

Health Care Scenario: A Background

Under the Constitution of India, in terms of distribution of sectoral responsibilities in the federal set up, health is a state subject. However, a number of items related to health are listed in the Concurrent list, and thus the Central Government has had enough scope to influence the context and the prospects in the health sector through its policies, budgetary allocation etc.

By any reckoning the healthcare facilities for an overwhelming majority of people in India are poor, both quantitatively and qualitatively. As per the most recent available estimates, urban areas have only 4.48 hospitals, 6.16 dispensaries and 308 beds per one hundred thousand of urban population. For the rural areas the situation is much worse, with 0.77 hospitals, 1.37 dispensaries, 3.2 Public Health Centres (PHCs) and just 44 beds per one hundred thousand of rural population.¹ For the country as a whole, number of beds per one hundred thousand of population, which had increased from 32 in 1951 to 83 in 1982, was only 93 in 1998. Similarly the number of doctors per one hundred thousand of population increased from 17 in 1951 to 47 in 1991, but stood at 52 in 1998. Thus, not only has the progress of the country in the health sector in the 55 years after independence been grossly inadequate, it may well have slowed down in many respects in the recent years. Numerous indicators can be cited,

apart from those mentioned above, to drive home this point.

Also, the curative services are primarily located in urban areas whereas the rural institutions mainly provide preventive and promotive services. The curative care facilities are almost nonexistent in rural areas, resulting in a massive proliferation of quacks in many parts of the country. It is on account of both the very poor spread and lamentable quality of preventive as well as curative healthcare system that the morbidity and mortality levels are still at unacceptably high levels in the country. Communicable diseases like Malaria and TB continue to haunt substantial sections of population. Even common waterborne diseases like gastroenteritis and cholera are still contributing to the high levels of morbidity.

Low public expenditure and highly privatised health care

One of the main reasons underlying the poor state of healthcare facilities in India happens to be the very low levels of public expenditure in health sector, which happens to be among the lowest in the world as may be seen from Annexure XVII. During the decade of the 1990s, it became even worse as the public investment on health as a percentage of Gross Domestic Product (GDP) declined from 1.3 in 1990 to 0.6 per cent in 2002.

Medicine and Public Health in 2003-04 Budget

1. The per capita real budgetary allocations for medicine and public health, declined for both revenue and capital account under plan and non-plan heads.
2. The per capita real capital allocation for medicine and public health is too small and in fact has negative expenditure in case of non-plan allocation.
3. The Budget 2003-04 encourages increasing privatisation of the health care sector. The stated objective of making India a global health destination, promotion of health tourism seems to be the main concern of the budgetary provision on health.
4. The proposal for community based universal health insurance scheme to be designed by LIC and GIC is ridiculous as only a very small chunk of the economically deprived sections of our population will be able to spend thousands of rupees on healthcare at private hospitals. So, the people who benefit most out of it will be those who can spend such amount and get it reimbursed later.

Source: The Marginalised Matter, CBA, 2003.

1. Ravi Duggal (2002); *Right to Health* (Mimeo), CEHAT, Mumbai.

Currently the aggregate annual expenditure on health is 5.2 per cent of GDP. Out of this, about 17 per cent of aggregate spending is coming from the state, the rest being out-of-pocket expenditure borne by the citizens directly. While the budgetary allocation on health sector by the Central Government over the last decade has been stagnant at 1.3 per cent of the total Central Budget, in the states it has declined from 7 per cent to 5.5 per cent.² The information in Annexure XVII show that public expenditure on health in India is one of the lowest in the world.

Further, it is ironic that in a context of widespread deprivations vis-à-vis the most basic needs, the system of medical care in the country is one of the most privatised systems anywhere in the world (See Annexure XX). In 1997, an estimated 68 per cent of the hospitals, 56 per cent of dispensaries, 37 per cent of beds and 75 per cent of the allopathic doctors were in the private sector.³ The major squeeze on the fiscal resources of almost all the state governments in the last decade has meant that public investment in the health sector, instead of rising, has been stagnant at best in most cases. Health being primarily a state subject as per the Constitution, the contribution of Central Government to the overall public health funding has been limited. Moreover, the successive governments at the Centre have unfortunately shown an accelerated tendency of withdrawing from their responsibilities towards the so-called social sectors.

In this regard we may also note that in any case, in terms of resource allocations, almost throughout the post-independence period, the governments at the centre treated the Social Sectors—health, education, housing, and water and sanitation—as being inferior to the Economic Sectors. What may have worsened the scenario since the beginning of 1990s is a fundamental shift in the Central Government's approach towards the social sectors, the crux being that giving a greater role and all kinds of concessions to private players in the social sectors would lead to an adequate response from them that would go a long way towards filling up the existing gaps in these sectors.

An obvious consequence of such a shift in approach has been that a process of privatisation and deregulation of the health sector, which became evident in the 1980s, got accelerated significantly during the 1990s.

In the 1990s, a number of corporate hospitals sprung up on land allotted to them by the Central and state government in prime urban locations, in exchange for their promise to provide a reasonable proportion of their services free to the poor. However, there is increasing evidence of non-fulfilment of such promises by major private hospitals.⁴ Yet such policies are being pursued vigorously. The 1990s also saw the privatisation of public health institutions and specific involvement of private providers in the public health system. Such developments have contributed to the increases in health costs clearly evident in the mid-1990's NSS Survey.⁵ A major culprit in pushing up costs has been the systematic deregulation of the pricing of drugs which gathered momentum in the recent years. At the time of the introduction of Drug Price Control Order, in 1970, all drugs were kept under price control. In 1979, only 347 of the drugs were kept under price control. This number was almost halved to 163 by 1987, and was subsequently brought down to 76 in 1995. Now, the Pharmaceutical Policy of 2002 has reduced it further to 35 drugs.

This matter of rising drug prices is obviously worrisome as a very large part of our population lacks the commensurate purchasing power. Also, a handful of states, accounting for well over half of the country's population, are performing very poorly in terms of the standard indicators, as may be seen from Annexure XXI.

The aforementioned figures bring out the wide intra-country differences at the state level; as it happens, even within states, there exist wide disparities. Thus, as the Ministry of Health and Family Welfare puts it: 'national averages of health indices hide wide disparities in public health facilities and health standards in different parts of the country.

2. Draft National Health Policy, 2001.

3. Ravi Duggal (2002); *Right to Health* (Mimeo), CEHAT, Mumbai.

4. R Baru (2000); 'Privatisation and Corporatisation', *Seminar*, May.

5. G Sen, A Iyer and A George (2002); 'Structural Reforms and Health Equity—A Comparison of NSS Surveys: 1986-87 and 1995-96', *Economic and Political Weekly*, 6 April.

Box No. 1 The Impact of Liberalisation on Drug Prices

In 1995, the amendment of the Drug Price Control Order of 1987 (which had kept 163 drugs under price control) deregulated the drugs market leaving only 76 drugs under price control mechanism. An analysis of its impact by the Delhi Science Forum (DSF) showed that out of a set of 28 essential drugs (8 under price control and 20 outside it)—whose price movement was studied—‘prices of 6 of the 8 controlled drugs decreased; on the other hand, the prices of the 20 drugs outside DPCO mechanism showed an increase in excess of 10 per cent and in some cases in excess of 20 per cent.’ ‘The DSF also analysed the increase in prices of 50 top-selling drugs between February 1996 and October 1998. It showed that the average increase in case of brands under price control was 0.1 per cent, whereas that in the case of brands outside price control was 15 per cent. It was also found that the price-rise was not a one-time increase owing to an escalation in raw material costs but was indicative of a trend of a continual increase in the prices of decontrolled drugs.’⁶

Given a situation in which national averages in respect of most indices are themselves at unacceptably low levels, the wide inter-state disparities imply that, for vulnerable sections of society in several states, access to public health services is nominal and health standards are grossly inadequate.⁷

The fiscal health of most state governments has taken quite a beating in recent years, the low buoyancy of central transfers and the spillover of the central pay revisions being important culprits in this regard. Consequently the spending ability of many of the states has been significantly constrained. Since it is very difficult for the states to cut down their fixed expenditures (like interest payment, payment of salaries, etc.), such a situation might have forced the states to reduce their variable expenses which include developmental expenditures like that on the health sector. Under the circumstances, the Central Government ought to have done more, particularly to help the low-performing states. However, a look at the Central Government’s budgetary allocations under health sector, during 1992-93 to 1999-2000 shows that it rose during this period for the relatively better performing states such as Andhra Pradesh, Gujarat,

Karnataka, West Bengal and Delhi, whereas those already lagging behind, viz. Bihar, Madhya Pradesh and Rajasthan were neglected in this respect, (Annexure XXII and XXIII) thus accentuating inter-state differences.

Given the narrow reach and poor quality of the public health system in the country, the most vulnerable socio-economic groups have benefited the least from the public health system. There is indication of such an inequality (see Annexure XXI and XXIV) as reflected through some of the major indicators of the health status among different socio-economic groups in the country.

It is common knowledge, as illustrated by Annexure XXV, that the private healthcare system is many times more expensive compared to its public counterpart and hence a shrinking of the latter not only pushes up the per unit cost but is also socially very regressive.

The accelerated phase of privatisation and deregulation of the health sector in the recent years has resulted in a situation where 83 per cent of the aggregate expenditure on health in our country is

Box 2: Public Expenditure on Health in India is one of the Lowest in the World

Public expenditure on health in India is one of the lowest in the world. Currently, public expenditure on health as a share of the aggregate annual public expenditure on health is 96.9 per cent in UK, 44.1 per cent in USA, 45.4 per cent in Sri Lanka, and 24.9 per cent in China, but for India it is a meagre 17.3 per cent.⁸

6. R Ramachandran (2002); ‘Unhealthy Policy’, *Frontline*, 15 March.

7. Draft National Health Policy, 2001.

8. *Ibid.*

private spending. It is worth recalling here that the public expenditure on health, as a percentage of total expenditure, in India is among the lowest in the world (see Box 2). In such a scenario it is inevitable that the socially and economically

vulnerable sections would have found it increasingly difficult even to meet the minimal health needs and a reasonable guess would suggest that the sum total of such sections may come close to half of the country's population.

National Health Policy 2002

In 1983, the government for the first time adopted a National Health Policy (prior to that the actions of the Government in the health sector were guided by the Five Year Plans and recommendations of various committees), and its major recommendation was: *universal, comprehensive primary healthcare services which are relevant to the actual needs and priorities of the community at a cost which people can afford*. Then after a period of eighteen years, the Draft National Health Policy 2001 was announced towards the end of 2001 and was adopted by the Central Government in the year 2002.

This new National Health Policy (NHP) candidly acknowledges that India's public healthcare system is grossly short of defined requirements, functioning is far from satisfactory, that morbidity and mortality due to diseases that are curable continues to be unacceptably high, and resource allocations are generally insufficient. However, the 1983 NHP's goal 'of providing universal, comprehensive primary healthcare services' does not even find a mention in this new policy document. The new NHP is riddled with confusions and contradictions as it only proposes numerous impressive principles and goals but does nothing to ensure that these are realised on the ground. On the other hand, it can also be argued that this new NHP is an attempt towards legitimising the ongoing privatisation of the healthcare system of the country.

The stated objective of the new NHP is to achieve an acceptable standard of good health amongst the general population of the country. NHP 2002 is quite explicit in its acknowledgement of the poor state of affairs in the health sector; it also recognises globalisation as a concern with a critical view of TRIPS and its impacts, envisages regulation of the private healthcare sector, and proposes to increase the expenditure on primary healthcare. Also, the new

policy recommends an increase in public health expenditure from the present below one per cent of GDP to two per cent of GDP by 2010. Moreover, the policy projects that public expenditure on health by 2010 will be 33 per cent of total health expenditure—up from the present 17 per cent. However, the mechanisms of how these eminently desirable objectives are to be achieved are not spelt out. Further, there is no analysis of why the goals of NHP-1983 remain unfulfilled, and there is no attempt to explore the linkages between what is happening to some of the major determinants of health—like food, water, and sanitation, and the important indicators of health status in the emerging scenario. Above all, the NHP 2002 remains naive as to what can be done to ensure that the commercial vested interest in the private healthcare sector do not succeed in overshadowing peoples' needs and patients' rights.

Although a new Drug Policy (Pharmaceutical Policy, 2002) was adopted by the same government in the same year as this NHP-2002, it is more or less silent about the impact of this policy on the health sector and does not discuss the consequences of further deregulation of the pharmaceutical sector which it advocates. The new policy has ignored the pressing needs of primary healthcare, and shows a strong bias towards urban specialist-based healthcare. It is true that this policy recommends an increase in public expenditure on health from the present level of less than one per cent of GDP to two per cent of GDP by 2010. But the quantum of increase suggested is grossly inadequate, keeping in mind the huge gaps in this sector, and it is well below five per cent of GDP recommended by the World Health Organization long back. Although the policy is critical of the states for not increasing their investment on health, it does not address the causes behind their inability to do so. We may also note the valid concern expressed by NHP-2002 regarding

resource use inefficiencies of various kinds in the running of the programmes sponsored by Central Government, e.g., the wastage on account of vertical disease control programmes, (as the 'vertical' implementation structure for the major disease control programmes requires independent manpower for each disease programme which makes these programmes extremely expensive and difficult to sustain), but the document does not have concrete and worthwhile policy suggestions to improve the situation.

The new NHP proposes to strengthen the provision of user fees in public hospitals, with the qualification that it will target those who can pay. In the 1980s, a few states like Rajasthan and West Bengal had introduced charges for diagnostic facilities and other services. In the 1990s, several other states followed suit. However, a recent study of user fees in Gujarat, Madhya Pradesh, Orissa, Rajasthan and West Bengal shows that they do not contribute more than two per cent to the hospital budgets.⁹ On the other hand, there is a mounting body of evidence which shows that user fees can be highly regressive. Identification of those 'who can pay' is an exceedingly difficult task and often a large part of

the vulnerable sections may get left out of the count of those who cannot pay. Andhra Pradesh's experiment with white cards is an example of this failure,¹⁰ and there is a genuine fear that the further strengthening of user fees will inevitably result in driving out substantial sections of the poor from the public healthcare system in India.

Another notable feature of the new NHP is that it plans to encourage the use of India's health facilities, particularly in the private sector, to attract patients from other countries. It also suggests that such incomes can be termed 'deemed exports' and should be exempt from taxes. The concern has been raised by several observers that such a policy would strengthen a climate subservient to the interests of the rich and powerful in the global health market and create islands of brain and resource drain within the country. Finally, the NHP-2002 proposal regarding privatisation of secondary and tertiary level care ignores the simple fact that 45 per cent of the poorest of the country continue to depend on the public sector hospitals for critical indoor care (Qadeer, 2002), and such a proposal is bound to push the unit cost of such healthcare by many times.

Union Budget 2002-03

One of the very few positive prescriptions of the NHP-2002 was its recommendation of a significant increase in the public investment on health. But this too was ignored by the Union Budget for 2002-03. The NHP 2002 had stated that there has to be 'injection of substantial resources into the health sector from the Central Government Budget' due to the growing constraints on states' resources and the consequent shrinkage of their allocations to the health sector. The contribution of the Central Government to the total public health expenditure is just 15 per cent at the present. The NHP-2002 proposes that this should be increased at least to the level of 25 per cent of total public health spending by 2010. However, in the budget proposals for

2002-03, the total allocation for health (both plan and non-plan) was only marginally higher at Rs 24.27 billion compared to the allocation in the 2001-02 budget, which was Rs 23.54 billion.

In terms of specific initiatives the NHP-2002 identified availability of medicines at the primary care level as being crucial in the relatively better utilisation of public health centres in the southern states. The policy in fact envisaged the 'kick starting of the revival of the primary healthcare system by providing some essential drugs under Central Government funding through the decentralised system.' But there was no budgetary allocation for this purpose for the year 2002-03. As far as disease control

9. G Sen, A Iyer and A George (2002); 'Structural Reforms and Health Equity—A Comparison of NSS Surveys: 1986-87 and 1995-96', *Economic and Political Weekly*, April 6.

10. Imrana Qadeer (2002); 'Debt Payment and Devaluing Elements of Public Health', *Economic and Political Weekly*, 5 January.

programmes are concerned, many of the budget proposals seemed arbitrary and on the whole there was lack of a coherent perspective. For instance, proposed budgetary allocations in 2002-03 are higher than those of the previous year for National Anti-Malaria Programme, Kalazar Control Programme and Leprosy Control Programme whereas they are lower than those of the previous year for TB Control Programme, National Filaria Control Programme, and Trachoma and Blindness Control Programme; the rationale for reduced allocations for these programmes is not quite clear.

Similarly, a welcome feature of the budget proposals 2002-03 is the higher allocation on the National Mental Health Programme (at Rs 270 million) compared to that of the previous budget (Rs 44.8 million). However, it is difficult to comprehend why the allocation on 'assistance towards expenditure on hospitalisation of the poor' (at Rs 28 million) is lower than that of the previous budget (Rs 42 million).

The Finance Minister, during his presentation of the budget for 2002-03 rightly acknowledged that

'access to good and responsive healthcare is still a distant dream for the majority of the rural population.' But strengthening the public healthcare system and expanding curative health services in the rural areas, which is undoubtedly the best solution of this problem, did not find any firm footing in the budget. The proposed insurance scheme by him, called 'Janraksha', for providing health insurance in the rural areas through the public sector insurance companies is also questionable. Under this scheme, with a payment of Re one per day as insurance premium, a person will be entitled to indoor treatment up to Rs 30,000 per year, and out patient treatment up to Rs 2,000 per year, at designated hospitals and clinics which, apart from civil hospitals and medical colleges, include private trust hospitals and other NGO run institutions. Given the resource-starved scenario at the public hospitals, it may well mean that the government will be subsidising health services provided by some private health institutions. It is obvious that this subsidy would have been better spent if directed towards the strengthening of the public healthcare system, especially in the rural areas.

Pharmaceutical Policy, 2002

The Pharmaceutical Policy, 2002, is the new drug policy adopted by the Central Government, which has been criticised strongly for being one-sided, echoing mostly the interests of the business class at the cost of neglecting the health needs of the poor masses of the country. The Drug Price Control Order (DPCO) mechanism was put in place in 1970 with all drugs being kept under price control. Subsequently, with the successive Drug Policies, the number of drugs under price control has been progressively reduced from 347 to 35 in the present; these 35 drugs and their formulations constitute only about 22 per cent of the total market.¹¹ It must be mentioned here that there are as many as 279 drugs listed in the National Essential Drug List (1996) of the Ministry of Health and Family Welfare. Thus, it seems obvious that the commercial interests of the pharmaceutical companies have been given overriding importance in the

Pharmaceutical Policy, 2002, with complete disregard to its consequences for the poor people of the country.

The standard argument advanced for deregulating drug prices is that market mechanism and competition will help check and stabilise drug prices. Such a dubious argument seems to be originating from the failure of the government to evolve an effective mechanism to monitor the pharmaceutical industry's adherence to the DPCO, and, more important, the process of liberalisation being pursued by the government. As has often been argued, the pharmaceutical sector is peculiar in the sense that it is a seller's market; the consumer, the public, has no choice in the matter because the interface between the product and the patient is through the doctor for whom the issues of price and affordability are secondary or the chemist who has no

11. R Ramachandran (2002); 'Unhealthy Policy', *Frontline*, 15 March.

interest in selling cheaper drugs.¹² The deregulation of the drugs market in 1995 was soon followed by prices of drugs going up (See Box No.1), and similar consequences may be expected as a result of the Pharmaceutical Policy 2002. Indian Government seems to forget that even in the developed countries like the United States and the U.K. there are effective price control mechanisms

and bodies to monitor drug prices. In a developing country like India, what is most disturbing about this policy is that it does away with the control over the prices of a large proportion of the drugs just when the country is moving towards a stricter or patent regime which, it is feared, will further promote monopolistic practices in the pharmaceutical sector.

The Patents (Amendment) Bill, 2002

India's Patents Act of 1970 had exempted food, medicines and drugs(chemicals) from product patenting and had provided for a protection period of only seven years for the process patents. However, in 1994, India signed the WTO-TRIPS Agreement and was given 10 years to bring its patent laws into compliance with the provisions mandated in the TRIPS Agreement. Subsequently, the Central Government introduced the Patents (Amendment) Bill, 2002 which became an Act in June 2002. Thus India has fallen in line with what many have considered socially regressive TRIPS Agreement; moreover, it has been argued that the Amended Patents Act has not even exploited the scope that is provided to the developing countries

(in the TRIPS Agreement) to ensure that these countries can give preference to the concerns of public health over the interests of the patent holder. As Chaudhuri puts it: 'While deciding on the inventions eligible for patents, the terms 'new' and 'inventive' could have been defined in such a way as to exclude lower level innovations such as new dosage forms or new formulations from the grant of patents. This would have restricted the number of patents. Also, Article 30 of the TRIPS Agreement could have been used to permit non-patentees in India to produce and export patented medicines to the least developed countries, which cannot produce these themselves. But the most glaring failure relates to compulsory licensing. In a product

Box 3: Access to Essential Drugs in India (2000)

Based on the statistical estimates received from WHO's country and regional offices and through the World Drug Situation Survey carried out in 1998-1999, the Department of Essential Drugs and Medicines Policy of the WHO divided countries into four categories.

1. Good Access to Essential Drugs—Countries in which 95-100 per cent of the population had access to essential drugs.
2. Medium Access to Essential Drugs—Countries in which 80-94 per cent of the population had access to essential drugs.
3. Low Access to Essential Drugs—Countries in which 50-79 per cent of the population had access to essential drugs.
4. Very Low Access to Essential Drugs—Countries in which 0-49 per cent of the population had access to essential drugs.

While countries like the US, UK, Australia and even Sri Lanka fell under the best (95-100 per cent) categories; China, Indonesia, etc. fell under the second (80-94 per cent) category; and even Pakistan, Myanmar and Bangladesh were in the third (50-79 per cent) category; India fell in the last (0-49 per cent) category.¹³

12. R Ramachandran (2002); 'Unhealthy Policy', *Frontline*, 15 March.

13. UNDP, *Human Development Report 2002*.

Box 4: Some Key Indicators of India's Health Report Card

On the basis of data received over the period from 1995 to 2000, the Human Development Report - 2002 (UNDP) states that in India—less than 50 per cent of the population has access to essential drugs, only 31 per cent is using adequate sanitation facilities, 47 per cent of children under the age of 5 years are underweight, 46 per cent of children under the age of 5 are underheight and only 42 per cent of the births are attended by skilled health staff.

patent regime, a proper compulsory licensing system is of fundamental importance to ensure competition and competitive prices. But the process in the Indian case has been made much more legalistic than what is required by the TRIPS Agreement. As a result it provides enough opportunities to the powerful patent holders to manipulate the process by litigation to prevent others from producing their patented products. Thus, if the bias in the Patents Act of 1970 was in favour of the non-patentees, the bias in this Amended Act is clearly in favour of the patent holders.¹⁴ In short, the new patent regime is likely to have made it quite difficult for the Indian Government to control

monopolistic practices of the big pharmaceutical companies which is likely to worsen the already very poor access of the essential drugs (see Box 3 and 4), for the vulnerable groups.

Thus, from our discussion of the major policy initiatives taken by the Government in the last one year, it should be evident that the year 2002 not only saw a continuation of the anti-people and pro-market policies in the health sector but that it also experienced certain critical developments in the economy whose consequences for substantial sections of Indian society could be extremely harmful.

State of Education in India: Some Major Indicators

India's performance in the field of education, as in the case of health, has been among the most disappointing aspects of its post-independence scenario as the country currently houses the largest number of illiterates and has the dubious distinction that every third illiterate in the world is an Indian. Out of approximately 200 million children in the age group 6-14 years, only 120 million are enrolled and the net attendance figure is just over 60 per cent (which may be an overestimate) of enrolment. In short, the prospects of even minimal literacy appear to be bleak. Of course, it is not the case that there has been no progress at all; during the last half-a-century, educational facilities have expanded substantially and the percentage of literate population has risen from 18 in 1951 to 65 in 2001 (see Annexure XXVI). However, the simple point is that the deficit is huge even in terms of crude quantitative indicators and quite a few countries in Asia such as Sri Lanka, Indonesia or China, among

others, have done much better than India during the same period.

Not surprisingly, the school dropout rates are also very high in India (see Annexure XXVII), mainly because the conditions of schools in our country are dismal, especially in the rural areas. The high dropout rates are not largely due to lack of demand for schooling from the relatively poorer households, as is sometimes assumed; the problems are mainly on the supply side. Even the minimal infrastructure, such as proper rooms, desks, drinking water facility, toilets etc. are a distant dream in a large number of schools. It is well-acknowledged by now that even with small incentives—such as a meal—attendance at school tends to improve substantially. Clearly, basic infrastructure and decent physical environment can go a long way in retaining children at school. Also, the overall social climate plays a critical role in this respect; for

14. Sudip Chaudhury (2002); 'TRIPS Agreement and Amendment of Patents Act in India', *Economic and Political Weekly*, 10 August.