Health Sector in India: Perspective and Way Forward:

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While there has to be a major effort in engaging the private sector in health care, this has to be based on stewardship and facilitatory efforts that address different forms of information asymmetry and conflicts of interests – and empower people to make the right choice. A premature and unprepared shift to purchasing care without first putting in place, the regulatory mechanisms and getting politically ready for much higher levels of public investment is fraught with danger

The health sector in India is at the cross-roads. This is partly due to an interesting relationship between development and health, which is known as the Preston Curve. In 1975, Samuel Preston showed that if the health of nations as measured by life expectancy is plotted against the wealth of nations as measured by GDP per capita, then up to a point, there is a sharp increase in life expectancy for even the modest increase in GDP per capita. Then the curve suddenly flattens out – and after this point, large increases in public health expenditure are required for modest increase in life expectancy (Deaton 2013).

In his book " The Great Escape" this year's Nobel Prize winning Economist Angus Deaton explains that even after the bend in the Preston curve, there is a sustained correlation between health outcomes with growth– only that now it is a logarithmic relationship- for the same degree of increase one requires a fourfold increase of the GDP per capita (Deaton 2013). He also points out that it is a two way relationship- that not only is economic growth related to better health, this bend in the curve also represents the point of epidemiological transition- when non-communicable diseases start becoming the main cause of death, increasingly dwarfing persistent contributions from the declining deaths due to maternal and common childhood diseases.

In the 2010 version of the Preston Curve, India today is at or near the bend on the curve, and this has major implications for policy. At the bend in the curve, the past problems of reproductive and child health and of communicable disease persist, but new problems have got added on. If public investment in health care does not increase, private investment would, but there is no certainty that this would lead to better health outcomes. If public investment increases, a choice has to be made between deploying it to strengthen public health system and purchasing care from private sector. If the case is latter then one needs to be ready to impose a strong regulatory regime and also increase public expenditure far above the 2.5 per cent of GDP that the current national health policy draft calls for (Sundararaman, Muraleedharan, and Mukhopadhyay 2016). All of these are difficult decisions – and this article elaborates and discusses these issues and challenges.

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Progress in Reproductive and Child Health

In earlier decades, a major proportion of deaths were related to deaths in the young child- most of this happening below the age of 5. Pregnancy related deaths were also high. Both of these have decreased sharply, partly because the number of deaths per live birth have decreased greatly and partly because with fertility control, the number of children or pregnant women has itself declined sharply.

There are many reasons why India has been successful in achieving such a reduction. One important reason is the focused attention on the reduction of infant and maternal mortality over the last 25 years. First we had the child survival and safe motherhood programme in the early nineties, and then the reproductive and child health programmes in the late nineties and early part of the last decade. Then in 2005, there was a revised and much more successful RCH- II programme, and this time it integrated with the National Rural Health Mission. Despite the adverse impact of the financial crisis and structural adjustment programmes in the nineties, these projects ensured that the RCH programme was relatively better protected from the crisis.

The declaration of the Millennium Development Goals and India's race to reach these goals has also contributed in small measure to achieve this. The Draft National Health Policy states: "The MDG target for Maternal Mortality Ratio (MMR) is 140 per 100,000 live births. From a baseline of 560 in 1990, the nation had achieved 178 by 2010-12, and at this rate of decline is estimated to reach an MMR of 141 by 2015. In the case of under-5 mortality rate(U5MR), the MDG target is 42. From a baseline of 126 in 1990, in 2012, the nation has an U5MR of 52 and an extrapolation of this rate would bring it to 42 by 2015(Draft National Health Policy 2015)." As the 2015 figures become available by next year, we would know whether we did or did not reach the targets, but we did get close. In the year 1990, India lagged far behind the global averages in maternal and child mortality rates- by about 47 per cent and 40 per cent respectively. By 2015, India figures were marginally better than the global average- India had finally caught up and is now going ahead.

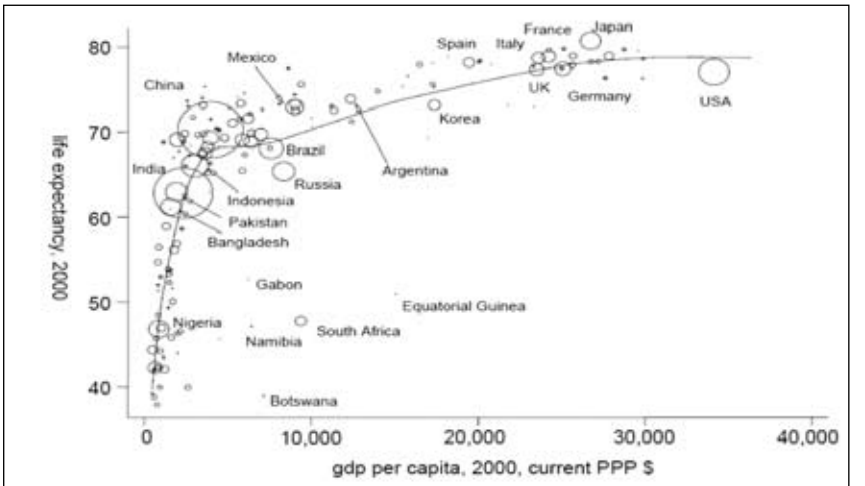

Figure 1: The Millennium Preston curve

Source: Deaton, Angus. 2004. "Health in an Age of Globalization." National Bureau of Economic Research. Author's calculations based on World Development Indicators 2003 (life expectancy and Penn World Table (GDP.)

It is important to note that these achievements were made without comparable improvements in sanitation or in child nutrition- two of the most important social determinants of health- where Indian levels of achievement lag far behind the global averages. In most nations infant mortality rates are seen as closely linked to levels of poverty and inequality. Indian reduction in poverty in these years is contested- with views expressed in both directions. However, what is clear is that these reductions in child and maternal survival had to be achieved by the health sector in the face of continuing adverse social determinants.

On the positive side, on two social determinants, India did some serious catching up with global standards. One was the supply of safe drinking water where over 94 per cent of hamlets are now covered (WHO 2015) and the other is women's literacy where the latest census reveal that 65.04 per cent of females are literate now (Census 2011).

The achieving of improved female literacy is closely linked to the great ongoing demographic transition. Decadal population growth rates are now falling and most states have now achieved a crude birth rate compatible with population stabilization. (less than 21 per 1000). Growth rates would continue to be high for some more years- due to what is known as the population momentum. This refers to the fact that there would be many more women now entering and passing through the reproductive age due to past high fertility rates- and therefore more children continue to be born, even though the small family norm has been achieved. Only seven states still continue to face a seriously high fertility rate-Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan- and to some extent in Jharkhand, Chhattisgarh and Meghalaya- but even in these, the rates of decline are encouraging (MOHFW 2011).

Much of the credit for the declines should go to the combination of health systems strengthening and maternity focused programmes like the JSY, JSSK, ASHA, Dial 108 and 104

ambulance services, and appointment of additional nurses and ANMs at the periphery- that happened with NRHM.

This is not to state that the challenges in reproductive and child health are over. There are still close to 46,500 maternal deaths and about 1.5 million deaths of children under 5 deaths each year, which is a high proportion of global maternal and child deaths. Quality and safety of health care is an issue. Though proportion of childbirths happening in a facility have improved dramatically, quality of care remains a challenge. And though, the demand for contraceptive services is well established in most population groups and states, the delivery of safe sterilizations services remains a challenge, as the tragic sterilization deaths in Bilaspur, Chhattisgarh exposed. Abortion services have not kept pace with developments.

With the NRHM acting as the driver, the Eleventh Five Year Plan did lead to a two fold increase in health care spending (in real terms) and about a 3 times increase in nominal terms- but this is about 40 per cent less than its own financing targets. No doubt it could have done much better with better financial outlays- and with a greater and more sustained deployment of human resources, and with greater action on the three important social determinants- poverty, nutrition and sanitation.

Mixed Progress with Communicable Diseases

The impact of NRHM and the previous two decades of public health systems interventions on the control of communicable disease is mixed. One programme that did relatively well was the National Aids Control Programme. A systematic campaign that addressed both preventive and curative aspects and that grounded itself on good quality health information and estimates was able to cap- and to a fair extent, reverse the epidemic. It is still too early to celebrate, the achievements are fragile, and set back is easy- but only has to compare with what the epidemic did to sub-Saharan Africa to appreciate how narrow and fortunate our escape has been from a similar fate. The single success against polio is another great achievement of this period, but here the challenge is the exit policy from the campaign mode and the rising costs of sustaining the gains. Less remarked about – but equally impressive is the major reduction in leprosy- reducing the prevalence of the disease to below the threshold which defines elimination. In this disease also, the programme struggles to articulate a strategy that can address the new case incidences and disabilities that will continue to occur for many years after it has been "eliminated".

Progress in vector control is mixed. Filaria has decreased dramatically and new cases of elephantiasis are negligible. Malaria has also seen significant declines and with a range of new tools becoming available, a confidence is gathering to transit to a malaria elimination programme. Potentially this is a disease that could fall below the elimination threshold in 10 to 15 years. Kala-azar is an anachronism. It should have been eliminated by now, the deadline having been re-set repeatedly. However, it festers in some deep pockets in a few villages of two to three states, cocking a snook at all attempts to get rid of it. About 20,000 cases annually occur across four states- but the majority are from Bihar. Meanwhile, new vector borne diseases have emerged- notably Dengue and Chikungunya. The good news is that deaths both in absolute numbers and as a proportion of all deaths, and even of all cases have declined significantly (MOHFW 2011).

Greatest concern amongst the national disease control programmes is with regard to tuberculosis. Even in this there has been signficant reduction in deaths- but reductions in new cases is less dramatic- and the spectre of multi-drug resistant tuberculosis is now raising its head in more and more states (MOHFW 2011).

However, deaths due to all diseases under these national disease control programmes are less than 6 per cent of all mortality. Most deaths due to infectious disease are due to diarrhea and respiratory infections especially in children and a number of other germs that do not have the same epidemic potential- but have significant

Table 1: Comparison of Mortality due to NCD in India with other selected countries

Indicator		Sweden	UK	Thailand	India
Proportion of NCD deaths due to 4 main causes that occur before age 70	M	23.4	29.1	45.5	62.0
	F	14.7	19.2	38.7	52.2
All NCDs Deaths per 100,000 population (age standardized rates)	M	390.3	425.9	559.6	785
	F	286.3	302.2	358.3	586.6
Cancer Deaths per 100,000 population	M	124.9	133.9	127.8	79.0
	F	100.5	112.5	82.6	66.3
Chronic Respiratory Illness Deaths per 100,000 population	M	17.3	37.2	87.7	188.5
	F	13.8	23.7	29.1	124.9
Cardio-vascular disease Deaths per 100,000 population	M	162.8	140.6	215.8	348.9
	F	105.7	86.7	156.9	264.6
Diabetes: Deaths per 100,000 population	M	10.6	5.0	23.5	30.2
	F	6.1	3.6	27.9	22.7

Source: (WHO,2014)

prevalence. Taking all communicable deaths together, they still account for less than 30 per cent of mortality.

Rise of Non-Communicable Diseases: A Public Health Challenge

The major and increasing proportion of mortality is due to non-communicable diseases which now account for over 60 per cent of all deaths and due to injuries which account for almost 12 per cent of all deaths. (WHO 2014) The probability of dying during the most productive years (ages 30-70) from one of the four main NCDs is estimated to be as high as 26 per cent. To understand its gravity, compare with Sweden where the corresponding figure is 10, UK where it would be 12, Thailand where it would be about 17. Expressed in another way, 62 per cent of male deaths due to the main NCDs would occur before the age of 70 in India, as compared to only 24 per cent in Sweden, 29 per cent in UK and 45 per cent in Thailand. The proportions are similar in women with about 52 per cent of deaths in women due to NCDs taking place below the age of 70 as compared to only 15 per cent in Sweden.

Age standardized death rates tell the same story. India would have about 785 male deaths per 100,000 due to the main 4 NCDs- of which about 80 would be due to cancer, 30 due to diabetes, 189 due to chronic respiratory disease and 349 due to cardio vascular disease. Sweden death rates for cancers are about 50 per cent higher than India- but for chronic respiratory illness, it is only about a tenth, about a third for diabetes and about half for CVD. Most other nations of the industrialized world and the developing nations with more universalized health care systems would have rates in-between Sweden and India (WHO, 2014).

So, in addition to having serious persistent problems with infectious diseases, India finds itself challenged by a very high and rising prevalence and premature deaths due to non-communicable disease- even as compared to most developed and developing nations. In injuries per 1akh population also India does very poorly.

The Challenge of Addressing NCDs in India

But there is another major difference between India's ability to address non communicable diseases and its ability to address infections and reproductive and child health. The requirements in terms of financial and human resources and management of care is much higher. More important due to having consciously excluding these diseases from all government provision of primary health care for over two decades, even the perception of how to address these problems at the primary health care is low. Most conversations about primary care get limited to IMR, MMR, immunization rates, and family planning. The system is not even geared to conceptually see these diseases as primarily part of a primary and not tertiary care mandate.

One must also note the contrast between communicable diseases and non-communicable disease with respect to risk factors. India's progress in communicable disease is due to lack of significant gains in poverty, nutrition and sanitation- in all of which we are doing much poorer than the developed world and even many developing nations. But when it comes to major risk factors for NCD- whether it is overweight and obesity, physical inactivity, alcohol or smoking- these risk factors are far more prevalent in the developed world. Why then does India have much higher prevalence rates of the disease? The answer lies not only in identifying the pathways through which social determinants play out with respect to NCDs in the developing world, but also in complete absence of primary health care that addresses these diseases. Private sector has no doubt expanded to fill these gaps- but market forces largely promote curative and preferably tertiary care. Market driven growth is unable to meaningfully address the needs of primary and secondary prevention - and it falls on the government to take up this role.

The government has initiated a National Disease Control Programme against non –communicable diseases- but these are far from universal. In contrast, the RCH Programme and the National Disease Control Programmes against TB, HIV, leprosy etc. are universal. Public health systems seek out every pregnant woman and guarantee appropriate care, they seek out every infant and ensure immunization, they seek out every TB case and ensure cure and so on. In non-communicable diseases except in sporadic instances, such a clear strategy for universal access to care has yet to be implemented.

Part of the problem in building a strategy against NCDs, is that the list of non-communicable diseases is long- and it is not easy to construct multiple vertical programmes the way the major communicable diseases were addressed. Even for communicable diseases there was an increasing realization on the need to shift from vertical programmes to horizontal integration. To be effective with non-communicable diseases horizontal integration is mandatory. It would be quite impractical to expect separate clinicians and support staff for each NCD, or even for all NCDs together.

But this in turn means strengthening district health systems in a comprehensive manner. There is a lot that one could learn from the NRHM in this regard.

Strengthening Health Systems under the 11th Five year Plan

The main vehicle of health systems strengthening was the National Rural Health Mission, now with integration of the National Urban Health Mission- renamed as the National Health Mission. Though health is a state subject, it was clear that a central push –both in financing and ideas was needed to break the logjam and get states moving onto strengthening their health systems. To respect the federal nature, states were required to draw up their annual project implementation plans, which

would be sanctioned under a joint center- state coordination committee. Though, over time the rules got more and more rigid, states had considerable flexibility in drawing up their plans.

One of the innovations that most states opted for was the creation of a workforce of close to 900,000 community health volunteers, the ASHAs. They made a major contribution to bringing public health services closer to the community, and increasing its utilization and in health education. Another important National Health Mission (NHM) contribution was the addition of over 178,000 health workers to a public system that had depleted its workforce to sub-critical levels over a long period of neglect in the nineties. The NHM deployed over 18,000 ambulances for free emergency response and patient transport services.

Across states, there were major increases in outpatient attendance, bed occupancy and institutional delivery. However, these developments were uneven and more than 80 per cent of the increase in services were likely to have been contributed by less than 20 per cent of the public health facilities- and they were largely focused onto a limited range of RCH services.

NHM in the 12th Plan Period

From 2012 onwards, the increase in funding did not keep pace with requirements- and this was the time when the neediest states were developing the institutional capacity to absorb the funds. The lack of increase in financing was attributed to inefficiencies in fund utilization, poor governance and leakages that gave NHM a bad name in some policy circles. While no doubt the NHM faced such problems, but these are not new and are reflective of governance deficits which would equally plague other approaches also. Another explanation that could be offered is the reluctance to invest more in public systems, because policy attention had shifted to encouraging the rapid surge in private sector which was now re-creating itself as the private health care industry. In the latter understanding, the NHM did not lose funding because it was failing - rather it lost support because it was in danger of succeeding. This may be over-stating the case, but one notes that The National Health Policy Draft does appreciatively details the government efforts at creating favorable conditions for the growth of health care industry.

In 2013, the National Urban Health Mission was approved- but even this did not lead to any significant increase in central funds. The National Health Policy draft mentions that "Strengthening health systems for providing comprehensive care required higher levels of investment and human resources than were made available. The budget received and the expenditure thereunder was only about 40 per cent of what was envisaged for a full re-vitalization in the NRHM Framework."

Other than political will, there are three other factors that are a major challenge or barrier to increase investments that would strengthen public health systems. The first of these is the flow of funds has changed from direct transfers from center into empowered state health societies to routing it through the treasury and state budgetary mechanisms. There are good political reasons to support such a routing, but the bottom line is that political correctness has to be matched with administrative pragmatism- or else what we would have is a failure to absorb funds. The second problem is that financing of public health facilities is based on rigid multiple line item supply side budgeting which is ridden with transaction costs and inefficiencies. A move to demand side responsive resource allocation as happens for example in Thailand can greatly improve efficiency of fund flows and absorption. Though this is mooted in the draft health policy, this has yet to take off. And the third and perhaps the greatest barrier is the reluctance to invest in increasing the skilled public health workforce on a regular and reliable terms of employment. In all healthcare systems, payments to providers would account for about 50 per cent of the total public health expenditure, more so, when it is primary care in less developed nations. All nations successfully moving towards universal health care- irrespective of their road maps share one common feature- adequate number of well skilled and salaried health workers in the frontline. If the systems are based on purchasing care from the private sector, then it is likely that they are spending far more- not less on salaries.

Health care Industry and Increasing Impoverishment due to Health Care Costs

Further, the National Health Policy 2015, draft notes that "the failure of public investment in health to cover the entire spectrum of health care needs is reflected best in the worsening situation in terms of costs of care and impoverishment due to health care costs." As the burden of diseases shifted to non-communicable diseases and as these were not covered by public health systems, except perhaps in the highly overcrowded government medical college hospitals, people had to shift to private health care. The shift is most pronounced in urban areas and for chronic illness. The immediate impact of this shift- which occurs even in relatively well performing states like Kerala and Tamil Nadu is a huge rise in out of pocket expenditures for health care.

This shift was also a cause and consequence of a rapid growth of private sector in health care as in industry. Whereas private health care had largely consisted of one doctor clinics or small nursing homes where owners were the investors and managers – and there were little differences between top management salaries and profits, a new type of private health care which is based on funds from investors whose main concern is maximizing return on investment gained ground. This private health care industry grows at almost

15 per cent CAGR- which is twice the growth rate of the service sector and about thrice the overall national growth rate. It even attracted considerable venture capital. Close on its heels is the private health insurance industry which after lowering of Foreign Direct Investment caps are bound to grow even faster. The private health care industry is valued at $40 billion and is projected to grow to $ 280 billion by 2020 as per market sources. Of this, about 50 per cent goes to hospital care that patients pay for- the rest to the pharmaceutical, medical device and insurance segments.

The growth of the private health care industry ensure that the top decile of the population has now access to health care which is comparable to the best global practices. The segment of the health care industry that caters to this 10 per cent is also able to attract clients/patients from overseas- since for such care it is competitive. However, this attracts specialists to shift employment to this segment of the health sector, which in turn means that those who need specialized consultation, even if not by income or wealth belonging to the top decile have to go these corporate hospitals. This adds to the incidence of catastrophic health expenditure for private health care industry, by global standards a market consisting of just the top one or two deciles is a very large market- larger than most European nations. But it leads to an internal brain drain of specialists- who are becoming increasingly hard to attract or retain in the public sector- even if the sector pays them on par with the highest salaries of the public sector.

There is also the danger that the business model on which many of these hospitals are based- like giving incentives to those doctors who are referring, or giving incentives to doctors for prescribing more of certain drugs or diagnostics, or excessive use of diagnostics- could all become standard professional practice and lead to wrong public perception of what constitutes good care.

Government Efforts at Financial Protection

How has the government responded to the challenge of impoverishment due to health care costs?

The main government efforts in this direction are to ensure that at least all the national programmes aim to provide health care that is free to all and universally accessed with fairly good rates of coverage. Thus, the national policy draft points out that "India has one of the largest programmes of publicly financed ART drugs for HIV anywhere in the world. All drugs and diagnostics in all vector borne disease programmes, tuberculosis, leprosy, including rapid diagnostic kits and third generation anti-microbicidals are free and so are insecticides treated bed nets that cover the population of whole geographies. This is also true for all of immunization and much of the pregnancy related care. Private markets have little contribution to make in most of these areas."

In addition, the central government has recently introduced a scheme for supporting states to provide free drugs and diagnostics in public health facilities. This will help further to reduce the out of pocket expenditure that the poor face even in public hospitals. Though the OOPE in public hospitals is typically less than one thirds or even up to one tenths of what it costs in private care, this residual amount is still impoverishing for most Indians. And there is growing consensus that one of the most effective ways of providing greater access and financial protection is the removal of user fees, and the provision of free drugs and diagnostics in the public hospital and health care facility.

Government Financed Insurance Programmes

A third measure that the government has introduced is publicly financed health insurance schemes that cover the costs of hospitalization of the poor. The major central government scheme in this regard is the Rashtriya Swasthya Bima Yojana which largely addressed secondary care. In addition eight or more states have introduced insurance programmes that cover tertiary care needs. The nominal population coverage under these various schemes is about 370 million in 2014 (almost one-fourth of the population). Nearly two thirds (180 million) of this population are those in the Below Poverty Line (BPL) category. However, there have been doubts raised about what the effective coverage is - meaning whether those who are covered as per official records are actually able to avail of cashless hospital services when they need them.

One option the ministry is considering is to bring these insurance programmes together into a single platform. The ministry of health could consider integrating publicly financed insurance programmes, more closely with public health care provisioning, thus re-imagining insurance form of tax based demand driven financing that supports and complements public provisioning rather than acts as an alternative to it.

Engaging the Private Sector

Given the size of the private sector- there is of course an urgent need to engage with it and ensure that it contributes to public health goals. Insurance is of course one of the best ways of doing so. But this requires to be complemented by much greater effort at regulation. All nations that have a health system based on purchasing health care from private providers have an extensive regulatory regime in place. To put such a system in place in India, is a challenge. The Clinical Establishments Act has made a very modest start- but even for implementing this, it has still to win the trust of the medical profession. Much larger trust and cooperation would be needed between the private provider and the government to put in place a regulatory structure that is adequate to ensure that publicly financed health insurance translates into meaningful levels of financial protection and access to care.

Beyond insurance and regulation there are other ways of guiding the growth of private sector. Grievance redressal mechanisms for private sector could help. So also would provisions of training and updating skills for the small providers and nursing homes. Engaging the not- for –profit sections in partnerships that require a less rigorous regulation can also provide considerable benefits. Partnerships for ancillary or support services which complements rather than substitutes public care provisioning – like for example, the dial 108 services have also done well.

Conclusion

There is a need to persist, intensify and expand the efforts that were initiated under the National Health Mission, if we have to sustain the progress that the Mission achieved. In particular, we need to focus such expansion both in urban primary care and in the four large Hindi speaking states.

While there has to be a major effort in engaging the private sector in health care, this has to be based on stewardship and facilitatory efforts that address different forms of information asymmetry and conflicts of interests – and empower people to make the right choice. A premature and unprepared shift to purchasing care without first putting in place, the regulatory mechanisms and getting politically ready for much higher levels of public investment is fraught with danger.

In strengthening public health systems, the challenge is of expanding the workforce, increasing investment and the quality of governance so that the challenges of Non- communicable diseases can be addressed without compromising the fragile advances we have made in RCH and communicable disease control.

Readings:

Census 2011. 2016. "Literacy Rate of India - Population Census 2011." Accessed January 17. http://www.census2011.co.in/literacy.php.

Deaton, Angus. 2013. *The Great Escape: Health, Wealth, and the Origins of Inequality*. Princeton University Press.

Draft National Health Policy 2015. Accessed January 17. http://www.mohfw.nic.in/WriteReadData/l892s/3536797344141993775 4.pdf.

MOHFW 2011. "Annual Report To The People On Health (December 2011) :: Ministry of Health and Family Welfare."

Sundararaman, T, V Muraleedharan, and Indranil Mukhopadhyay. 2016. "NSSO 71st Round Data on Health and Beyond." *Economic and Political Weekly* 51 (3): 7, January 16th 2016.

WHO. Global Status Report on Non-communicable Diseases 2014, Geneva.

WHO. Non- communicable Diseases Country Profiles 2014." *WHO*. http://www.who.int/nmh/publications/ncd-profiles-2014/en/.

———. 2015. "WHO | World Health Statistics 2015." *WHO*. Accessed January 17. http://www.who.int/gho/publications/world_health_statistics/2015/en/. ❑

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