COMMENTS

Hypertension is falling through the gaps in primary health care

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Abstract

This commentary on a paper discussing the high levels of hypertension found in a tribal Indian community reflects on how the poor are affected by the hidden epidemic of non-communicable diseases. They suffer multiple burdens – of communicable and non-communicable diseases, of poverty and of ill-equipped, under-functioning and non-accountable health systems. The situation is worsened by the selective model of primary health care promoted by international financial institutions. The curious logic of this approach to public health is illustrated using hypertension.

The paper by Mukhopadhyay describing an epidemiological investigation among the Lepchas, a tribal community in Sikkim (1) addresses a critical public health issue in India, especially rural India. The high level of hypertension found in both men and women of this tribal population living in a mountainous area was found to be in direct contrast to the very low prevalence of hypertension as recorded by the local primary health centre (PHC). Though the study was carried out more than a decade ago, its observations are still of interest given the paucity of information from such regions. As the authors note, if one applied current criteria for diagnosis of hypertension, with lower thresholds, the prevalence would have been recorded as even higher than it was in this study.

The report highlights the hidden epidemic of non-communicable diseases in rural India where non-communicable diseases are also a major problem -- contrary to the perception of many health professionals and policy makers. Such problems come to light only when we look for them.

A recent ICMR report (2) provided disturbing estimates of the prevalence of various non-communicable diseases. The weighted prevalence for hypertension, drawn from various studies, was 164.18 per 1,000 adults for urban areas, and 157.44 per 1,000 adults in rural areas. Seventy per cent of India's population, and a majority of its poor, live in rural areas. Most people with hypertension are unaware of their disease.

Hypertension is even less acknowledged as a problem of tribal communities, like the Lepchas. In our community health programme which serves tribal communities living in forest-related villages in Chhattigarh, a survey of adults who are not sedentary, obese or affluent revealed a prevalence of hypertension of eight per cent. Thirty per cent of these had blood pressures of >180 mmHg systolic and >110 mmHg diastolic at diagnosis (unpublished data). We have been alarmed by the levels of morbidity due to diabetes, hypertension, cancer, respiratory disease and mental illness that we see in our rural population, and the poor outcomes for those affected. People are suffering multiple burdens – of communicable and non-communicable diseases, of poverty and of poorly equipped, poorly functioning and poorly accountable health systems.

Hypertension is the most prevalent of the non-communicable diseases (if one excludes anaemia and undernutrition). It is also one of the primary risk factors for stroke, ischemic heart disease and renal failure, all of which cause significant morbidity and mortality. Circulatory diseases emerged as the single most frequent cause of death in a recent survey from rural Andhra Pradesh (3), representing 32 per cent of deaths.

Yet hypertension is one of the most easily detectable of diseases, and can be identified by a paramedic. However, measurement of blood pressure, an essential part of the physical examination of any adult, is often neglected in India. For example, auxiliary nurse midwives at the sub-centre level should examine blood pressure as part of antenatal care, as pregnancy-induced hypertension is a major contributor to maternal mortality in India, Yet this is rarely done. The rule of halves in hypertension – only half of cases are detected, of which only half receive therapy, and of which only half are adequately controlled on it – applies in India, as seen in a study in urban Chennai (4).The situation in rural areas is worse. Only seven per cent of patients in a study from Rajasthan were aware of their hypertension (5).

Hypertension is also a disease amenable to cheap and effective treatment. Agents like diuretics and betablockers or even calcium blockers can cost just 10-20 paise per day (6). Both the diagnosis and treatment of hypertension is within the reach of the public health system, and it should be a priority for health personnel at all levels.

The paper by Mukhopadhyay raises issues on the ethics of the current model of primary health care in India, by pointing the failure to identify people's health needs and respond to them. If PHCs are meant to deliver comprehensive primary health care to people, then hypertension should be diagnosed and treated at all PHCs and community health centres in the country**.**

Instead, the selective – rather than comprehensive – form of primary health care in India forces people to seek care from private providers for conditions that should have been dealt with at the primary care level. Is there hope for a broadening of our agenda for primary health care and closing such gaps as in

the case of hypertension?

In the current policy environment, comprehensive primary health care is facing opposition from international financial institutions like the World Bank which have come to exercise influence on the health policies and health systems of developing countries. The World Bank has been promoting a minimalist essential care package at the PHC level, on grounds of cost-efficiency rather than equity. This package includes the five elements of reproductive health care, childhood care, limited curative care (such as first aid, medical and surgical emergencies), communicable disease control, and "behavioural change communication" (7). Other problems are supposed to be dealt with at other levels of the health care system, where private providers are increasingly being encouraged as points of care.

The curious logic of this approach to public health can be illustrated using hypertension. Detection and treatment of hypertension which affects one in every seven adults attending a health facility will not be a priority to be dealt with at the primary health care level. The strokes resulting from untreated hypertension would become a secondary care issue to be managed by the private sector – or by the public sector after levying user fees. This approach has only worsened the conditions of the poor in other parts of the world (8).

Another obstacle to addressing the gaps in diagnosis and treatment of people's health problems is the vertical programme-driven nature of delivery of primary health care, in India. The primary health care system fails to take up any problem seriously if it is not backed by a national programme, further perpetuating the selective nature of primary care. Diagnosis and treatment of an important public health problem like hypertension can become a part of primary health care and be based on nationally evolved guidelines. It need not wait for a separate national hypertension control programme. Such a programme is perhaps now in the offing (9).

Finally there is a need to study the determinants of hypertension in rural and poor populations. The term "epidemiologic transition" describing the increasing prevalence of non-communicable disease obscures the fact that most of these diseases occur more frequently in, or have a graver impact on, the poor. While the Lepchas' significant use of alcohol and tobacco and possibly higher consumption of salt could have contributed to higher levels of hypertension, there are many questions related to the epidemiology, clinical features and outcomes of non-communicable diseases like hypertension or coronary artery disease that cannot be explained on the basis of aging, affluence or life-style alone. Exposure to undernutrition early in life, and its relation to cardiovascular disease, is an evolving field of enquiry (10). Sympathetic nervous hyperactivity related to stress is involved in the genesis of hypertension (11). In this regard, a largely unmeasured and underreported stress is that of living in poverty; of income, of opportunity, and of access to basic services (12).

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