

1. INTRODUCTION

A sort of revolution in health research is underway. New insights have been gained into the human body. Humans are understood as social beings whose health is influenced by an intricate interplay amongst the biological, genetic, social, economic and environmental determinants of health. Outcomes of this revolution in health research are transforming the way diseases are diagnosed, treated, and prevented as also the methods for promotion of health.

Significant advances in better understanding of human health and disease are also being boosted by new ways of thinking, new technologies, new partnerships, and new industries. The complexity and scale of today's health research challenges increasingly require that researchers reach out beyond their own areas of expertise and establish partnerships that bring people who share a common vision and interests together.

Health challenges and disease know no boundaries. Public safety and security requires a health system and a research community that can respond quickly and appropriately to rapidly emerging health concerns.

While health research has made appreciable progress there remains an unacceptable lag time in translating the research outcomes into tangible health products or in application of the knowledge generated through research. Thus, the task is of how best to mobilize research to bridge the gap between what is known and what is done – the 'know-do' gap. Equally important is to ensure that the products of health research reach and are used for and by the people who need it most. Health research should be directed to provide ways and means of bringing about equity and improving access to health technologies.

The health of the population would not only be influenced by the technological advances in medicine and public health but also by the changes in structure of the society. Some of these changes are bound to happen like the demographic transition (increasing in age-segment of more

than 60 years), modification of life styles (increased consumption of alcohol and tobacco and consequent effects on health) and the changing environment (urbanization, occupational diseases, injuries and accidents). The 11th Plan should aim to create a healthy environment which can decrease the admissions to hospitals. This cannot be achieved by actions of health sector alone. Health is an outcome of interplay between various variables like clean environment, potable and safe drinking water, sanitation, housing, infrastructure facilities, education and income. An inter-sectoral and inter-disciplinary approach would be critical.

The crude birth rate has decreased from 41.7 in 1951-61 to 24.8 in 2002-03, and crude death rate has fallen from 25 to 8 in the same period. Maternal mortality ratio has decreased from more than 5 to less than 2 and infant mortality rate has decline from 146 to 60. The total fertility rate has declined from 6 (1970-71) to 3 (2002-03). Small pox and guinea worm have been eradicated. Leprosy has been eliminated as a public health problem. Significant progress has been made in fight for polio eradication. It is believed that since the introduction of Directly Observed Treatment Strategy (DOTS) in the country over 500,000 deaths have been averted due to tuberculosis. The number of malaria cases have been contained at about 2 million a year.

The country is burdened with infectious diseases alongside the emergence of non-communicable diseases. Management of some of these for example diabetes, vascular diseases, hypertension, mental health, cancers, injuries, respiratory infections etc. is quite costly. Contrary to popular belief, these lifestyle diseases do not spare the poor. The investment in public health is low and the state of health systems is unsatisfactory. Coping with these set of new diseases along with existing diseases calls for reforms in India's health system.

The Report of the National Commission on Macroeconomics and Health (NCMH) builds a strong case for investing in indigenous research and encouraging Indian companies and universities in partnership to engage in R&D for drugs, medical devices and vaccines relevant to the needs of India's poor. For developing a culture for research, the Report suggests that the Government should initiate steps to debureaucratize procedures, introduce greater transparency, provide incentives and adequate flexibilities to enable engaging and retaining the best minds to undertake research - both in public and private universities and research institutions. There is also a compelling

need to build multidisciplinary research blending physical, medical and social sciences. Besides, there is also an equal urgency to establish regulations, strict ethical norms and transparency, standardize methodology and international standards of research. Such capacity is necessary for undertaking operational research as also large-scale trials of drugs of both modern and traditional systems of medicine.

The Planning Commission's Approach Paper to the 11th Plan provides the general directions, the recommendations of the National Commission on Macroeconomics and Health, Planning Commission's Working Group for 11th Plan on Health System Research, Biomedical Research and Development and Regulation of Drugs and Therapeutics and the Report of the Performance Appraisal Board of the Indian Council of Medical Research the road-map to develop a blue print for health research.

During the 11th Plan period, the ICMR would address these very substantive agenda and challenges. ♦