy when performed collectively by all stakeholders, will tackle the growing public health burden imposed by NCD.[9] In order for the strategy to be implemented successfully, high-level political commitment and the concerted involvement of government, communities and health-care providers are required; in addition, public health policies will need to be reoriented and allocation of resources improved.

References
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