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Editorial

Is hypertension the new HIV epidemic?

At first sight, this seems a ridiculous, crassly attention-grabbing assertion. HIV infection is a sexually transmitted infectious disease; hypertension is neither of these things. HIV is a major global health priority and is recognized as a serious threat to public health and development in many poorer countries. Hypertension is seen as a disease of the West, of prosperity and therefore of little relevance to poorer countries. Yet, these two conditions have a number of important things in common.

Hypertension and HIV infection are both mostly asymptomatic, but can lead to fatal and disabling illness. It is estimated that in 2013 hypertension was responsible for at least 45% of deaths due to heart disease and 51% of deaths due to stroke.[1] Between 2000 and 2013, the number of deaths attributable to hypertension rose from 7.6 to 9.4 million.[2,3] Projections based on available data indicate that the number of deaths attributable to hypertension over the next 20 years may well exceed substantially the number resulting from HIV/AIDS. This is not just true on a global scale, but for most low- and middle-income countries. In Africa, the global burden of disease attributable to non-communicable disease is projected to increase by 27% over the next 10 years.[4]

Hypertension and HIV are both quite easily diagnosed through simple screening tests, particularly so with hypertension. Thanks to the roll-out of antiretroviral drugs, HIV is becoming a chronic health condition which can be managed through a combination of drug therapies and lifestyle change. This is also true for hypertension, and effective drugs are generally cheap and easily administered. From a health services perspective, chronic HIV infection and hypertension pose very similar challenges: they share the need for life-long treatment, regular monitoring and a reliable drug supply. As such, they require a major reorientation for health systems that are generally geared towards dealing with acute rather than chronic problems.

For Africa as a whole, WHO estimates that antiretroviral therapies (ARTs) are now provided to over half the population who are eligible.[5] By contrast, new WHO data for Ghana and South Africa show that less than 10% of people with hypertension had access to effective treatment.[6] One reason for low treatment rates is that, as with HIV/AIDS, the asymptomatic nature of hypertension means most people living with the condition remain unaware of it until major pathological damage has happened. For example, a recent systematic review of hypertension studies for Africa found awareness ranged from 10% in Ghana to only 8% in Gabon.[7]

In the early stages of the pandemic, HIV was not a condition associated with poor countries, but that perception quickly changed. Similarly, the view persists that hypertension is mainly a disease of the West, despite the growing body of evidence that prevalences in poorer countries are quickly catching up. Indeed, in some cases they are already higher than in the West. As with HIV, South Africa has one of the highest rates of hypertension anywhere in the world.[6] And as in the early stages of the HIV pandemic, the rapid spread of hypertension to rural areas in poor countries[8] comes as a surprise. Risk factors associated with hypertension such as obesity, lack of physical exercise and unhealthy nutrition are believed to be urban problems in low-income countries. Yet, prevalences of hypertension in rural districts are already high[9,10] and in some cases have fully caught up to urban levels.[11] Whereas hypertension is not an infectious disease, the risky behaviours associated with it are spreading fast and seem to be as effectively transmitted as infectious agents. The classical divide between urban and rural areas is fast becoming blurred.

HIV was faced with political denial and public misunderstanding in the early years of the pandemic, especially in some poorer countries. There is a similar pattern of denial with hypertension. Worryingly, this can also be seen at

the international level: hypertension and associated cardiovascular conditions accounted for less than 3% of global health assistance between 2001 and 2008.[12] This denial is based on the misguided view that hypertension does not affect poorer social groups. Yet there is substantial evidence that hypertension is highly prevalent among poorer groups and that they are less likely to have access to effective treatment.[6] As with HIV, hypertension can be both a cause and a consequence of poverty. For example, a national survey in China found that 37% of patients and their families fell below a US$1-a-day poverty line within 3 months of experiencing stroke.[13]

Rather than being understood as a condition of poverty, HIV remains a highly stigmatized condition and continues to be blamed on irresponsible personal behaviour. To some extent the same is true of hypertension, which is causally linked with behavioural factors such as obesity, high salt intake and alcohol consumption and tends to cluster with other risk factors—smoking, physical inactivity—for cardiovascular disease. In the West it is increasingly recognized that explaining these behaviours in terms of individuals' moral shortcomings is unhelpful and misses the bigger picture of structural and environmental causes. There is less evidence of this enlightened approach among policy-makers in poorer countries or in international agencies, who struggle to persuade funders and taxpayers to help people who 'eat and smoke too much'.

The 2011 UN Assembly of Heads of States noted with concern that 'the rapidly growing magnitude of non-communicable diseases (NCDs) affects people of all ages, gender, race and income levels, and…that poor populations and those living in vulnerable situations, in particular in developing countries bear a disproportionate burden'.[14] Several developing countries have set up national NCD control programmes, but most of these remain a low priority and implementation creeps along with frustrating slowness: a situation very reminiscent of the slow build-up of AIDS control programmes in developing countries prior to 1990.

Recent editions of *IJE* have featured a debate about the extent to which global health policy priorities should shift from infectious diseases such as HIV to non-communicable diseases such as hypertension.[15–23] This debate has mainly pivoted on a social gradient 'beauty contest', disputing the pace at which conditions such as hypertension are spreading to relatively poorer groups. As argued by Remais *et al.* in *IJE*, rather than framing policy as a choice between competing priorities, the key challenge is to roll out services and interventions which address both.[24] At the same time, it has been suggested that valuable lessons regarding hypertension could be taken from HIV/AIDS policies.[25] Yet there is little indication that these lessons are being taken on board. Our response to the global epidemic of hypertension seems little better than our response to HIV/AIDS two decades ago: too little too late. Can we not wake up earlier this time, before millions have died?

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