

Emerging Trends, Challenges and Prospects in Healthcare in India

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Health has been described as one of “the most important conditions of human life and a critically significant constituent of human capabilities which we have reason to value” by the well-known economist and nobel Laureate Dr. Amartya Sen. Well-being and health of an individual not only affects him but also bears influence on national economies in terms of prevention, treatment and health care cost, work hours lost, Disability adjusted life years (DALY), dwindling household income and Gross Domestic Product. Healthcare has been a neglected field in Asian countries where the lion’s share of the budget is spent for other priorities of developing nations as infrastructure development, education and arsenal management. Communicable diseases take a heavy toll of life while undermining the economic growth of these nations. Existing gap in mortality in well-heeled nations and economically deprived developing nations is abysmal. The persistence of health inequalities among various countries and also within the countries is a matter of concern.

Resurgence and reemergence of diseases previously believed to be under control like dengue fever, viral hepatitis, tuberculosis, malaria, and pneumonia have marred the spirit of public health specialists and policy makers alike and the problem has been further compounded by increasing drug resistance in parasites and pathogens and failure of conventional drugs which were propounded in the past as “magic bullets” and “wonder drugs” in combating these diseases. The problem of steep rise in these diseases can be attributed to inadequate medical care facilities, unhygienic living conditions, rapid urbanization and globalization which facilitated the spread of multi-drug resistant strains and above all, a crumbling health infrastructure. During past few years, our inadequacy and lack of preparation to face an epidemic was revealed on sudden outbreak of SARS, chikungunya, H5N1 which triggered a wave of panic across the continent. Rise in incidence of neglected diseases has also warranted the need to sit back and review our prevention and intervention policies.

While Asian countries were busy struggling in finding and devising ways to combat infectious diseases, modern lifestyle was spawning new horrors. Sudden changes in lifestyle for meeting unrealistic job demands, stress, acquired habits and addiction wreaked havoc on the health of working population. The clock is ticking and we are facing the danger of an epidemic of lifestyle diseases, a phenomenon previously unknown in Asia. This sudden shift and erosion of health can be attributed to sedentary habits. It was found recently that Asians were predisposed to several diseases like diabetes and cardiovascular diseases.

One major challenge for epidemiologists and public health workers remains in estimating the true burden of socially stigmatized infectious diseases like HIV and sexually transmitted diseases as underreporting of cases due to lack of awareness can be misleading and will continue to hamper the efforts in crusade against the diseases. Another priority should be to bring the modern health care facilities to the doorsteps of people residing in remote areas while cutting down the cost of medicines thus, enhancing access to medical care. While it is a matter of pride that now life expectancy of population in developing nations has reached a level matching to their western counterparts due to better quality of life in terms of nourishment and healthcare facilities, these countries face a bigger problem as it also increases demand for better health care and facilities as the elderly are more prone to diseases and disabilities. A major challenge for such countries will be to reorient their health care systems to cater these needs.

A slender ray of hope emerging with the changing face of economy remains with the fact that growth of medical tourism has boosted the growth of infrastructure. While healthcare sector has emerged as one of the largest sector, the major chunk is governed by private players, thus causing a great divide for access to the proper healthcare among deprived and affluent population. Another big opportunity has arisen because of the interest in alternate medicine systems exploiting our traditional

knowledge. Past decade has witnessed enormous demand for herbal medicines and Asian countries have a wealth of such treasures owing to high biodiversity. IT revolution has led to development of Hospital Information Systems, Decision Support systems which are being utilized in day to day affairs in hospitals for streamlining the system for storing and managing patient's data. Telemedicine has also contributed in changing the face of healthcare. Funds, aids and grants for R&D provided by developed nations are towards the traveler's diseases and are insufficient to meet the challenges that these nations face. There is need to strengthen our R & D and to look for tailor made solutions that suit our needs. A major step towards this goal will be justified allocation of budget towards the basic and applied research for understanding the diseases.

In This Volume:

In this special issue, we have attempted to provide a glance of the trends and opportunities in health care. We are thankful to all the contributing authors for their support to make this issue successful. **Saxena** et al. [1] elaborated on the present perspective on antiviral therapeutics and drug development for infectious diseases. **Paul and Raychaudhuri** [2] provided an insight on medical application and molecular identification of different *Momordica charantia* varieties. Review article by **Varadwaj** et al. [3] provides an insight on role of Mitoxantrone as an anticancer agent. **Arora** et al. [4] described molecular modeling studies on potent

drug target 2, 4-cyclodiphosphate (MECP) synthase of malarial parasite.

We express our gratitude to the reviewers for sparing their valuable time for reviewing the articles and providing their honest and important opinions. We are also thankful to Dr. Ming Chen, Editor in Chief, *Electronic Journal of Biology* and all other staff members of the journal for their support to bring this issue online.

We dedicate this issue to those who are trying to achieve the remote goal of providing access to healthcare to one and all.

References

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