

India's Health Situation – Perspectives

By

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It is a great honour and privilege for me to be given this opportunity of speaking to you today on

the occasion of National Science Day. I cannot but pay my homage today to Hakeem Abdul Hameed

whom I had the privilege of knowing and of benefitting on many occasions from his wisdom and scholarship. I was very happy that Hakeem Sahib, with a galaxy of Unani experts were my guests at the Postgraduate Institute of Medical Education and Research, Chandigarh, where I was Dean in 1978. We broke one small barrier between Allopathy and the Unani System of Medicine on those three days of the seminar. I thank you, Dr. Qazi, Vice-Chancellor of Hamdard University and your faculty for inviting me.

In my talk today I want first on this day of reflection to delineate to you some of the spectacular achievements in the field of health which have been carried out in India. Then I will talk about the massive challenges and problems we are facing which are responsible for the abysmal state of health in India in many areas, but particularly in the urban slums and the rural areas.

Finally I want to describe to you how these huge problems are being tackled and leave it to you to decide where we are in our quest for attaining a healthy, productive population in our country at a reasonable and affordable cost. Although I will be mentioning some figures during my talk please do not bother noting them as I will be sending a copy of this presentation with the figures for distribution.

- A. The most recent achievement in India in the field of health was the elimination of poliomyelitis from the country. In a country as large as India, with a population as large as India with its diverse cultures, traditions and practices many times many of us at the

periphery of the programme thought we would never eradicate polio from India. However, the dedicated, inspiring work of thousands of health workers, of the public, of civil society and Non-Government Organizations (NGOs) and the government programmes, international agencies like the World Health Organization (WHO), the donor agencies like Rotary International made this possible. The whole world salutes India on this remarkable achievement. We can hold up our heads and say we are proud of this achievement, proud of our people who helped in this programme, and proud that it was a collaborative people's programme.

B. The second area of success I want to talk to you is the success of the country in containing HIV-AIDS. There was a time when having HIV/AIDS was like receiving a death sentence. There was nothing one could do but to prepare to die. In those days treatment was very expensive and the drugs were very toxic and the number of tablets one had to take was around fifteen a day. Today diagnosis of HIV/AIDS is like being diagnosed for any other disease – life long treatment is necessary but one can live one's life out. As citizens of India you may be interested to know why our programme against HIV/AIDS succeeded so well as some of these lessons could be used in our fight today against diseases like diabetes, coronary heart diseases, obesity and cancer. I believe that the programme succeeded because of the following reasons:

- 1) A separate semi-autonomous organization was set up – National AIDS Control Organization (NACO) within the government structure but given flexibility and decision making powers.
- 2) The government programme worked very closely with Civil Society and with peoples' organizations and the people at every level. This involvement of the people and the relevant Non-Government Organizations gave great strength to the programme.
- 3) The planners of the programme laid emphasis on certain population and worked in these areas throughout the programme. At times we felt this was not the right approach to concentrate only on the sex workers, the truck drivers, the people injecting themselves with drugs and the men having sex with men. However the programme adherence shows that they were right in their assessment and judgement.
- 4) The fourth reason is that just at that time there was an explosion in the development of drugs led by the Indian pharmaceutical industry. I will talk about this separately but at this stage we need to know that Indian pharmaceutical industry made drugs available and at an affordable cost.

5) Lastly we had adequate resources for this programme and the funds, or lack of funds, was never a barrier.

6) One cannot but praise the leadership of NACO throughout the years when the programme was implemented.

I remember that when I published a paper a treatment of HIV/AIDS in the book published by Sage Press in 1984 and said that, like Brazil, every Indian needing anti-AIDS drugs should be given these medicines free – every Indian – the Government told me that I would bankrupt the Government. Today every Indian who needs anti-HIV medicines is given these drugs free – and not only the first line drugs but the second line drugs if these are needed even though these are much expensive. The Government remembered and very graciously invited me to speak when the free drugs programme was first launched and then again when the second phase was launched.

Of course, there are still problems – the problem of discrimination, the occurrence of HIV/AIDS in populations where it was not present before and the effect of growing incidence of both HIV and tuberculosis in the same patient. However, the systems are working. NACO incidentally has its own Research Programme supported by its own resources and this again has been a big success. I recommend that this model of research support directly by the department in the Ministry be initiated to complement,

in the field of diabetes and tuberculosis, the efforts of organizations like the Indian Council of Medical Research.

C. The third area of success has undoubtedly been the achievement of our pharmaceutical industry which has made possible treatment of HIV/AIDS not only in India but all over the world. I have just talked about anti-HIV drugs. Let us look at some figures.

D. In the mid-nineties the cost of drugs for treatment of HIV was 10,000 US Dollars per year. Indian pharmaceutical industry slashed it down to 69 dollars for a year's treatment of first line anti-HIV drugs. What an achievement. The achievement was not only technical but humanistic – they brought down the price of the medicines because people needed the medicines and could not afford to buy them. Governments could not afford to buy these. International organizations today like the World Health Organization, the Global Programme of HIV, TB and Malaria, the Bill and Melinda Gates Foundation, the Clinton Foundation and the Medicine Sans Frontiers are all queuing up to buy Indian Medicines. 80% of all anti-HIV drugs used in Africa are from India. Pharmaceutical houses like CIPLA under leadership of Dr. Hameed led this pharmaceutical revolution. 75% of the vaccines used in the world are produced in India and one in every five drugs used anywhere in the world is an Indian drug. Indian drugs are exported to about 175 countries. This contribution by Indian pharmaceutical industry to the health status in

India and abroad has been a remarkable feature in India's march towards making India a healthy nation.

- E. We have made, after many years of frustration, progress at last in Reducing our Maternal Mortality and Infant Mortality. These indices are universally accepted as an index of the health status of a country. The most recent figures indicate that here too the country has made progress and that at least in five states we may be able to achieve the Millenium Development Goals. Let us look at the figures.

The Maternal Mortality Rate for 100,000 live births was 212 deaths in 2007-2009 and has come down to 178 deaths in 2010-2012. Deaths due to maternal mortality per 100,000 population were –

570 in 1990

390 in 2000

280 in 2005 and

230 in 2008 - A drop of 59% in maternal mortality levels.

The Infant Mortality was 72 per 1000 live births in 1998 and has come down to 42 in 2012. The breakthrough has been achieved and we hope to do better and better.

- F. Quality Healthcare at one sixth of International costs

There is no doubt that healthcare of a standard available in the most advanced countries of the world is now available in India in the corporate hospitals – some of them – and in some of our government hospitals. That this is now available in the country is the achievement. The cost of this is one sixth of the cost in countries outside India and a fair number of patients are coming to India for treatment. Many Indians are now not going abroad for treatment but are obtaining quality treatment in India. It is expected that more people from abroad will come to India as management and bureaucratic hurdles are removed. Visionaries such as Dr. Prathap C. Reddy have led the endeavour to make available healthcare at the highest level of excellence to the people of this country.

G. Innovative Technology in Healthcare Delivery

Interestingly the next area I want to talk about is the Innovative Technology introduced in Indian health care which had to be done because of a lack of resources both financial and human. I remember Mr. Bill Gates telling me in a conversation held a few years ago that Indian medical research is not innovative. Perhaps this is so in research but probably not so in delivery of healthcare. We have had to be innovative and I would list this as one of our achievements.

More efficient use of equipment, like using MRI machines 24 hours a day for seven days a week, a hub and spoke architecture that creates facilities to deal with large volumes, using treatment protocols, task shifting to non-medicals, use of high school graduates as vision technicians and use of village girls as ophthalmic paramedics are some of these innovations. All these and several other innovations have been described in a paper by two Professors in the USA – in the Harvard Business Review – November 2013 who conclude –

“Indian hospitals, doctors and administrators have traditionally looked to the West for advances in Medical Knowledge, but it is time the West looked to India for innovations in healthcare delivery. Changes in the US healthcare system will not come easily or quickly. However, the US health care system could operate very differently if it were exposed to the low-cost innovation that drives the best Indian hospitals”.

H. Accredited Social Health Activist – ASHAS

India has working all over the country today over 8,00,000 ASHAS who are the first contact of any person in the community with a person in the field of health. These ASHAS – 10+2 trained persons, mostly girls, keep in touch with the community, visit them, send them to the nearest healthcare, accompany pregnant women to the nearest centre for institutional delivery, help in immunization of the children and inform the

individual and the patient about preventive and promotive health measures. They are also provided a few commonly used medicines and can dispense these. This is the largest programme of this type in the world due to sheer numbers. By and large the programme has been a big success and we are proud of it. These ASHAS are not paid a salary but receive some remuneration for services rendered like taking the mother to the health centre for delivery. They receive training for six weeks. Though there are still a few glitches in certain parts of the country these are not related to the general programme of ASHAS. Their success can be measured by the fact that many programmes now all want the services of ASHAS. Herein, of course lies the danger of their doing too many things.

I have now described eight areas where the country has done very well. Why then is our health situation abysmal, a word used by the same Professors who visited our hospitals and wrote about our great innovation strategies.

In this part of the talk I will talk about the problem we are facing and how we are going about trying to resolve these. I will leave it to you to judge whether the approaches being taken are appropriate and also think about other approaches that should be thought about. Our problems have resulted in a crumbling infrastructure for public health in our rural areas, lack of doctors,

absence of diagnostic facilities in the public sector, poor quality of treatment, high out of pocket expenses and shortage of medicines. There is also the problem of distances to travel to healthcare centres in the rural areas and long waiting times.

1. Shortage of Health Personnel

There is a great shortage of doctors, nurses and para-professional staff to look after a population as large as India. According to the Planning Commission Report of 2012 we have, in relationship to what we need, a shortage of

- 75% of doctors
- 53% of nurses and
- 88% of specialist doctors

The country has, as on December 2013, 386 medical colleges sending out 45,000 doctors every year. We also produce about 18,000 postgraduate doctors every year. Our Doctor to Population Ratio is 1:1739. If we are to depend on doctors to man our health systems we need 400,000 doctors more in addition to the 870,000 we have today. We want to make our Doctor-Population Ratio 1:1200 by 2035. The point I am making is that by increasing seats in medical colleges, by opening new medical colleges, by trying to open medical colleges in the sectors like Army, Railways, Insurance and even Institutes of Technology we will never be able to bridge the gap. The same story is for nurses and for technical and supporting staff.

We need 240 new medical colleges to produce the number of doctors we need. And hope that they go to our villages.

Whether we like it or not we have to think of using persons other than doctors for the first line delivery of healthcare.

One option is to train a cadre of Public Health Graduates – B.Sc. (Community Health) in a three and a half year course and allow them to provide some limited healthcare and concentrate on public health. This curriculum has been developed. There is opposition to create this cadre by the medical profession and is not being implemented country wise. The Government have left it to the state governments to implement this programme if they wish to. The states of Chhattisgarh and Assam already have experience of such programmes. I believe that the Medical Community need to be closely involved in all deliberation on this. I think that the DIALOGUE has not been adequate.

What other ways can we try to meet this huge gap? The National Rural Health Mission is trying to use our traditional medical practitioners to deliver healthcare at the primary health centres. We have in the country 690,000 thousand doctors from the traditional systems of medicine recognized in the country - Ayurveda, Unani System of Medicine, Siddha, Naturopathy, Homeopathy and Sowa Rigpa the Tibetan System of Medicine. We also have Yoga specialists and meditation practitioners in the country. Given the fact that we will

never have enough doctors – according to international standards and the fact that we have traditional medical practitioners who are already providing healthcare - can we think objectively and without emotion how to use this resource we have. I will end this section by pointing out that we have also 400,000 pharmacists who also would like to play a more active role in our national health programme. These are well trained professionals with specialized expertise in the use of medicines.

Of course, bridging courses would be needed and can be devised for these categories of human resources in health.

2. Lack of Access to Care

The next big problem we face, partly as a result of lack of healthcare personnel is very poor Access of Care. There are large areas in our country where there is no provision of healthcare. Our villagers have to walk long distances to obtain health services. One way, of course, is to open new primary health centres but where are the people to work there? We already have a public health structure of

- 20,049 Primary Health Centres
- 4833 Community Health Centres and
- 1230 Hospitals with and

Thanks to the National Rural Health Mission (NRHM) crumbling structures have been repaired and today medicines are available. Attempts are being made to meet this challenge by trying out different approaches. Provision of Mobile Services_ to the same outlying areas every week by a mobile services van is being tried out and already we have nearly 900 mobile vans providing such services. Boat Clinics are another innovative endeavour and this is a very successful venture already working in Assam and outlying areas in the North-East where villages are cut off every year by flooding by the Brahmaputra.

Finally one area of activity which will increase Access to Healthcare is the use of the mobile phone and information technology. This use can transform our Healthcare Access. Use of the hub and spoke model with the spoke at the primary health care level buttressed by Information Technology via the mobile phone has already started and we all need to support such initiatives.

3. Out of Pocket Expenses on Healthcare

The average India pays much more of healthcare expenses himself or herself than citizens of most other countries. This is known as Out-of-Pocket Expenses. It is this expense that can drive people below the Poverty Line (2.3%) every year. It is this which causes one hospitalization to deprive a person of a month's wages in addition to payment of sum of

money he can ill afford to pay to the hospital. This leads to rural indebtedness and even suicides. The Out of Pocket Expenditure on Health by Indians is around 60-70%. He is paying that himself. In other countries it is much less. When one analyses the different components of that expenditure one sees that 60-70% is expenditure on medicines. And this is where a lot can be done as 50% of the medicines which push 1.8% of our population below the Poverty Line – never to come back - are not needed, not prescribed appropriately, not used properly with too many drugs are prescribed together. The Out of Pocket Expenditure ruinous to our people can also be reduced by bringing in cheaper diagnostics. I am not touching on research in this talk but concentrated research needs to be supported on development of cheaper diagnostics. A start has been made in this direction. Before going on to another area I want to give you two well researched figures. One single hospitalization in Tamil Nadu takes away 45% of the monthly income. One hospitalization in Meghalaya takes away 35% of the monthly income. We cannot afford to let this unethical and iniquitous system continue when we have the solution in our hands and have shown that it works.

4. To reduce the expenditure on medicines it is proposed to provide a certain number of essential medicines of good quality to every Indian free from birth till death. This is my own area of interest and this can be implemented for at least 250 medicines. It needs some management changes like pooled procurement, quality checks, improved and rational

prescribing based on Standard Treatment Guidelines and Patient Education in proper use of medicines. This has already been demonstrated in Delhi State. In 18 months the number of medicines in prescriptions provided free in Delhi Govt. Hospitals rose from 31% to 97% without any additional expenditure. This programme was initiated by the Delhi Society for Promotion of Rational Use of Drugs (DSPRUD) as a WHO-India programme in Rational Use of Medicines. The Society consisting of retired persons and some who worked in Government – all working voluntarily under leadership of Dr. Harsh Vardhan, the Minister for Health in Delhi State at that time. Programmes of Rational Use of Medicine are now ongoing in the states of India such as Delhi, Tamil Nadu, Rajasthan, Haryana and Kerala. We have the resources to implement this programme of free good quality medicines for all. It needs strengthening and political commitment but it can be done.

I want to mention a few other challenges we face.

5. Quality of Care

As we increase the access to healthcare we also need to look at our Quality of Care. Several studies carried out in rural areas have shown that patients do not go to government hospitals because of the low Quality of Care provided. Access without Quality is counterproductive. Like countries all over the world Patient Safety is an issue for our hospitals both in the public and private sector. Patients come to hospitals to get cured. It is

not acceptable that they get ill or even die because of conditions in the hospital or errors in the hospitals. This is happening not only in India but in hospitals all over the world. Amongst the reasons for Medical Errors, errors in medication form the largest group. We need our pharmacists to device measures such as the surgeon Atul Gawande's Check List developed at Harvard now brought out as a successful book under the same name. Increasing resistance to existing antibiotics due to misuse and lack of new antibiotics are becoming a huge health hazard.

6. Failure of our Self-Regulatory Systems in Health

We have self regulating mechanisms such as the Medical Council of India and the Nursing Council of India which are not working well. I do not want to go into this except to say that our curriculum for undergraduate medical education is outdated and needs change. Today it is not producing the type of doctors we need.

7. Drug Regulatory System

Any health system can flourish only within a well structured drug regulatory system. In India, just as the Medical Council failed us so also the government drug regulatory system failed us. The result is that the market is flooded with unnecessary medicines, many of them combinations, while the system of release of new drugs had been misused. There was wide criticism of the existing system both by the doctors and the industry, both by Parliament

and the Supreme Court of India. One of the areas most hit was the field of clinical trials in which India was hoping to become a global leader. The number of trials fell drastically. The Government of India set up a Committee with me as Chairman to recommend measures to reform the system. The Committee made its recommendations which have been, except for two, accepted by the Government and implementation of the twenty five recommendations has begun. As a result of all this there will soon be a robust, transparent and efficient system of drug regulation in India based on scientific principles and ethics.

8. Resources for Health

I come now to the last point which could, in fact, have been the first point. Resources allocated to the health sector need to be increased to support the programmes. I have talked about many things I have not talked about the creation of six AIIMS (All India Institute of Medical Sciences) like institutions in different parts of India, setting up six NIPERS (National Institute of Pharmaceutical Education and Research) , establishment of new Cancer Centres, establishment of several institutes in different areas of AYUSH and establishment of Centres of Biotechnology, Information Technology and Translation Research relating to Health. A 1000 crore National Skills Development Council has been set up for training to para-professionals. A Lifescience Skills Council is being set up for technicians and supervisors needed for our expanding pharmaceutical industry.

All this needs money. India spends 4.1% of its GDP on Healthcare as against

- China (5.1%)
- Brazil (9.5%)
- South Africa (8.9%)
- U. K. (9.6%) and
- USA (17.9%)

We need to spend much more on Healthcare.

Conclusion

In conclusion I believe that if we all think of Health India as one entity we would achieve much more. For example when we think of human resources for health all figures from India mention that 30,000 doctors, 54,000 nurses and 15,000 Auxiliary Nurse Midwives are produced every year – total of 99,000. However we also produce 30,000 AYUSH physicians and 36,000 pharmacists every year leading to the figure of 165,000 which is the resource we have.

Similarly in the concept of Health-India when we think of combating the menace of Diabetes or finding new methods of treatment of diabetes let us not think of how Ayurveda or Allopathy or Unani Medicines can benefit the people. Let us all put our heads together and see how we can tackle this problem together.

The same approach is essential for preventive and promotive aspects of health. We are not using the vast information we have relating to promotive and preventive health. Even the Ayurvedic and Unani physicians today are not utilizing this knowledge maximally. This knowledge belongs to all of us and we need to spend much more effort and resources in a joint manner on Promotive Health.

Again, in Healthcare let us not think of what the allopathic hospitals and Ayurvedic and Unani Hospitals can do, what the government hospital can do and what the corporate hospitals and nursing homes can do. We need to think of all these resources as our resources and what they can do all together.

We have many challenges ahead but we also have tremendous resources in the country. Let us use these more.
