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Has progress been made? Control of cardiovascular disease in Africa

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Cardiovascular disease (CVD) is no longer merely an emerging problem in Africa, but has become firmly established and its magnitude is approaching that of an epidemic. While the risk factors and the pattern of diseases causing CVD may differ from those in Europe and North America, the impact is greater in Africa and is compounded by the persisting and difficult-to-eradicate communicable diseases. Additionally, the fight against CVD competes with education, housing, transportation, defence and ignorance (1). Thus, the picture of CVD in Africa today is what it was in Europe and North America in the sixties and, at least for the immediate future, with no clear indication that a large- scale change is around the corner. This paints a sad picture and unless there is mass concerted effort now, time may run out. It is against this that the small progress in this area and the prospects for change are discussed, for indeed the prospects are there.

The causes of CVD have been thoroughly discussed in the literature, and the differences between the causes in sub-Saharan Africa and the developed countries owe largely to differences in lifestyle. In sub-Saharan Africa stroke and heart failure are major health problems, and ischaemic heart disease is far less common. Recent events have not helped as the situation evolved. The downturn in the economy of most sub-Saharan African countries and the subsequent interventions of the World Bank, International Monetary Fund and other funding agencies has led to health services being rationalised and approached from a more cost cutting or money minded intent. International aid to African countries is often dispersed in national budgets and programmes with the result that the impact on the individual is ultimately reduced. This is reflected in the practice, or even policy, of many African countries whereby only about 5% of the budget is spent on health. In the same line it should not be forgotten that CVD is not on the agenda of the Millennium Development Goals.

Difficult conditions

Control of CVD has been dogged by problems at various other levels. Inadequate practice, in the way of blood pressure measurement, cardiovascular risk assessment, treatment of hypertension and poor blood pressure control rates still exist (2). Research drives progress but, unfortunately, sub-Saharan African countries, with only a few exceptions, perform poorly in this area. More meaningful research requiring international collaboration is almost always carried out in conjunction with workers in the advanced countries with the constant fear of the imposition of ideas on the African collaborators. Another limitation is the poor access to the little research output from Africa. Unable or disinclined to publish in more widely circulating journals, many researchers publish their works in journals circulating largely within countries or even regions of countries and this only heightens the isolation felt by these workers. Then there is the problem with the workforce. Africa harbours a sixth of the world population, 1.640.000 (2.8%) of the world total health workforce of 59.220.000 but accounts for health expenditures less than 1% of the world total. The 2006 World Health Report further states that most countries in Africa face a critical shortage of health service providers and also highlights the low pay and purchasing power of these workers and the unavailability of needed drugs (3). It goes on to state that smaller proportions of patients in Africa perceive that they had been treated with respect when visiting health facilities. Poor conditions of work, low morale and motivation, poor supervision and migration militate against effective health services (4). As ever, there is the likelihood of counter measures from certain economic sectors, such as the tobacco and beverage industries, which will fight to push their sales and not necessarily the health of their employees.

Rays of hope

Increasing awareness and knowledge: Many professional associations and other bodies have emerged in many countries of Africa all with the aim of increasing awareness, knowledge and treatment of CVD (5). These include national and international professional associations and non-governmental organisations which provide guidelines for management of CVD, organise conferences and workshops. Sometimes they also offer screening services. Several of such organisations operate among others in Nigeria, South Africa, Kenya and Egypt. Continental bodies engaged in this area include The International Forum for Hypertension Control and Prevention In Africa (IFHA), Pan-African Society of Cardiology, African Association of Nephrology and the Africa Heart Network. The IFHA (6), the Nigerian Hypertension Society (7), and the Southern African Hypertension Society, just to mention a few, have developed guidelines for the management of hypertension, and there is evidence that these have been well received. Most of such initiatives started only two decades ago and are strengthened to this day. The World Heart Foundation, alone or in partnership with other bodies, assists in the training of health care professionals in CVD prevention and implementation of CVD guidelines.

Fostering research: Some attention is paid to non-communicable diseases research in Africa even in the face of the communicable diseases burden, and hope comes from many directions. National surveys have been carried out in some countries including South Africa and Nigeria (8) and a few countries have produced guidelines for the treatment of hypertension. There has

also been some impact of knowledge that has been put into practice – as for example: One report from lfe in Nigeria showed an improvement in anti-hypertensive prescription patterns, with regard to cardiovascular protection for more than ten years; it also identified the most cost-effective regimen (9). Furthermore, it was reported from Tanzania that the treatment that was recommended as the most ideal one, i.e., the faithful application of preventive cardiology practice, was not the most cost-effective step (10). On the surface it might appear that this presents a conflict but, in reality, it only calls for locally relevant and applicable research. Thus, research needs to be pushed in order to find less costly solutions. In yet another report of a study of women in Accra, Ghana, it was shown that women, especially those under 50, were willing to adopt weight reduction as a measure to reduce cardiovascular risk (11). Although these reports do not represent overwhelming evidence, they nevertheless offer hope.

Redistributing resources: The major portion of money spent on CVD is expended on expensive treatment. It has been suggested that even if no additional resources are available, redistribution of existing resources with additions to preventive services will yield greater cost-effectiveness (12). Some CVD prevention measures can be implemented within the existing structure at primary, secondary and tertiary care centres. Decision makers can be more readily involved if they believe they are especially at risk of CVD. A proposal has been made for a template of CVD control based on strengthening the commitment of policy makers, focussing on prevalent modifiable risk factors, decentralization, surveillance and research. Among others, this approach recommends, focussing on primordial and primary prevention and concurrently targeting high-risk groups and setting a higher blood pressure threshold for drug therapy of hypertension. The point has to be made that local strategies are needed to address the locally prevalent medical, social or economic conditions (13).

Facilitating partnerships: Initiatives such as African Journals Online and others have sought to address the issue of the isolation suffered by many African journals and authors by providing indexing services, yet, much remains to be done. Internet access is becoming widely available to most secondary and tertiary care centres, and we can expect a transformation in information dissemination in the near future, especially with the coming of the New Partnership for Africa's Development. One of its goals is the facilitation of partnerships among African collaborators and also with those in industrialised countries. There is a place for high-tech medical education and practice. For example, Tele-Cardiology, already in use in some parts of South Africa, could become more widely used and could establish vital access to both patients and cardiologists that are great distances apart. Encouraging results have already been recorded and doctors have made remote decisions far from the patients, just by studying certain electronically transmitted patient characteristics (14).

Educating the public: Large strides have been taken in educating the public about CVD although the media has not been utilized to the fullest. Not as many people today would ascribe sudden death to supernatural phenomena as would have 30 or 20 years ago. It is not uncommon, these days, for people to readily proffer stroke or heart attack as the cause of

sudden death – rightly or wrongly, depending on the circumstances. Not all have embraced modern medicine, however. Many still turn to their traditions, spirituality or religious houses for relief, although economic considerations may be partly responsible.

Finding the root determinants: An approach not yet fully explored in the fight against CVD is to examine the root determinants of CVD. Root determinants are those factors that determine the immediate risk factors and seek to explain, for example, why people smoke or drink and thus become liable to developing a cardiovascular disease. It is possible that this approach may take us back to what might have been the problem all along, namely the inequities in the system.

A two-class system still exists

By and large, the drugs needed for treatment of hypertension are available and physicians rightly prescribe them, individualizing the prescriptions in the appropriate situation. Older therapies persist alongside newer regimens, and there is the increasing use of generic drugs. Many secondary care facilities provide basic x-ray and electrocardiography services, and most tertiary care facilities provide echocardiography and computer tomography scanning services. A few now offer magnetic resonance imaging. Certain centres all through the continent offer medical and some surgical treatment of cardiac diseases. However, the success of a treatment programme depends largely on the affordability of the drugs and procedures, and when there is no state or insurance covered treatment, as is often the case, payment has to be made from one's own pocket. The cost of certain drug prescriptions could easily consume a substantial proportion of the income of many low-paid workers, and this is a weakness of the system. Self-help is commendable, has played and will continue to play pivotal roles in health care, but it cannot be accepted as a replacement for government services – lest the inequities in the system be further accentuated (15).

It is perhaps too early to pass clear judgement on the performance of the various initiatives and, in this regard, we will have to wait and see what future surveys reveal. As with many other situations in sub-Saharan Africa, it appears that two classes of beneficiaries have emerged. There are the privileged, who receive information and education, can act on them and receive care when needed, and the less privileged who are not as lucky and bear the brunt of the problem. Unfortunately, the latter category forms the majority. Therefore, progress at the community level lags behind that at the individual level.

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