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Funding of health care in India in the context of country development and overall health system goals

Key words: India, funding of health care, health system goals, socio-economic development

Introduction

India is a pluralistic, multilingual and multi-ethnic country located in Southeast Asia. It is the 2nd largest populated country which has the 7th position in the geographical area. Since 1990 India has emerged as one of the wealthiest economies in the developing world. Recently it is the second fastest growing major economy in the world. Despite the fact that economical development in India has been accompanied by increases in life expectancy, literacy rates and food security, India's performance in the area of health care has been still far from satisfactory. The system of financing health care as a one of the most privatized in the world faces especially many problems. This paper would therefore attempt to describe and assess the system of financing health care in India. In order to outline to the readers the overall country context the first section will provide a brief description of the demographic, economic and health profile of the Indian population. The second and third sections will present the main methods of funding health care in India as well as and the budget of health care system. The concluding section would attempt to assess the financing system in India and offer a way forward for the better achievement of health care system goals.

The World Health Organization has identified health financing as one of the four functions of the health system.[1] The purpose of health financing is to make funding available, as well as to set the right financial incentives for providers, to ensure that all individuals have access to effective public health and personal health care. This means reducing or eliminating the possibility that an individual will be unable to pay for such care, or will be impoverished as a result of trying to do so [1]. Health care system by its functions should pursue specific goals such as:

- improving the health of the population they serve. This means making the health status of the entire population as good as possible over people's whole life cycle,
- responding to people's expectations in regard to non-health matters. It reflects the importance of respecting people's dignity, autonomy and the confidentiality of information,
- fairness in financial contribution (sharing risk and providing financial protection against the costs of ill-health). Fair financing in health systems means that the risks each household faces due to the costs of the health system are distributed according to ability to pay rather than to the risk of illness [1].

The connection between health financing, other system functions, the health finance policy objectives and overall health system goals is depicted in **Figure 1**.

All world countries face difficult challenges and choices in financing their health systems. The determinants of health financing are complex amalgam of institutional, demographic, socioeconomic, environmental, external, and political factors. There is no single answer to the question of how to finance health systems. Therefore the assessment of the health financing system should be based on the assessment of the level of achievement related objectives for the population.

1. Socio-economic development and health profile in India

India is a developing country with 28 states, 7 union territories and a population of 1,103 million [3]. The majority of India's population (nearly 75%) lives in rural areas of the country, although the urban growth rate is well ahead of the rural rate. The life expectancy has doubled from 32 in 1947 to 66 at the present times [4].

[1] The other function are: stewardship (setting and enforcing the rules and providing strategic direction for all the different actors involved); resource creation (investment in human and physical capital and inputs); service delivery.

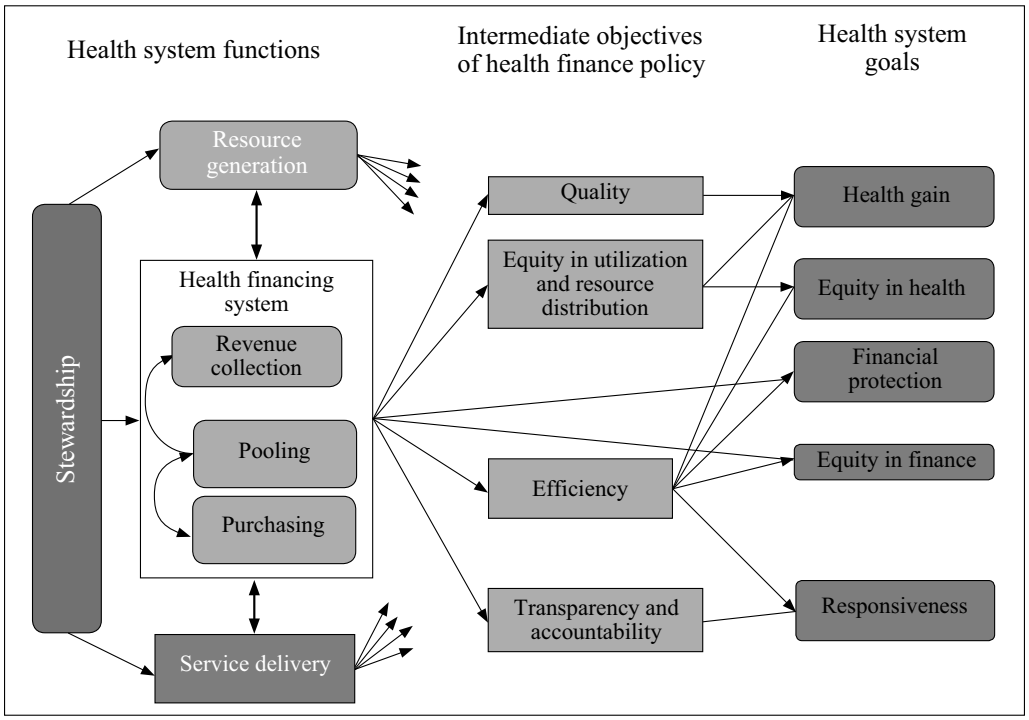

Figure 1. *Links of health financing system to policy objectives, other system functions and overall system goals [2].*

After 60 years of independence, India has achieved economic stability; the major sectors of contribution are Agriculture, Tourism, Commerce, Power, Communications, and Science & Technology. In 2006 Indian's GDP PPP was 2,740,066 millions of international dollars (while United States was 13,163,870, China 6,091,977 and Japan 4,081,442) [5].

The estimations for 2008 indicate that GDP PPP will reach level of $5.21 trillion. Despite this overall economic growth, India is still ranked 128th out of 177 countries in Human Development Index (HDI) ranking [6]. Additionally there is a vast inequality in the wealth of the population. At the turn of the century, India was having the largest number of millionaires in the developing world and sadly at the same time India also accounted for nearly one-fourth (364 million) of the world's poor [7].

At the United Nations Millennium Summit in September 2000, the eight Millennium Development Goals (MDGs) were agreed and these goals along with their indicators offer a comprehensive snapshot of a country's socio-economic development[2] [8]. In the Indian context, there is a wide disparity in the geographical distribution of these indicators.

According to the millennium development report for India, 2005, MDG targets for reducing hunger, improving access to water and sanitation are likely to be achieved or are already achieved but progress on some other health indicators (child and maternal mortality) may not be on track. India holds the largest number of maternal deaths in the world and its worrisome rates of Infant Mortality & Maternal Mortality are worse than those in some African sub-Saharan regions. India is also home to the highest number of undernourished people in the world, and one-third of the world's under-weight children. This indicates the need for targeting MDG-related interventions to poorly-performing states, districts, and perhaps even villages. The progress made by India would have an overarching impact on meeting the global Millennium development goals.

India is struggling not only against communicable diseases but also carries a large burden of non-communicable diseases. The state of infectious disease is no different. The so called diseases of the poor namely Malaria, Tuberculosis, Leprosy, Leishmaniasis, Dengue and lately HIV and AIDS have added a severe toll on the country's health status.

Malaria is killing around 1 million people worldwide [9]. It is affecting the most vulnerable population and at the same time malaria has a severe impact on the overall economic growth of many nations [10]. Most of the drugs used for treating Malaria are reportedly becoming resistant and it has been ages since any major breakthroughs have been made in the treatment of Malaria.

India has got the largest burden of Tuberculosis in the world and it is killing an individual every two minutes. In recent times the situation has only worsened with the co-occurrence of TB and HIV. To add to this insult, the incidence of drug and multi drug resistant TB is on the rise. The prime reason is irregular or partial treatment. The diagnosis, treatment and even the vaccine are dependent on old and imperfect technologies [11].

[2] The Millennium Development Goals (MDGs) are a set of numerical and time-bound targets to measure achievements in human and social development. The Millennium Development Goals are: eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV /AIDS, malaria and other diseases; ensure environmental sustainability; develop a global partnership for development.

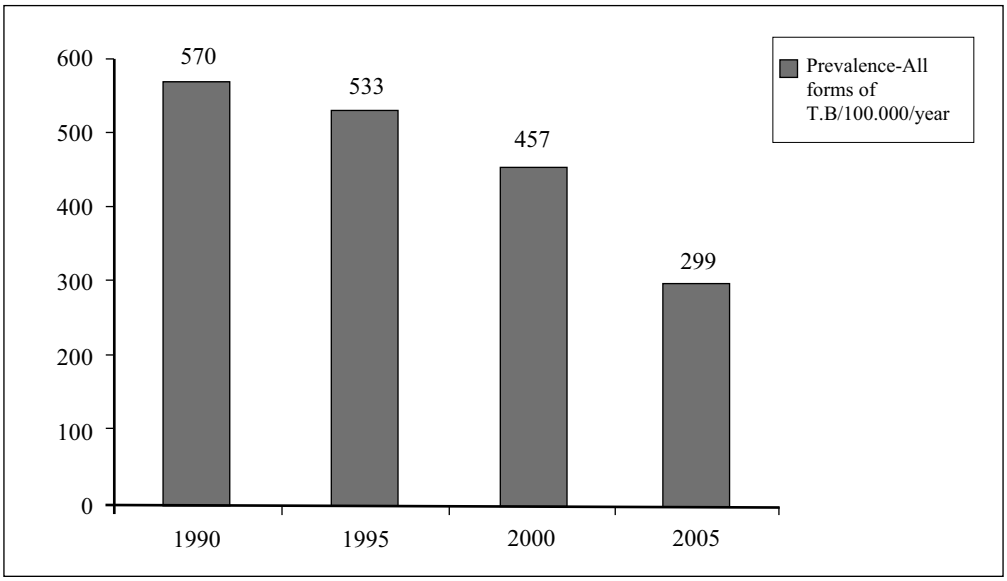

Figure 2. *Prevalence of Tuberculosis in India [12].*

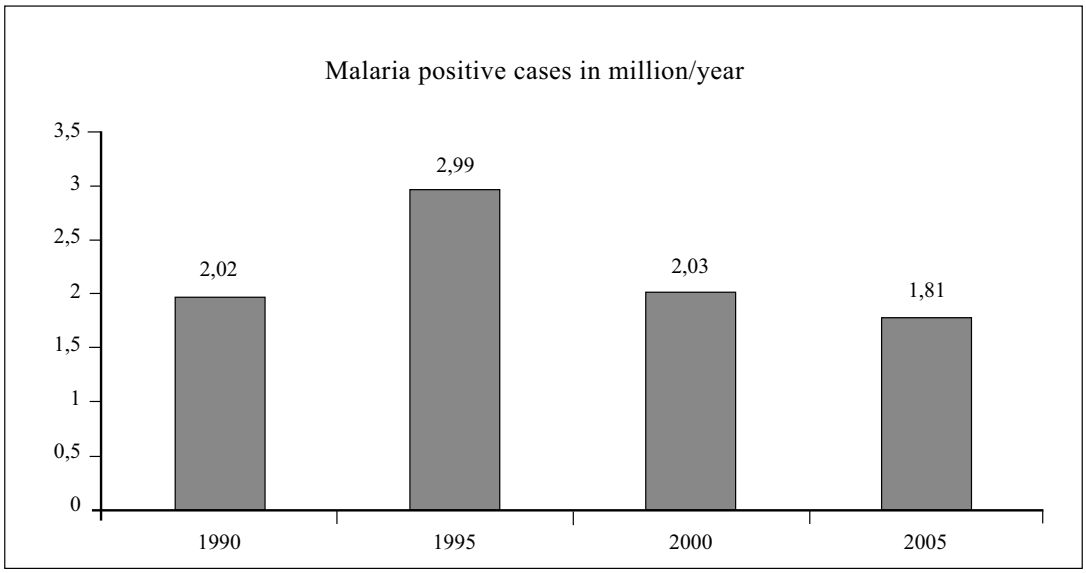

Figure 3. *Malaria positive cases in India [12].*

Over the last few years a growing number of people have become infected with HIV. Poor countries have the highest patient load and India carries the third largest burden of HIV cases. The number of people dying from AIDS is on a constant rise [13].

The situation of other neglected diseases affecting the poor people is identical. These diseases are peculiarly having a large prevalence in the low income developing world, a lower burden in developed nations, and a low level of funding in terms of the disease burden. This under-funding of research in neglected diseases of the poor is known as the "10/90 gap" which refers to the point that lesser than ten percent of global R&D expenditure are devoted to the diseases and conditions associated with ninety percent of the world population [14].

The low and middle income countries are bearing the double brunt of communicable and non-communicable diseases. India has already become the diabetes capital of the world and at the same time India loses around 2.5 million people to malaria, respiratory infections, diarrhea and other infections annually [15].

2. System of funding health care in India

Due to the vast diversity within India, one single solution will not be able to meet the needs of all its citizens [16]. Therefore, India has a mixed type of healthcare funding system. It has general taxation (based on the Beveridge model), social health insurance (based on the Bismarck model), private health insurance, community

health insurance and out of pocket payments [17]. In this section, general taxation is described, followed by documentation of different types of insurance systems and out of pocket payments in India.

2.1. General taxation

The tax system in India is well-developed with clearly distinguishable power between the Central and State Governments, and local bodies. During the last 10–15 years, tremendous reforms have been brought to the Indian taxation system with main emphasis on rationalizing tax rates and simplifying tax laws. This has resulted in better compliance, easiness in tax payment and better enforcement. The taxes charged by the Central Government are direct and indirect. The direct taxes include Corporate Income Tax (CIT), Capital Gains Tax, Personal Income Tax (PIT), Tax Incentives and Double Taxation Avoidance Treaty. The indirect tax includes Excise Duty, Customs Duty, Service Tax and Securities Transaction Tax. The taxes charged by the State Governments include Sales Tax or Value Added Tax (VAT), Stamp Duty, State Excise, Land Revenue and tax on agricultural income. The VAT has replaced Sales Tax in most states of India after 1st April 2005. The local bodies can charge tax on properties, octroi and for utilities such as water supply, drainage [18]. The general tax and non-tax revenues are the primary sources of public financing. Grants and loans received from the internal and external agencies are included under these. The Centre's and States' programmes are being financed by this pool of resources. Other than these tax revenues, a small quantity is raised through user charges, fees and fines from the sector, and further incremented through external agencies' grants and loans. The general tax and non-tax revenues are also important sources of public financing in the states, because the cost recovery from the delivered services has been small (less than 2%). This results in the healthcare resource allocation based on general financial condition of the State Governments. Even State Governments raise funds through user charges and some type of fees, which varies between states [19]. The figure below explains the general tax system in India.

2.2. Insurance systems

Social health insurance is an obligatory and contributory health insurance, which is usually applicable for the formal sector. The employees contribute through payroll deductions and the employers provide a grant. This health insurance covers employees and their dependents such as the Central Government Health Scheme (CGHS) for the Government of India's civil servants and the Employees' State Insurance Scheme (ESIS) for the low-paid industrial workers. The CGHS provides benefit package for both outpatient and inpatient care. It has its own dispensaries for providing outpatient care. For inpatient care, it uses the facilities of the government and

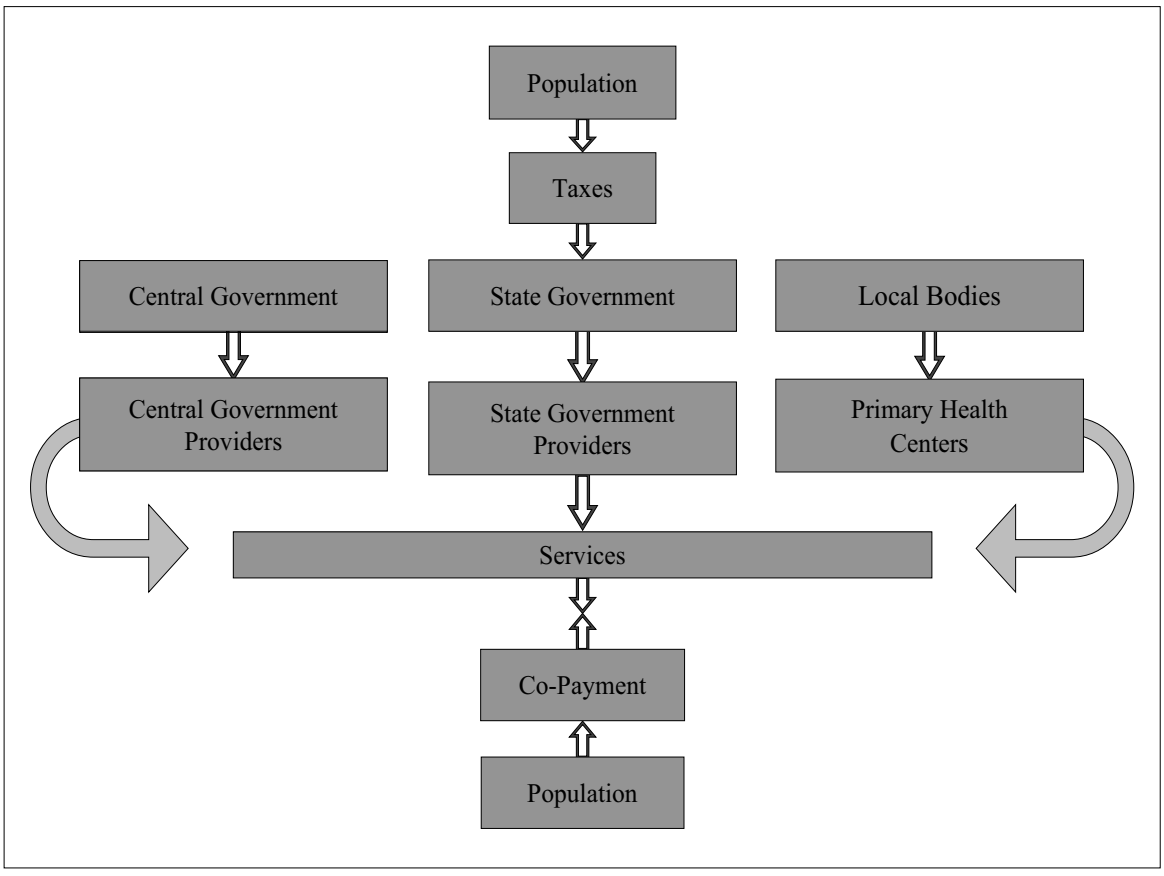

Figure 4. *Health care funding in India – general taxation.*

permitted private hospitals, and reimburses the expenses to the patient. The ESIS has its own dispensaries and hospitals. Moreover, medical care can be availed from the empanelled private practitioners. There is a facility of reimbursement of the expenses to the patient, if the patient avails a special care which is not available within the ESIS dispensaries and hospitals [16]. The premium amount depends on the earned income (and hence ability to pay) and not on the health risk. Standard benefit packages are provided and contributions are earmarked for spending on health services [17].

Some employer based health insurance schemes are available in India in both the public and private sectors such as in Indian Railways; Indian Army, Navy and Air Force; security forces; plantations and mining sectors. This system provides lump sum payments, reimbursement of employee's healthcare expenditure for outpatient and inpatient care, fixed medical allowance, monthly or annual irrespective of actual expenses, or covering them under the group health insurance policy. It is completely employer managed facility. Apart from all these, social security benefits are there for the underprivileged people under the provisions of Maternity Benefit (Amendment) Act 1995, Workmen's Compensation (Amendment) Act 1984, Plantation Labour Act 1951, Mine Mines Labour Welfare Fund Act 1946, Beedi Workers Welfare Fund Act 1976, and Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. Moreover, Illness Assistance Funds of the Central and a few State Governments also plays a vital role in case of people living under below poverty line (BPL) [17].

Private health insurance is a voluntary and for-profit health insurance wherein people can register and buy the insurance product of their liking such as Medical Insurance Scheme (Mediclaim). People have to pay a premium to a health insurance company which pools people with similar risks and insures them for health expenses, that is, risk-rated premium. The premium also includes a profit part to the third party and provider institutions. The premiums are not based on buyer's income but depend on an estimation of the risk status of the buyer (or of the group of employees) and the package of benefits provided. Those who are not covered under the social health insurance opts this option, especially the high income people. In 1999, the Insurance Regulatory Development Authority Bill (IRDA) was passed in India, which has opened the door of the insurance sector to private and foreign health insurance companies [16]. Within the private sector, Bajaj Allianz, IFFCO-Tokio General Insurance Company Limited, ICICI Lombard, Royal Sundaram Alliance, Reliance General Insurance, Cholamandalam MS General Insurance Company Limited, and HDFC-Chubb General Insurance Company Limited provide health insurance schemes. Within the public sector, the General Insurance Corporation (GIC) and its four subsidiary companies (United India Insurance Company Limited, National Insurance Company Limited, New India Assurance Company Private Lim-

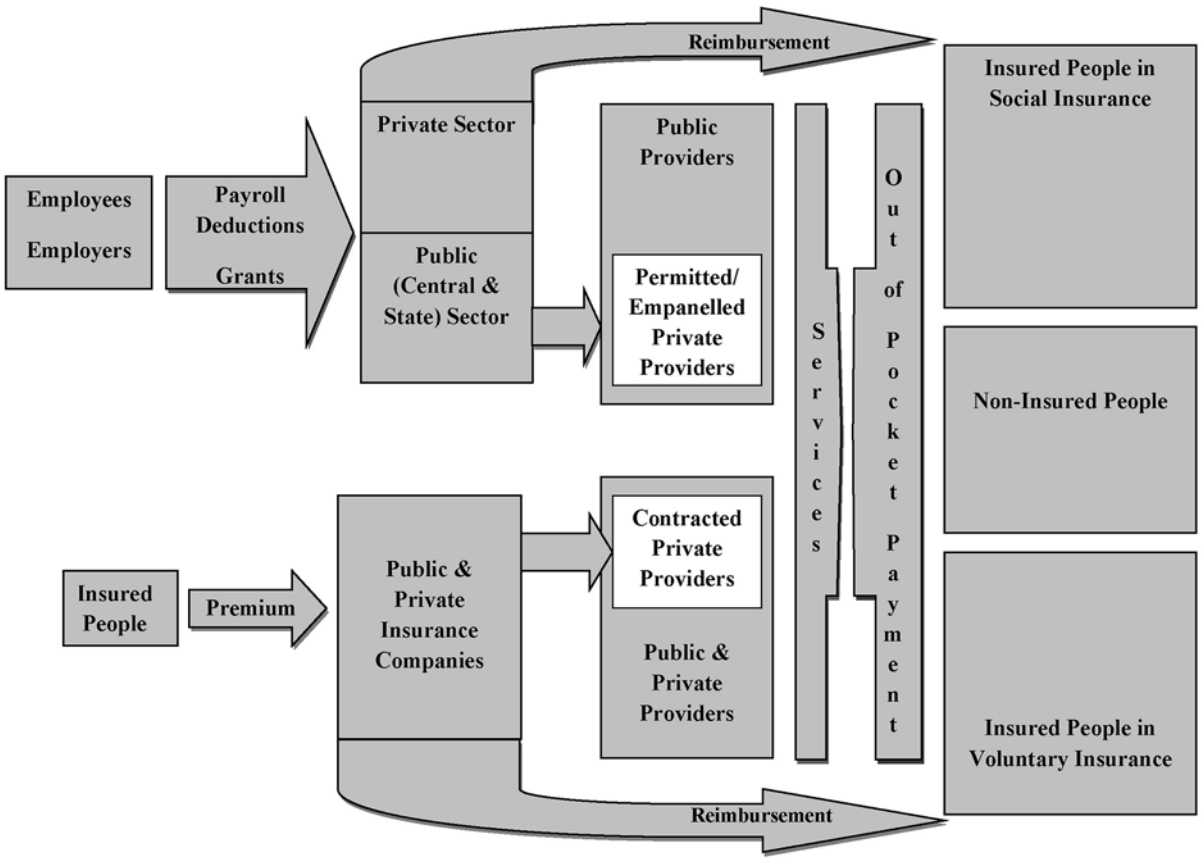

Figure 5. *Health care funding in India – insurance system.*

ited, and Oriental Insurance Company Limited) and the Life Insurance Corporation (LIC) of India provide voluntary insurance schemes [20]. The private insurance companies are mainly concentrated in about eight cities and the public sector insurance companies covers 90% of the market share [19]. Universal Health Insurance Scheme (UHIS) is a voluntary health insurance scheme for the below poverty line people. The public sector is responsible for running this scheme [16]. The **Figure 5** shows the insurance systems in India.

Community health insurance is also a voluntary and not-for-profit health insurance which usually operates for the low income people, rural areas and informal sector such as Mutual Health Organizations (MHOs), Local Health Insurances and Micro Health Insurances. The community, trust hospitals or non governmental organizations (NGOs) plays a vital role in these insurances. These are usually small schemes and are formed on the basis of a collective pooling of health risks. The premium usually does not depend on the earned income (thus, flat amount and are not progressive). Moreover, the premium is also unrelated to the assessment of individual risk status [17]. Community health insurance is of three types namely, direct, mutual, and linked models. In the direct model, a hospital initiates a health insurance product. The hospital acts as both the healthcare provider and the insurer. In the mutual model, an NGO organizes and implements the health insurance, and purchases healthcare from various providers, such as the "Yeshasvini model". In the linked model, an NGO collects the premium from the community and purchases health insurance from a formal insurance company, and healthcare from providers. The last one (among these three) is the most common form in India [16].

2.3. Out of pocket payments

Out of pocket payment is the most common source of healthcare expenditure in India. Moreover, it is the main form of household funding for availing healthcare services. Here, people (households) have to pay at the time of illness. This method is very inefficient and inequitable as the patient is unable to purchase healthcare efficiently. Moreover, there is no risk pooling [16]. It may be official direct payment for healthcare services; co-payment; or payment for diagnostic tests and prescribed and out of counter drugs [17]. User charges for some healthcare services are being introduced especially in secondary and tertiary level public hospitals which forces people towards private health sector [19].

3. Health care expenditures in India

The total health expenditure in India for the year 2001–2002 was Rs 1,057,341 million, which accounted for 4.6 percent of its GDP) (**Table I**.) Of the total expenditure, 20.3 percent was public/government expenditure, 77.4 percent was private expenditure and remaining 2.3 percent external support. Over all, the per capita health expenditure for the year was rupees 1021 [20].

Expenditure	Exp. in Rs 000s	Per capita Exp (in Rs)	Dist of THE (%)	as a % of GDP
Public expenditure	214,391,018	207	20.3	0.94
Private expenditure	818,104,032	790	77.4	3.58
External Support	24,846,646	24	2.3	0.11
Total Health Expenditure	1,057,341,696	1021	100.0	4.63
GDP at Market Prices	22,813,050,000			

Table I. *Healthcare spending during the financial year 2001–2002 [20].*

The **Table II** below shows that Central Government contributed Rs 67,185 million (6.4 percent) while the contribution of state governments and local governments was Rs 132,709 million (12.6 percent) and Rs 14,496 million (1.3 percent) respectively. In private expenditure, the household funds account for 72.0 percent. The total expenditure incurred by firms in public and private sector for providing medical care benefits to employees and their dependents was 5.3 percent of total health expenditure. The contribution of NGOs at Rs 800 million, was mainly through donations from Indian philanthropic organizations and from their own resources in the form of interest from deposits and rent from buildings etc. The total external aid received for providing health activities was rupees 24,846 million, most of which has been routed through the central government.

The budget of the Ministry of Health and Family Welfare (MOHFW) constitutes the main part of the Central Government Budget. Classification of public health expenditure for the year 2001–2002 indicated that 33% of the total health expenditure of MOHFW is for public health & RCH programmes as against 18.4% in medical education & research followed by 17.6% in public hospitals. 53 percent of total MOHFW had been utilized for primary care services, 23.6 percent in tertiary care services and 5 percent in secondary care services.

The total health expenditure by State Governments includes external support, grants from central government to states and public receipts. Classification of State health expenditure in India for the year 2001–2002 by function indicated that 47.6 percent had been utilized under curative care services, 12.2 percent in reproductive and child care services followed by 8.7 percent towards Medical

Source of funds	Exp. In Rs 000s	% Distribution
(a) Public funds		
1. Central Government	67,185,399	6.4
2. State Government	132,709,065	12.6
3. Urban Local Bodies and Panchayat Raj Institutions	14,496,554	1.3
Total (a)	214,391,018	20.3
(b) Private funds		
1. Households	760,939,107	72.0
2. Firms	55,365,142	5.3
3. Non Governments Institutions Serving Households (NGOs)	799,783	0.1
Total (b)	818,104,032	77.4
(c) External Support		
1. Grants to Central Government	16,483,158	1.5
2. Material Aid to Central Government	825,937	0.1
3. Grants to State Government	2,389,555	0.2
4. To NGOs	5,147,996	0.5
Total (c)	24,846,646	2.3
Total funds	1,057,341,696	100.0

Table II. *Statement on funds for health care in India, 2001–2002 [20].*

Education and training of health personnel. By provider classification, 50.1 percent State health expenditure owed to hospitals/Dispensaries/PHCs/Subcentres followed by 14.7 percent in public health and RCH programmes.

Local government spent 41.4 percentage of total expenditure on the curative care services and 27 percentage on the general health administration [20].

The total expenditure incurred by households on health care activities is Rs 760,939 million. Out of this 98 percent is out of pocket expenditure on health services. This includes household payment made for utilizing health care services delivered by the government, the private sector and NGOs.

As it is presented in the **Table III** more than 66 percent of total households expenditures is for outpatient care. Classification of private health spending in India for the year 2001–2002 by function pointed that 87.7 percent had been utilized under curative care services while 12.3 percent in prevention and public health services. Further, private health expenditure in primary care services (curative) reflected 48.1 percent compared to 24.1 percent in secondary care services and 15.5 percent in tertiary services [20].

There are wide variations in household spending across states. While Kerala spends an average of Rs 2,548 (2004–2005 current prices) per capita per annum, households in Bihar, one of the poorest and most backward state spent Rs 1021 per capita per annum accounting for 90% of the total health expenditure in the state during the year 2004–2005 [19].

The new trend in the healthcare funding structure shows a decrease in public funding and an increase in private funding which is mainly out of pocket. There is an increasing growth rate of 14% per annum in household health spending [20].

Conclusions

The current political economy of health care in India makes India one of the most privatized health sector in the world. As it was presented above out of pocket expenditures is the main mechanism of financing health care and in the context of large-scale poverty in India this contributes to widespread inequities (in health and in finance)[3]. Public investments and expenditure on health care are relatively low and from 1975–1976 to

[3] National data reveals that 50 per cent of the bottom quintile sold assets or took loans to access hospital care and 20 million people each year fall below the poverty line because of indebtedness due to healthcare.

Type of health expenditure	Expenditure (in Rs 000)	% Distribution
Outpatient Care	504,073,660	66.2
Inpatient Care	135,775,203	17.8
Delivery	60,628,932	8.0
ANC Services	12,625,604	1.6
Abortion & still births	5,223,740	0.7
Immunisation	1,248,147	0.2
Family Planning	13,389,819	1.8
Medical attention at death	15,818,021	2.1
Premiums for health Insurance schemes	11,250,839	1.5
Others (Donations to NGOs)	905,142	0.1
Total	760,939,107	100

Table III. *Household expenditures on health care services, 2001–2002 [20].*

2003–2004 increased only by 0.1 percentage point (from 0.8% of the GDP to 0.9% of the GDP). There are evidence that the level of public spending on health (driven partly by fiscal constraints and partly by government priorities), has important implications for the potential of countries to attain their policy objectives [2]. There is a strong inverse relation between government spending on health as a percentage of GDP, and the share of total health system spending coming in the form of out-of-pocket payments. The more governments spend on health, the less patients pay at the time they use services, with consequent implications for the objectives of financial protection, equity in finance, and equity in the use of services.

Given the current level of public health expenditure India will not be able to make significant progress towards the better health of the whole population and financial equity. The estimates of the National Commission on Macroeconomics and Health of the Indian Ministry of Health and Family Welfare indicate that public investment in India for provisioning of public goods and primary and secondary services alone will require about Rs 74,000 crores or 2.2% of GDP at current government prices. When added to the current level of 0.9%, the total public health spending (i.e. expenditures incurred by the health departments at central and state level) in proportion to GDP the amount required will be about 3%. The government has estimated that such spending will bring down the household expenditures by over 50% and entail substantial health gains [19].

Global experiences show that universal access and equity are achieved with financing mechanisms which are largely of a public nature like social insurance, tax revenues, payroll deductions or some such combinations. The social insurance coverage in India is limited and exists mostly for the middle classes. The private insurance is restricted to classes who have the capacity to buy them. Therefore there is aw need to gradually shift towards a mandatory universal health insurance system. Taking into account all external and internal determinants of financing health care Indian government has to design the model that would be suitable and sustainable for India. Besides, for deepening the Health Insurance markets, action should be initiated to put in place the appropriate regulatory and institutional mechanisms.

India's health care system lags behind country development. The double brunt of communicable and non-communicable diseases, the poverty of the population, the lack of the adequate financing system and the low level of public expenditures on health make the accomplishment of the health system goals difficult. Therefore India should take advantage of economic prosperity to introduce health care system reforms. The reforms should improve the health of the whole population as well as the financial protection which constitute an integral element of development.

Streszczenie:

Finansowanie ochrony zdrowia w Indiach w kontekście rozwoju kraju oraz ogólnych celów systemu zdrowotnego

Słowa kluczowe: Indie, finansowanie ochrony zdrowia, cele systemu zdrowotnego, rozwój społeczno-ekonomiczny

Artykuł przedstawia główne cechy systemu finansowania ochrony zdrowia w Indiach w kontekście rozwoju kraju oraz celów systemu ochrony zdrowia. Pomimo faktu, iż Indie są jedną z najszybciej rozwijających się gospodarek świata, kraj ten stoi w obliczu wielu problemów związanych z realizacją ogólnych celów systemu zdrowotnego, takich jak: poprawa zdrowia, równość w zdrowiu, równość w finansowaniu oraz ochrona populacji przed ryzykiem finansowym. System finansowania ochrony zdrowia w Indiach, będący jednym z najbardziej sprywatyzowanych w świecie, stanowi szczególnie istotny problem. Całkowite wydatki na zdrowie dla lat 2001–2002 wynosiły 1 057 341 mln rupii indyjskich, co stanowiło 4,6% PKB. Wydatki publiczne na ochronę zdrowia były jednak relatywnie niskie i w ciągu ostatniego trzydziestolecia wzrosły jedynie o 0,1 punktu procentowego (z 0,8% PKB do 0,9% PKB). Wydatki całkowite ponoszone przez gospodarstwa domowe stanowiły ponad 70% całkowitych środków ochrony zdrowia, co w kontekście dużej skali ubóstwa ludności Indii, przyczynia się do nierówności: w finansowaniu, w korzy-

staniu ze świadczeń zdrowotnych i w zdrowiu. W celu poprawy stanu zdrowia populacji oraz podniesienia poziomu publicznego finansowania opieki zdrowotnej istnieje potrzeba wprowadzenia reformy systemu ukierunkowanej na stopniowe przechodzenie w kierunku powszechnego obowiązkowego ubezpieczenia zdrowotnego.

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