



Changing disease profile and preventive health care in India: Issues of economy, equity and effectiveness

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ABSTRACT

The importance of preventive health care practices has increasingly been recognized in the wake of changing disease profile in India. The disease burden has been shifting from communicable to non-communicable diseases as a result of greater focus on achieving competitiveness in a fast globalizing economy. The rapid pace of social and technological changes has led to adverse life style choices resulting in higher incidence of heart diseases, diabetes, obesity, cancer, and deteriorating inter-personal relations and psychological well-being among individuals. Most of these health risks can considerably be reduced through disseminating science-based information on health promotion and disease prevention including exercise, nutrition, smoking and tobacco cessation, immunization, counseling, fostering good habits of health and hygiene, disease screening and preventive medicine. Prior evidences indicate that preventive health interventions can improve health outcomes in a great deal. In a regressive health delivery system of India where major health expenses on curative health is met by out-of-pocket money, preventive health services hold promise to be cost efficient, clinically effective and equity promoting. This article, therefore, examines in depth the issues and prospects of preventive and promotive health care services in realizing optimum health care needs of the people.

Keywords: Preventive Health Care, Equity, Cost Effective, Life style

INTRODUCTION

India has recently been experiencing an epidemiological transition in the composition of disease burden. In absolute terms, the infectious diseases are still highly prevalent among the poorer sections of the society due to lack of basic amenities of life. On the other hand, the proportion of non-communicable diseases (NCDs) in the disease profile has been increasing at an alarming rate. Epidemics of NCDs are presently emerging or accelerating in most developing countries.¹ As per WHO estimates,² NCDs accounted for 53 percent of all deaths in the age group of 30-59 years, and it is projected to be higher in the years to come. While NCDs are usually expected to occur in old age, their peak occurrence in

India is a decade earlier than western countries. The rapid pace of technological and socio-economic changes has led to lifestyle choices detrimental to healthy living. The forces of liberalization, globalization and associated urbanization have further augmented the urge for competitive living. The changing lifestyles have resulted into higher incidence of heart diseases, diabetes, obesity, certain cancers, deteriorating inter-personal relations and psychological well-being among people. In the modern competitive economy, the services sector is gaining pre-eminence and the value of individual worker has increased more than ever before. While on job, an individual with specialized skill is the focal point in the ever-increasing demanding work

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environment. Besides job stress and burn out, new types of occupational hazards are affecting the youth owing to lack of physical activities like muscular pains, cervical **spondylitis**, slip disk, hypertension, depression, acidity, obesity, sleeping disorders.³

The rising burden of NCDs due to the combination of age structure and lifestyle changes has contributed to the unprecedented health transition in India. Health transition is characterized by a demographic transition in the age profile and an epidemiologic transition marked by the shift in the cause of death profile with increasing dominance of NCDs.⁴ During this transition, the age profile of the population changes from a pyramidal shape to a more columnar shape, as fertility declines and the population ages. As more individuals survive to enter the middle ages, the years of exposure to the risk factors of chronic disease increase.⁵ The process of socio-economic development is accompanied by several undesirable lifestyle alterations in the form of a diet rich in saturated fat, salt and excess calories, decreased physical activity, addictions like tobacco and alcohol, and augmentation of psychological stress. Thus, both dose and duration of risk factor exposure multiply in large measure leading to life-style related problems and their adverse consequences. When infections and nutritional deficiencies are receding as important contributors to mortality, cardiovascular diseases (CVDs), cancers, diabetes, neuropsychiatric ailments and other chronic diseases are on rise constituting a major burden of disease. Though NCDs usually originate in the upper segment of the social strata, they have entered into a stage where the poor are worst afflicted. Studies reveal that migrant poor workers have shown excess rates of coronary heart diseases (CHD) and diabetes in comparison to other groups in urban settings. Similarly tobacco consumption, a leading cause of oral cancer, is also higher in rural as compared to urban population and in the poor as compared to the rich population groups.^{6,7} The said health transition highlighting greater risk of NCDs poses as major health challenge of growing magnitude.

The significance of preventive health care practices has increasingly been recognized in the wake of aforesaid health transition. Most of the health risks

from lifestyle diseases can considerably be tackled through disseminating science-based information on health promotion and disease prevention including screening to identify potential condition, regular exercise, proper diet, smoking and tobacco cessation, immunization, fostering good habits of health and hygiene (self-care), counseling and preventive medicine. Evidences suggest that promotion and preventive interventions can substantially improve health outcomes. In other words, preventive health care involves measures taken to identify and minimize risk factors for disease, improve the course of existing ones, and disease screening for early detection. Early recognition and prevention of disease is an important part of health care, because it detects the disease at the initial and curable stages thereby preventing complications and co-morbidities. It is also a whole lot cheaper and effective than treating a full blown disease at a later stage. Life-style diseases are preventable and modifiable. Individual and collective social behaviour can be modified by way of health promotion, which is essential element of well-being. Receiving preventive health care during early ages among children, for instance, may have better and developmental health outcomes. The increasing burden of NCDs is likely to cause more pressure on the already over-burdened health infrastructure, which largely caters to curative health. The regressive health delivery system of India where cost efficiency, equity in access and use, and effectiveness are important health issues, preventive health care interventions hold promise in realizing optimum health care needs of the people. This study, therefore, highlights as how sustained preventive health care interventions are cost efficient, equity promoting and clinically effective.

OBJECTIVE

The main objective of the present endeavor is to examine the role of preventive health care measures in the midst of changing disease profile from communicable to non-communicable diseases (NCDs). The study also reviews how preventive health interventions can be helpful in tackling the health issues of cost, equity, and effectiveness in the health delivering organization in India.



COST EFFICIENCY

The continued rise in health expenditure is a world-wide concern. Unlike the present treatment-based health care, prevention oriented approaches offer great unrealized potential to directly improve the health of the people and thereby reducing medical utilization and its attendant costs. Preventive services have intuitive appeal. If a disease can be detected early or prevented altogether, the cost of treating it can be reduced or eliminated. Though some preventive health care services rendered for people with serious chronic illnesses led to live longer and accumulate more health care expenses, the total health gains for the society at large may offset the costs. Because good health is best understood as the indispensable basis for defining a person's sense of well-being.⁸ Investment in preventive health care is like a public good. Its spill-over effect is much larger for the good of the society. Moreover, expenditure on health promotion does not merely constitute the social cost; it is rather an investment in human capital necessary for economic prosperity. Health is, therefore, both a resource as well as an outcome of sustainable growth; an important objective of the development.

Preventive care procedures are one of the primarily low-tech-low cost methods. The child immunization programs, for instance, create externalities from "herd immunity" where others have reduced chances of exposure to infections. Medical costs can also be contained by efforts focusing on delivery improvements or organizational efficiency and better technology. Yet many of such measures have not arrested the trends of escalating budget. Because it has limitations, as these measures do not address the underlying causes of the health care problems. For instance, several chronic conditions such as cancer, cardiovascular diseases, and diabetes mellitus are on rise in spite of better treatment and research. The preventive services include early detection, avoiding or slowing the course of a disease essential for good health, help to reduce medical payments. Several seminal studies over the last few decades have reported that patients with psychological disturbances have increased rates of utilization of primary health care services.^{9,10} The preventive health care check-ups usually involve a complete physical

examination to make sure that the good health of an individual is realized. The physicians analyze risk factors that may lead to disease or unhealthy condition in the future and advise the tests for early warning signals. Hence, preventive health measures help in bringing down the cost of medical emergencies by catching them early.

EQUITY

Health seeking behavior among patients with any illness as measured by health care utilization is determined by a host of factors such as individuals' attitude, belief, perceptions, their knowledge about illness, cultural norms, health infrastructure, and available funds. But health expenditure is the most important factor to enhance access, use, and outcome in health care in the short run. India is one of the lowest public health spending countries in the world. Public health expenditure constitutes a meager 0.9% of GDP. Moreover, the bulk, more than 75% of the health care services are provided by the private sources in the form of out-of-pocket money. This proportion of private spending is one of the highest among low income countries. In a country like India where about 27% of the population lives below the poverty line, it is certainly regressive in effect. As per health surveys, people from the poor background have shown low level of health care utilization. Medical services provided by the private sector are largely for ambulatory care. About 70% of the treatment expenses comprise medicines. It is also known that relatively high cost of care is justified as necessary due to defensive medical practices in private sector. Studies indicate that problem of oral cancer prevalent in adolescents was found to be sensitive to educational interventions. Likewise, child immunization programmes have been quite successful in controlling infant mortality due to effective information campaigns. The promotive and preventive health strategies, therefore, encourage equality in terms of increased access to health facilities among otherwise excluded sections.

EFFECTIVENESS

NCDs onslaught in the productive and middle ages results in major financial burden on the suffering individuals, their dependent families and society as a whole. Unlike acute and chronic case of NCDs



(diagnosis and therapy) which is technology intensive and costly, most of the preventive interventions may be provided at primary and secondary level involving cheaper means like trained manpower. This also helps to avoid biological costs of pharmacological risks associated with the treatment of some of the chronic diseases. Literature reveals strong evidences supporting the efficacy of psycho-educational counseling techniques to attenuate stress (i.e. anxiety, depression, distress and Type-A behavior) to enhance wellness and quality of life (QOL). The efficacy of certain intervention methods such as health education and counseling on psycho-social and biological risk factors, morbidity and mortality has been evaluated by a number of studies. Many interventions based on research have been developed that show how changing disease processes and quality of health and well-being of an individual can be influenced. It is worthy to note that psycho-educational counseling have desirable effects on risk factors, reducing cholesterol levels,^{11,12} systolic blood pressure, weight,¹¹ and resting heart rate.¹² Both Lindel et al¹² and Dusseldrop et al¹¹ reported significant reduction in cardiac morbidity (ranging from approximately 20% to 40%) as a function of participating in the educational counseling. The associations between psychological factors like stressful life events, emotional non-expression, coping response, etc. and disease course have been noticed in empirical researches. Behavioral scientists have identified psychosocial variables (e.g. lack of social support, depression) associated with the adoption and maintenance of cancer risk behaviors such as smoking, excessive exposure to ultra violet rays, obesity, and inappropriate use of alcohol. Psychological factors may facilitate or hamper the participation of potential population in various cancer screening tests such as regular Pap smears (cervical cancer), mammography (breast cancer), prostate specific antigen (prostate cancer), occult faecal blood (colorectal cancer), and skin cancer (melanoma) screening.¹³ Thus, health psychologists have demonstrated the effectiveness of workplace prevention programmes for reducing exposure to excessive sunlight,¹⁴ smoking cessation,¹⁵ and changing cancer related dietary elements.¹⁶ Recent decreases in mortality rates for prostate cancer and breast cancer through the use of regular prostate-

specific antigen testing and early and regular mammography respectively, suggest the potential value of utilizing psychological interventions to promote the use of early detection tests.

CONCLUDING REMARKS

On the basis of foregoing discussion, it may now be concluded that preventive health interventions not only highly useful in arresting the growing burden of NCDs, but also helpful in promoting health and well-being of the masses. The preventive health care measures have been proved to be cost efficient, clinically effective, and equity promoting. In view of imbalances in the institutional health care organization, the emphasis on preventive health services may bring rich dividends. Thus, the conclusions underline the urgent need to integrate these practices in the primary and secondary health services in sustainable basis in order to meet the growing health requirements with the given health delivery system of India.

REFERENCES

1. Murray CJL, Lopez AD. Global health statistics: Global burden of disease and injury series, vol. I & II. 1996, Harvard School of Public Health, Boston.
2. WHO. Preventing chronic diseases; A vital investment, 2005.
3. AlkaChaddha, Ali Mehdi, and G. Malick. Impact of preventive health care on Indian Industry and economy. Working paper No. 198, 2007, ICRIER, New Delhi. 2-18.
4. Olshansky SJ, Ault AB. The fourth stage of the epidemiologic transition: the age of delayed degenerative diseases: *MillbankMem Fund.* 1986, 64:355-91
5. Reddy KS. Prevention and control of NCDs: Status and Strategies, 2003, ICRIER, New Delhi
6. Chaddha SL, Gopinath N, Shekhawat S. Urban-rural differences in the prevalence of coronary heart disease and its risk factors in Delhi. *Bulletin of WHO*, 1997, 75(1):31-38.
7. Reddy KS. Cardiovascular diseases in India. *World Health Statistics Quarterly.* 1993, 46:10-7.
8. Sirinivasan R. Health care in India, Vision 2020: Issues and Prospects, India Vision 2020, Govt. of India, 2004, New Delhi.



9. Brown G, Harris T. Social origin of depression: A study of psychiatric disorder in women. Free Press, 1978, New York.
10. Wildmer RB, Cadoret RJ. Depression in primary care: Changes in pattern of patient visits and complaints during a developing depression. *Family Practice*. 1978,7:293-302.
11. Dusseldrop E, V. Elderen T., Maes S, Meulman J, Kraaij V. A meta-analysis of psychological programs for coronary heart disease patients. *Health Psychology*,1999,18:506- 19.
12. Lindel W, Strssel C, Maurice J. Psychosocial interventions for patients with coronary artery diseases. *Arch. Intern. Med*. 1996, 156:745-52.
13. Lerman C, Daly M, Sands C, Balshmen A, Laftbader E, et al. Mamography adherence and psychological distress among women at risk for breast cancer. *Journal of National Cancer Institute*. 1993, 85:1074-80.
14. Glanz K, Chang L, Song V, Silverio R, Muneoka L. Skin cancer prevention for children, parents, and caregivers: A field test of Hawaii's sun smart program. *Journal of Academic Dermatology*, 1998, 34:413-17.
15. Westmaas JL, NathV.,Brandon TH. Contemporary smoking cessation. *Cancer Control*. 2000, 7:56-62.
16. Glanz K. Behavioural research contributions and needs in cancer prevention and control; Dietary change. *Preventive Medicine*.1997, 26:43-55.