

## Management strategies for treatment of cardiovascular diseases in India: A review

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### ABSTRACT

India's spending on health is poorly dismal, being less than 0.7% of its Gross Domestic Product (GDP), against an average of 0.9% of the low income countries. As a result, of this poor funding by the government on one of the most important sectors, there has been a sudden rise in private hospitals and their successful blooming. Hospitals in major cities in India in many cases are run by business houses, using corporate business strategies and high tech specializations. Thus, the marginal presence of the government share in health care leaves the door further wide open for alternative private health care suppliers. Hence the private sector is playing a very important role in India's health delivery system and has a wide network of facilities that cater to health requirements of both the urban and the rural populations. However, the major drawback is the high rising costs of treatment of certain upcoming disorders like that of cardiovascular disease, which has recently become number one non communicable disease. The age of technology has made life easier and made people more prone to heart diseases. These diseases are a global health problem with no geographic, gender, or socio-economic boundaries. In the last couple of decades the disease burden across the world has shifted from communicable diseases to non-communicable diseases (NCDs). The paper discusses some of the aspects of financial management of treating heart disease through insurance sector and its third party administrators, the TPAs.

**KEY WORDS:** HEALTH CARE, MANAGEMENT, CARDIOVASCULAR, DISEASES, INSURANCE

### INTRODUCTION

Health care system in India during the last couple of decades has made a commendable progress despite being maimed with a serious setback in its early development, because of severe unavoidable circumstances. For example, the memories of the Bengal famine of 1943, which killed 2-3 million people, are still haunting us, the fact that health services were concentrated in urban areas, and health indicators were universally poor with a life expectancy at birth of 37 years during

the country's partition and independence thereof. However, much progress has been recorded since then. Life expectancy is greater than 63 years, and the India of 2014 is a thriving democracy with a diversified production base, a large scientific community, and an impressive information technology sector. Since then, in India, health has assumed as a gigantically growing industry, and the potential is tremendous, as India's spending on health is poorly dismal, being less than 0.7% of its Gross Domestic Product (GDP), against an average of 0.9% of the low income countries.

As a result, there has been a sudden rise in private hospitals and their successful blooming. Hospitals in major cities in India in many cases are run by business houses, using corporate business strategies and high tech specializations, which create demand as well as attract high profile patients as the facilities in some of these hospitals are world class (Wilson 2009 and Health Information, 2010).

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During the same period however, India's record in expanding social opportunities has been uneven. The health and nutritional status of children and women remains poor, and India is routinely ranked among countries performing weakly on overall health performance (WHO, 2000 and WHO, 2008). But there is good reason for hope. The country has withstood the recent global economic crisis and quickly returned to economic growth. On the other hand, the marginal presence of the government share in health care leaves the door further wide open for alternative suppliers. The private sector plays a very important role in India's health delivery system and has a wide network of facilities that cater to health requirements of both the urban and the rural populations.

With regard to India's health care system, it is still pathetic. India has one of the most fragmented and commercialized health care systems in the world, where world class care is greatly outweighed by unregulated poor-quality health services. Because public spending on health has remained low, private out-of-pocket expenditures on health are among the highest in the world. Health care, far from helping people rise out of poverty, has become an important cause of household impoverishment and debts. The average national health indicators, though showing improvements in recent decades, hide vast regional and social disparities. Although some privileged individuals enjoy excellent health outcomes, others experience the worst imaginable conditions. Health disparities are being exacerbated by unequal economic growth, growing commercialization of health care and poor regulation of costs and quality of care (Balarajan *et al.*, 2012; Paul *et al.*, 2012, Kumar *et al.*, 2012).

One of the serious problems which has been staring Indian population is the recent emergence of cardiovascular diseases. A century earlier very few people used to die of heart diseases. In due course of time, they have become the number one global killer. The age of technology has made life easier and made people more prone to heart diseases. The combination of a sedentary lifestyle and a rich diet has led to an increase in clogged blood vessels, heart attacks, and strokes. These diseases are a global health problem with no geographic, gender, or socio-economic boundaries. In the last couple of decades the disease burden across the world has shifted from communicable diseases to non-communicable diseases (NCDs). Moreover, a majority of people suffering from NCDs reside in the developing countries. These nations, not having completely dealt with the scourge of communicable diseases yet, are now facing the additional burden of NCDs. The already inadequate and stretched healthcare systems in these countries has meant that the mortality from NCDs is also higher, with more than 80% of premature deaths occurring in low and middle-income countries.

Cardiovascular diseases (CVDs) were once thought to be impacting the rich and affluent, but it is now well established that they afflict the poor as well. While changing lifestyles, unhealthy eating habits and declining physical activity are the key reasons for high incidence rates in the rich population, the issues of access and affordability account for higher mortality amongst the urban poor and rural population. During this period and the coming of 2030, the global population is projected to grow by from 7 billion to 8.5 billion people. The crude

death rate is expected to remain more or less stable at around 8.4 deaths per thousand. However, a major shift is currently underway in the overall disease burden in the world. In 2008, five out of the top ten causes for mortality worldwide, other than injuries, were non-communicable diseases; this will go up to seven out of ten by the year 2030. By then, about 76% of the deaths in the world will be due to non-communicable diseases (NCDs), principally heart disorders being on the top (Deloitte ASSOCHAM Report (2011).

## MANAGEMENT STRATEGIES FOR TREATMENT OF CARDIOVASCULAR DISEASES:

Despite the tremendous advances in cardiac care made recently, including drugs, devices, and diagnostic innovations; many patients still continue to die from heart diseases or live with significant morbidity either due to paucity of funds or ill-treatment, again due to mismanagement of economy. One of the dire needs is not only making radical economically viable improvements in existing heart remedies and surgical methods but also to extend preventive strategies such as improved life style, nutritious and healthy food, corporate health protection initiatives, health wellness programmes, promotion of meditation and Yoga to full effect to combat heart diseases (Deloitte ASSOCHAM Report, 2011).

Recently, Preker *et al.*, (2013) have described in detail theoretical and practical aspects of healthcare such as financing, reforms, insurance and their limitations in several countries like US, China, Turkey, Thailand, South Africa etc along with India. The detailed World Bank report, covering several countries along with India has suggested for strong public policies along with Government involvement for making an efficient, secure and equitable system of healthcare financing.

According to this latest report of E Library of the World Bank, edited by Preker *et al.*, (2013) health insurance, which has been a saviour world wide, is quite limited in India, all organized health financing arrangements cover around 110 million (workers, 21 million of them covered under Private Voluntary Health Insurance (PVHI). This is expected to grow in coming years reflecting a large untapped market as well as growth in income as a result of faster GDP around 7-8% a year.

Similarly, as per World Bank Reports (2010, 2013), health insurance premium, revenue has been growing in India at 20-25% a year and offers at present the only economically viable solution for treatment of high cost diseases like the heart diseases, cancers and other non-communicable diseases which are on the rise. This is quite relevant in the view of the fact that health cost spending in India is quite low being US dollar 30 per capita i.e. 4.8% of national income on health cost. According to this report India's health spending is largely out of pocket and is overwhelmingly the largest component of health system financing in India, accounting for 70% of the total estimate or even higher than that.

Recent data of World Bank (2010) show that in India, 61% of private spending is on outpatient care, 57% of outpatient spending is on acute infectious diseases, 85% of inpatient spending is in five areas cardio-vascular diseases- 14%, cancer 13%, accidents 19%, acute infections 22% and obstetrics

and gynecology 17 %. According to the World Bank almost four fifth of health care spending in India today is met through out of pocket spending which is highly regressive. Organized financing is barely developed. Hospitalization cost place a huge burden on Indian families, causing many to fall into poverty. Compared with income overall spending is high for a poor country like India but outcomes are below average, the need and the demand for healthcare financing reforms in India are urgent and strong .

These diseases impact not only the well being, but can also hold back the economic growth of the country due to increased healthcare expenditure and diminished productivity. India is projected to lose approximately USD 236 billion between 2005-2015 due to CVDs and diabetes. To address the issue of rising CVDs, urban India has made considerable progress in delivering high quality diagnostics and interventional cardiac care. Indian hospitals perform heart surgeries with outcomes that are comparable to the best in the world. However, this level of care is available only to the select few those that can access and afford it.

Though Indian hospitals conduct over ninety thousand heart surgeries a year, this is a small fraction of the 2.5 million required. While there is increasing availability and focus on curative care in urban areas, this alone cannot solve the problem of CVDs. There is a need to focus on prevention and early diagnosis. CVDs comprise a major portion of non-communicable diseases. In 2015, of all projected worldwide deaths, 30 million are expected to be because of cardiovascular diseases. In fact, CVDs would be the single largest cause of death in the world accounting for more than a third of all deaths, (WB Report, 2010, WHO, 2012, Preker *et al.*, 2013).

The Indian healthcare sector has seen improvements over the past couple of decades, but there is still a long way to go before we meet international standards. The improvements have not been uniform inequities based on gender, rural vs. urban and even social status still remains. While the government assures healthcare to all its citizens, 80% of all out-patient and 60% of all in-patient care is handled by the private sector which accounts for 68% of all hospitals in the country. Healthcare financing also remains a key issue. In 2010, 5.0% of the GDP was spent on healthcare, less than any other BRIC nation, out of which the government spend was a meagre 0.9%. Further, 74% of total health spending in India was out-of-pocket (OOP), with only 14% of the population being covered by some form of health insurance.

India has seen a rapid transition in its disease burden (number of cases/ lakh) over the past couple of decades. The load of communicable and non-communicable diseases (NCDs) is projected to get reversed in 2020 from its distribution in 1995. This is largely because, with India's economic growth and urbanization over the past decades, a large section of the population has moved towards unhealthy lifestyles with decreasing physical activity, increasing stress levels, and increasing intake of saturated fats and tobacco.

Cardiovascular diseases are the largest cause of mortality, accounting for around half of all deaths resulting from NCDs. Overall, CVDs accounted for around one-fourth of all deaths in India in 2008. CVDs are expected to be the fastest growing chronic illnesses between 2005 and 2015, growing at

9.2% annually, and accounting for the second largest number of NCD patients after mental illnesses. A more worrying fact is that the incidences of CVDs have gone up significantly for people between the ages 25 and 55 to 24.8%, which means we are losing more productive people to these diseases.

The interdependence between health and economic well-being is well established and there is a huge impact of cardiovascular diseases on economic growth and development. Between 2005 and 2015, India is projected to cumulatively lose USD 236.6 billion because of heart disease, stroke, and diabetes, shaving 1% off the GDP. This is based on the fact that in the year 2000, in the age group of 35 to 64, India lost 9.2 million years of productive life, almost six times the figure for United States (Deloitte ASSOCHAM Report 2011). Between 2011 and 2031, the number of people above 60 years of age is expected to more than double in India, (Economist IU, Nutrition Transition in India (1947-2007), Leeder *et al.*, (2005) and International Heart Protection Summit 2011).

According to Wahi (2011) in an excellent opinion on integrated health care system in India, it has been reported that despite increases in spending in recent years total yearly health spending in India is very low and India ranks 153 out of 193 countries with respect to total expenditure on health per capita. The government expenditure on health is only a quarter of total health spending with the bulk of the expenditure being private. The impact of this spending inequality has severe consequences in a country where above 50% of the population lives below the international poverty line of 1.25 US dollar per day. According to the above author the stated goal of the NRHM launched in 2005 was to increase health expenditure from 0.9 % of GDP to 2.3% of GDP in the next 5 years, however despite increases in government health spending, this target has not been achieved so far (Wahi, 2011). Comparatively, in India public spending on health is lowest in the world, being between 0.94% to 1.4 % , in comparison, the figure stands at 14% for Maldives, 29% for Bhutan, 53% for Sri Lanka, 31% in Thailand and 61% in China, (Kumar *et al.*, 2012, TOI, 2011).

Thus, Indians have to pay above 80% of their medical expenses from their pocket, called as Out of Pocket Spending, (OOPS). Paying off health care bills is crippling Indian households. India's per capita OOP to pay healthcare costs has gone up from Rs.42 83 in 2005 to Rs.68.63 in 2010. Experts recently have said that the main strategy to reduce out of pocket expenditure would be to step up the governments investment in public health domain - from the current 0.7 to 1.0 % of GDP to about 3% (Sinha, 2012, TOI March 16th 2012).

## CONCLUSIONS AND RECOMMENDATIONS

In conclusion, it is suggested that health insurance is the only economically viable option which can provide protection against risks or uncertain events and is based on the principle that what is highly unpredictable to an individual is predictable to a group of individuals. Health insurance protects against the cost of illness, mobilizes funds and provision for health services, increases the efficiency of mobilization of funds and provision of health services, and achieves certain equity objectives.

There should be more awareness of health insurance schemes tailor made for Indian public in particular who cannot afford to bear the financial burden of high cost treatments of cardiovascular related disorders.

Though, health insurance in our country is in a nascent stage and contributes to a very small portion of the health expenditure, the government through its state run health schemes have played a significant role however they are not enough, as they are coupled with delays, corruption and mismanagement. Because of this malady, the government has allowed the private insurance companies to offer health insurance products for its huge population with a view of ever increasing high costs of health care, this aspect has made health insurance an economically unviable option, and has not been so successful, as it developed several problems, thus paving the way for creation of a third party involvement, in the form of the third party assurance the TPA. In order to remove such serious adversaries the emergence and future of third party assurance (TPA) becomes very important, which if properly managed can play a key role in the growth and development of a managed health care system. TPAs are separate entities that coordinate between insurance companies, customers (patients) and health providers (hospitals), they arrange for cash less hospitalization and closely monitor the use of resources and services.

However it has been recently seen that the TPAs also do not have a very good working system with many of the insurance companies and hospitals and have been considered as hiccups between the health insurer, companies and the health service providers, leading to the failure of the health care system except for the few big insurance companies which have a high cost monopoly, thus creating an imbalance between the customer and the health insurance in managing health care systems.

In such a grim health scenario, it becomes imperative that we find alternative health financing mechanisms which are viable, cost effective and transparent, which can be a partner to the state and government run programs, health insurance is one such alternative, however in India health insurance market is very limited, covering about 10 % of the total population due to problems of huge magnitude.

The data of various studies points that there is a low penetration of the TPA through the health insurance. Thus there is a huge scope in terms of future expansion and business which can be tapped by health insurance companies in India through well organized and professional services of the TPA. It is strongly recommended that there should be an encouraging policy of the government through IRDA to use the services of the TPA in the future for the mutual benefit of the government i.e the public sector, the insurance companies, the hospitals,

TPAs and finally the patients which have to be considered on top of the pyramid. Keeping in view this aspect it is recommended that the government along with the public and private health sector must evolve patient/customer beneficial health insurance programs for the middle and the old aged of all economic sectors involving the TPA, giving them more financial control so as to deliver better services and come up to the expectations of the real third party administrator.

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