Commentary: Non-communicable disease and priorities for health policy in sub-Saharan Africa

NIGEL UNWIN
Senior Lecturer in Epidemiology, Health of Populations in Transition Research Group, Departments of Diabetes and Epidemiology & Public Health, University Medical School, Newcastle upon Tyne, UK

This first part of this century will see a decisive shift in global disease patterns, as non-communicable diseases (NCDs) become, for the first time in history, the predominant health problems afflicting humankind in all regions of the world. Cardiovascular disease accounts for around half the deaths from NCDs, and between a third and a sixth of the overall burden. However, this global overview glosses over the fact that these changes will differ substantially in both pace and scale between different regions of the developing world. It will be slowest in sub-Saharan Africa where old and new infectious diseases will continue to account for the majority of deaths and disease burden for at least the next 15 to 20 years. Why then should health policy-makers in sub-Saharan Africa take NCDs seriously, particularly as they struggle with tiny health budgets against the huge burdens imposed by conditions such as HIV, TB and malaria?

In answering this question it is necessary to challenge two related myths. These are that NCDs are not a significant cause of mortality and morbidity, and that they are diseases of affluence and not of importance to the poor of sub-Saharan Africa. The global burden of disease study estimated that age-specific death rates from NCDs in adults are higher in sub-Saharan Africa than in established market economies. This picture is supported by data from three areas of Tanzania: for some conditions, such as stroke, death rates are several fold higher, with the highest rates in the urban population. It is due to the very high death rates from communicable disease, that the proportion of deaths due to NCDs remains below that found in established market economies, accounting for between 1 in 6 and 1 in 4 deaths in adults aged 15 to 59. Data from several countries in Africa also provide evidence for high and rising prevalences of common NCDs and their risk factors in urban areas. For example, studies from urban Tanzania and South Africa put the prevalence of diabetes in adults respectively at 5 and 8%, with 20 and 33% having hypertension (based on blood pressure of 160/95). These areas of high prevalence are by no means affluent, even by local standards, yet within them it is not necessarily the economically better off who are most affected. Data on this aspect are scarce, but preliminary data from urban Cameroon, for example, suggest highest levels of hypertension in the least well off.

So if NCDs are already a major burden amongst the adult population of sub-Saharan Africa - and with demographic change (admittedly made much less predictable by the HIV epidemic) and increasing urbanization this burden will increase substantially over the coming one to two decades - then what should be done? In this edition of the Journal van der Sande et al. provide a thoughtful and thought provoking contribution, and suggest a template for the prevention and control of cardiovascular disease in sub-Saharan Africa. The natural starting point is measures to raise awareness amongst policy-makers of the importance and threat from these conditions. Locally relevant data are invaluable in this regard and the measures proposed by the authors for disease and NCD risk factor surveillance are pragmatic and in line with current proposals from WHO. However, there remains the generic need to provide policy-makers with data that place NCDs within the context of the overall burden of disease. Approaches to this have been suggested and do exist. These are unlikely to be practical or affordable for all countries and using such data from countries with similar geographic and economic characteristics could be one approach to filling this gap.

In many populations in sub-Saharan Africa primordial prevention (preventing the emergence of risk factors) is a theoretical possibility, where as in many urban populations the challenge is to reduce current levels of risk factors, especially obesity, physical inactivity and tobacco smoking. There are no off-the-shelf interventions to do this, and exporting health promotion methods of dubious effectiveness from developed countries may indeed be ‘exporting failure’. Van der Sande et al. are therefore right to emphasize policy and fiscal measures, for example aimed at food stuffs and tobacco, for which there is some evidence of effectiveness. The challenges of applying such measures, often against the interests of multinational corporations, are great and need to be guided by appropriate policy analysis and research and international co-operation. Van der Sande and colleagues note that community and family ties in Africa may mean that community and individually based prevention measures have a greater chance of success here than in Western Europe or North America, although clearly this cannot be assumed. Research to guide the development and evaluate the effectiveness of such measures will be essential.
risk factors for other conditions, such as diabetes, chronic lung disease and several cancers. This was the basis of the WHO Interhealth Project, and is of importance in setting priorities, as the burden of disease that will be addressed is greater than that for CVD alone.

Undoubtedly communicable diseases will remain the predominant health problems in sub-Saharan Africa for at least the coming 15-20 years. However, to leave a policy vacuum around CVD and other NCDs would be irresponsible. It would leave the emergence and prevention of risk factors to the market and the running and growth of health services for NCDs to be largely undirected by issues of clinical and cost effectiveness. It is time for these conditions to be clearly and explicitly on the health policy agenda for sub-Saharan Africa.

References


Correspondence: Nigel Unwin, Senior Lecturer in Epidemiology, Health of Populations in Transition Research Group, Departments of Diabetes and Epidemiology & Public Health, Medical School, Newcastle upon Tyne NE2 4HH, UK.