Foreword

Health care systems of all types the world over are in crisis, predominantly in the developing countries, not least in India. Health and health care are influenced by the altered orientation of our society. The commodity economy has spread into the realm of health services and health care delivery systems, resulting in the inexorable commercialisation of health[1]. In this adulteration of the essence of community health, the principal losers are the poor, i.e. the myriads of Indians of low socio-economic status and their counterparts in other developing countries. The undeniable fact is that the majority of Indians do not and cannot have access to modern health care at present and this dismal picture is unlikely to be altered in the foreseeable future[1].

The inequalities in health care in the developing world are legendary. The concept of primary health care based on equity, acceptability, self-determination and social justice remains an illusion. Millions of people in developing countries still have no access to basic life-saving drugs. Others are deluged with thousands of formulations under a bewildering choice of brand names. Polypharmacy and promotion of dubious and dangerous drugs and drug combinations are rampant. The gap between what is preached and what is practised must be urgently narrowed. The rhetoric of 'Health for All' must be translated into reality at all levels – national, regional, and global[2].

Dr. Hafdan Mahler, former Director-General of the World Health Organisation, wrote in 1986: 'For people to be intelligently involved in caring for their own health, they have to understand what leads to health and what endangers it'[3]. Regrettably, Dr. Mahler's statement which was meant to primarily include only those receiving health care of varied and variable quality in developing countries, is equally – if not more – valid for those responsible for formulating health care policies in these countries. Over the years, those of us involved in the implementation of health care have learnt – often through bitter experience – that health cannot be divorced from politics. And the unpalatable truth is that relatively few political leaders believe that health is a worthwhile economic or political investment[2]. Expenditure on health care is viewed as a drain on scarce resources rather than as an investment in the nation's future. Furthermore, prioritization of the needs of the majority and optimal management of available resources are neglected points in health care delivery in developing countries. This painfully accurate description of the state-of-the-art in health care calls for decision and direction, not despair and disenchantment. The need of the hour is, at first, to have a metamorphosis of the thinking of people in the corridors of power.

With approximately half the Indian population below the poverty line; with four-fifths of the health care costs being paid privately; with only one-fifth of Indians having access to modern medical facilities; with four-fifths of medicines being available from the market place and not through Government Health Services; with a literacy rate of 40 per cent or less and even fewer having knowledge of English – the language in which information on medicines is usually given; with an alarming proportion of medicines being sold over the counter without prescriptions; with many thousands of pharmaceutical companies manufacturing many more thousands of formulations (accurate figures are unavailable) invariably without paying heed to statutory Good Manufacturing Practice (GMP) and Quality Assurance (QA) requirements; with frequent price rises and, last but not least, with one-fiftieth or less of GNP being spent on health care, the Indian scenario is diabolical[4].

The alarming and distressing gap between the health care systems of the developed and the developing countries is demonstrated in many ways. The average life expectancy at birth for the 36 least developed countries is 48 years versus 72 years on average for 36 industrialized countries; maternal mortality ranges from two to 1100 per 100,000 live births, a differential of more than 500; infant mortality (in the first year of life), an important indicator of health status for any community, also shows marked differences ranging from 10 or less per 1000 live births in the developed countries to 50 or more per 1000 live births in many of the countries of Africa and South-East Asia, the situation in Africa being particu-

larly serious with many countries having rates in excess of 100 per 1000[5]. Ironically, this has been paralleled by a staggering increase in population in many developing countries. India, with the second largest population in the world ill-advisedly contributes to this population explosion. At present, every seventh person in the world is Indian – a depressing statistic. Furthermore, the uncontrolled migration of the Indian rural population to the major cities in search of an escape from the vicious cycle of unemployment, poverty and despair, has resulted in an unabated urbanisation, as witnessed in the 1980s[6]. This has created major infrastructural problems, including those related to health care, caused by overcrowding, insanitary conditions and lack of clean drinking water. This unfortunate scenario is compounded by the usual unpreparedness of the authorities concerned and virtual absence of strategic planning. Demographic momentum which is an intrinsic part of the young age structure of current populations will inevitably generate large increases well into the 21st century, both in India and in other developing countries. By the year 2000, the world's population will exceed six billion, nearly a four-fold increase since the year 1900[7]. India's share of this population will be close to one billion. Although the world population growth rate peaked at 2.3 per cent and began to decline in the late 1970s, it continues to grow at an annual average of 1.73 per cent, with a ratio of 4 (approximately 0.5 per cent versus 2 per cent) between the developed and the developing countries[7]. If this trend is not arrested, the world population will probably reach eight billion by 2020, nearly all of this growth being in developing countries[7], and India will almost certainly become the world's most populous nation – a dubious honour at best.

In 1990, worldwide health care costs were of the order of 1.5 trillion US dollars or seven per cent of the global GNP[8]. However, the distribution of these costs varied significantly between the developed countries (average 9 per cent of GNP) and the developing countries (average 3 per cent). **In India, the health care expenditure as defined in successive five-year plans, has been invariably less than the average allocations of the developing countries.**

Clinical research has played a significant role in the development of new medicines, the generation of pivotal and path finding data from studies of health and disease patterns of populations, and the emergence of agents and methods for the prevention of diseases. All these factors have had a cumulative effect on the health of the community as demonstrated by the consistent enhancement of the quality of life and the dramatic increases in life spans in the developed world. Clinical research is essential for the promotion of health and improvement of health care. The countries of the world where clinical research is an important part of the health care system have a significantly better quality of health care. Clinical research in India is woefully deficient and inadequate in spite of the availability of an almost unmatched reservoir of patients and illnesses i e. clinical and pathological material. The reasons are many: a lack of available funds for projects which should receive priority, i.e. inappropriate distribution and monitoring of available funds which are inadequate to start with; a stifling bureaucracy and red tape; the conspicuous absence of cooperative endeavour; the suppression of promising young researchers by their seniors who are past their creative best; the rampant mutual back-patting among those who constitute award-granting expert committees and perhaps, most important of all, an environment devoid of the culture of research[9].

At present, there is a gross mismatch between the burden of illness, which is overwhelmingly in the developing countries, and investment in clinical research which is primarily focussed on the health problems of the developed world[9]. Especially weak are the critical disciplines of epidemiology, primary health care, clinical pharmacology and the mechanisms of formulating and implementing policies relevant to the overwhelming needs of the vast majority of the population of India and other developing countries. The importance of the generation of honest and reliable epidemiological data cannot be overemphasized. The evolution of policies is largely dependent on good epidemiological studies. Proper management of primary care for the silent majority, both in the rural and urban settings deserves top priority. First and foremost, government general hospitals and primary health centres must be cleansed – physically and metaphorically – of the filth that invariably characterises them at present and transformed from venues of venality to houses of healing. Although the primary health care centres may have multiplied in number, their quality has not necessarily improved and they have had a 'less than optimal impact on the health status of the people they are supposed to serve'[10]. The reasons for this are legion but are said to include 'poor leadership by the doctors, poor supervision of paramedical workers, little accountability, intermittent supply of medicines, vaccines, etc, an element of consumer resistance due to a mixture of inaccessibility, cost (although the service is ostensibly free), and lack of trust'[11]. Clinical pharmacology has developed only in some academic hospital settings and, even in these institutions, does not fulfil some of its essential functions. In developing countries such as India where the discipline of clinical pharmacology already exists,

it should be developed to provide appropriate support for primary health care physicians. This interface will help to reduce irrelevant prescriptions of medicines and minimise consequent costs.

Health care in the developing countries must have a focussed, structured and decentralized approach to identify health problems which need urgent attention. This need not necessarily entail high technology and high costs. Clinical research is an essential but often neglected link between aspiration and action in health care. Although it is 'controlled clinical practice', nothing more and nothing less, it is so often missing in the developing countries, thus excluding its critical role in health care delivery. As the 20th century enters its last decade, the universal goal of 'Health for All by the Year 2000' is quietly slipping into oblivion. Those of us involved in health care must know that it is a distant illusion. It may be even too late to achieve in some measure, the less ambitious goal of 'Health Care for All by the year 2000' because of the distressing contradictions of the present world health scene, particularly in India and other developing countries.

Cognizance of these depressing facts inspired a concerned, neutral, non-profit organisation, The Menon Foundation, to persuade a panel of experts from India and abroad to debate and discuss some of these pertinent issues at a Symposium on 'The Role of Clinical Research in Health Care Delivery in the Developing Countries' at Madras in 1990. The Symposium was attended by approximately a hundred delegates belonging to many disciplines from various parts of India including young medical specialists from medical schools, senior medical academics, executives of the pharmaceutical industry, representatives of the governmental drug regulatory authority and others involved in primary health care in the rural and semi-urban environment.

REFERENCES

1. Maitra S. Actual Drug Needs: Facts and Fallacies. *Drug Industry and the Indian People* ed Sen Gupta A. Delhi Science Forum, Delhi, 1986.
2. Williams G. WHO – Reaching Out to All. *World Health Forum* 1988; **9**. 185.
3. Mahler H. Springboard for Action for Health for All. *WHO Chronicle* 1986; **40**(3): 109.
4. All India Drug Action Network. *Rational Drug Policy – Facts and Figures*, March 1986.
5. World Health Organisation, *Research for Health: A Global Overview*, Background Document, A/43 Technical Discussions/ 2, May 1990.
6. Raghavan K T V. Special Report. *The Hindu*, May 23 1989.
7. Commission on Health Research for Development. *Health Research: Essential Link to Equity in Development*. Oxford University Press, Oxford, 1990.
8. Pinto F. New Paradigms for Health Care. *The Economics of Health Care: Challenges for the Nineties*, Medic Limited, London, 1990.
9. Pandya S K. Why is the Output of Medical Research from India Low? *Br Med J* 1990; **301:** 333.
10. United Nations Children's Fund. *An Analysis of the Situation of Children in India* UNICEF, New Delhi, 1984.
11. Richards T. Impressions of Medicine in India. Provision of Medical Care: Varied and Variable. *Br Med J* 1985; **290:** 1047–50.

G. N. Menon

S. Ramaseshan

★ ★ ★

"It is not enough to know, you must also use the knowledge; it is not enough to wish, you must also act... Thinking in order to act, acting in order to think, that is the sum of all wisdom".

Mahler H. (Quoting Goethe) Springboard for Action for Health for All. *WHO Chronicle* 1986; **40(3):** 115.