

## Relevance of Primary Health Care in Controlling Noncommunicable Diseases in India

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## Introduction

The conference in Alma Ata in 1978 culminated in a unanimous decision, that Primary Health Care (PHC) is the tool to achieve the ambitious goal of "Health for All" by the year 2000, the declaration of the World Health Assembly in 1977. For the first time, health was defined in non health terms 'Achievement of a socially and economically productive life by every individual', a fact realized for the first time. India being a signatory followed the same and began by declaring its National Health Policy in 1983. India had in fact made two attempts in making a population policy in 1976 and in 1977,(1) but they had remained as statements as they could not be passed by the parliament as they got dissolved after the paper being tabled. Further the basic principles of PHC, viz. equitable distribution, community involvement, appropriate technology and multi-sectional approach had all been an integral part of our National Health Programmes like National Malaria Control Programme initiated a quarter of a century earlier. The results on the whole were good and in some areas unbelievable. The dawn of the new millennium saw the United Nations coming out with Millennium Development Goals (MDGs), in which half of them were directly related to health and the other half indirectly. The PHC approach was again revitalized to achieve the MDGs. The focus however was on communicable diseases and provision of maternal and child health and family planning services.

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The developing world is grappling with the double burden of disease when the developed world is coming to terms with the epidemiologic transition. The noncommunicable diseases (NCDs) now account for 60% of the world deaths and are likely to increase. (2) The sad part is, not only 80% of these are in the developing world; the age specific mortality by these diseases is almost twice in the developing countries in comparison to the developed countries. A third of these deaths are below 60 years of age. In the developing world, NCDs (including injuries) account for 55% of the Disability Adjusted Life Years and reduce the GDP between 1-5%. According to the National sample survey organisation (NSSO) 60th round, NCDs in India are responsible for 40% of hospital stay with an out of pocket expense of 47.3%. Annual Income loss to households associated with NCDs is roughly Rs. 280 billion. The joint report by the World Health Organization (WHO) and the World Economic Forum estimated the income loss as \$8.7 billion in 2004 and likely to increase to \$54 billion by 2105. The loss of productive years in 2000 was 9.2 million. With the NCDs occurring at a younger age and the longevity increasing, the problem is likely to escalate further. Can the PHC approach tackle this Herculean challenge?

India is in the midst of an epidemiological and demographic transition with increasing burden of chronic diseases, decline in mortality and fertility rates, and ageing of the population. Noncommunicable diseases (NCDs) such as cardiovascular diseases (CVDs), cancer, blindness, mental illness, etc., have imposed the chronic disease burden on the already over-stretched health care system of the country. The NCDs, addressed as lifestyle disorders/diseases also by many, are no more diseases of the affluent as some people believed at one time. In fact in India the prevalence of NCDs in the lowest quintile is only slightly lower than the national average. That could also be possibly due to

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the more physical activity by the rural poor. The poor have a higher low birth weight rates at birth, higher maternal malnutrition, both pre-pregnancy and during pregnancy, high smoking rates, stress, unhealthy diet and in the urban slums less physical activity. The poor sanitary conditions, safe drinking water, immunization, overcrowding etc., predispose them with a higher burden of communicable diseases. Concentrating on the treatment of the latter, they hardly give any priority to the NCDs thinking wishfully that it will not affect them. Lack of awareness and few symptoms only adds to the low priority accorded. This results in late diagnosis, incomplete and irregular treatment and follows with complications adding to economic and social burden along with suffering. With the majority of the country poor, scattered in difficult terrain, not knowledgeable about the prevention and their relevance of the NCDs, and health services not easily accessible, the paramount importance of the first principle of PHC'equitable distribution' cannot be overemphasized and better argued.

The second principle of 'Community Participation' is perhaps most applicable to the NCDs, if we have any plans to control them. Multifactorial in origin, very closely linked to the behavior, customs and lifestyle of the community, not just the involvement but their ownership and proactive role of the community is the first step in the control of NCDs. Making them aware about the existence of these diseases, educating them that not only can it happen to them, but is actually happening to them and their consequences and how they can be prevented, delayed if susceptible, controlled if struck by them and the postponement or maybe even elimination of complications if properly treated and monitored is absolutely essential. The involvement of the community in controlling NCDs doesn't require rocket science, but the human science of communication and counseling, which is more difficult.

MacMahon<sup>(3)</sup> stated that "the risk of an American male dying of a coronary heart disease (CHD) is quite as large as the risk of death experienced during some of major historical epidemics of infectious diseases, yet the general population remains almost unaware of the existence of the epidemic of CHD. The slow growth of the epidemic had concealed its size. People gradually started seeking clinical advice and treatment. The blood pressure of the hypertensive and hyperglycemia of the diabetics was controlled. Those requiring surgery were operated upon and those attending obesity clinics reduced their weights to some extent. At the individual level the problems were resolved, albeit at a high cost, but at the community level the problem remained the same if not worsened as the number of persons coming back in the normal range was a fraction of those joining the abnormal levels. Reducing

a little extra fat in the food outlets would have reduced more number of people becoming obese.

The clinician is looking at the physiological risk factors like body mass index, blood pressure, blood glucose and cholesterol to reduce the outcome of diseases like diabetes, heart disease, stroke, cancer etc. However if we invest on controlling the behavioral risk factors like tobacco, alcohol, physical inactivity nutrition etc., the number of normal persons developing physiological risk factors would be less and at a slower pace and at a later age. Hence the people requiring treatment would be less and so will be those developing disease and the consequent complications. The efficacy of the investment in population risk factors as compared to treatment has shown good results in countries like Scotland, US etc.

The third principle of appropriate technology is thus very much valid and if properly used can reduce the cost drastically and increase the reach, especially to the poor. The blood sugar can be replaced by urine sugar for screening and bringing the positives to the labs for blood sugar. The medicines if procured rationally and in bulk can reduce the cost of treatment drastically.

The health of the population has gone beyond the health sector and involves the development sector in the recent past, reiterating the principle of multisectoral approach in PHC. The physiological risk factors can be delayed if the behavioral risk factors are given due emphasis at an early stage. Right nutrition and exercise has to be initiated in the schools. Laws have to be enacted for the food outlets, sale of tobacco products and alcohol especially to children. The media of all the types available has to be gainfully channelized. Tobacco and smoke free environment has to be ensured. Income generating activities have to be increased especially for women along with their empowerment. The community has to be educated about the behavioral risk factors along with the need for regular screening and treatment, if needed. This will require the effort of the departments beyond health. A single pronged approach will not work. For example, the intensive anti-smoking campaign in the US from the late fifties brought the per capita consumption of cigarettes from 4300 in 1960 to 2300 in 1995 and a subsequent decline in the mortality rates due to the cardiovascular diseases. However the rates started to increase from the 1990s, as the obesity rates started increasing along with the decreasing physical activity. Thus the need for the multi-pronged, multisectoral approach of the PHC.

This may be possible only if we develop a large workforce, both in health and beyond in the development sector. Teachers, cooks (using less saturated and no trans fats), architects, physical instructors, trainers may need to be educated and trained. Women and their groups, civil society members, community health workers will have to be trained in educating the community and help in the monitoring and surveillance process along with assisting the community in availing the services. The health staff like the field based, paramedics, technicians, needless to say are needed to be updated about all the recent advances. They should be able to explain the relevance of prevention to the population using the risk prediction charts. The growth charts having been well accepted by the community; there is no reason why these won't be effective. Local wisdom and local influencers should be optimally utilized. The communication messages and the participation need to be interwoven with the local custom and traditional values.

During the Eleventh Five Year Plan, major focus was given on National Rural Health Mission initiatives. Efforts have been made for restructuring and reorganizing all health facilities below district level into the Three Tier Rural Primary Health Care System. Population-centric norms, which continued to drive the provisioning of primary health infrastructure has been modified. Emphasis has been given to allocate 70% of the total financial resources to below district level (block level and below), 20% at district level, and 10% at State level. Efforts have been made to work out the requirements of funds for a fully

functional primary health care system at block level and below, including field-based implementation of disease control and preventive activities. There is an urgent need to revitalize the PHC approach for both the communicable and the non-communicable diseases. It needs to be tailored as per the social determinants of the region based on the health system research to determine the local needs and solutions. Single size fitting all may not work.

The primary health care thus is applicable today as it was in 1978.

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