Pathways to SDG: Macro to Micro Perspectives

November 20, 2016, New Delhi

UNITED NATIONS UNIVERSITY

FIN
Friend In Need India
ISSUES IN HEALTHCARE

Pragmatic Policies for Healthcare Security

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Policy Foundation
Single day Newspaper at a Glance

A thought for today
Water and air, the two essential fluids on which all life depends, have become global garbage cans

JACQUES-YVES COUSTEAU
Delhi forced to hide behind a mask

New Delhi: The specific crisis of Delhi is not only affecting its citizens but also medical stores in the city. The news of delhi's pollution has forced the citizens to wear masks and stay indoors.

"Earlier people were suffering from breathing problems due to air pollution. Now, even joggers are wearing masks and the problem is worsening," said Shatinder Chauhan, a resident of Vasant Vihar. "I have sold over 200 masks in the last six days."

Chauhan himself feels that since he sits all day facing the main road, he too should wear a mask or move out of Delhi. Like him, mask buyers are overwhelmed by the very visible pollution, causing anxiety in the capital.

"I wonder when the government will act. It's been more than a week now and the situation remains grim," worried Karol Bagh resident Rakesh.

Let Delhi Breathe

Kashmiri, "I have bought masks for my entire family. What we are seeing today is never for our health."

The dark grey haze over the city is a trigger for the outdoors. A walk around Khan Market, he said, "It reminded me of a London street."

Not surprisingly, chemists are also running out of masks. Vaishali, a chemist at Khan Market, said on Saturday, "Yesterday, we sold around 30 masks, but today the demand has grown by four times."

But resident Karan, another chemist, added that this was the first time people were approaching stores for masks without doctors prescribing them.

Rajesh Kumar, an ophthalmologist, walked into Khan Market, saying he felt constantly while breathing, "I have been using a plunger for the last few days when going for my morning walk," he said.

Toxicity

How to save your health from bad air

1. The toxic air has affected almost everyone in Delhi. It is causing watery eyes, coughing, and wheezing among the healthy but while those with pre-existing diseases are struggling to survive.

2. The worst affected are heart patients. Those with coronary artery disease or congestive heart failure must be careful as pollutants can trigger a heart attack.

3. Patients with lung diseases: Toxic air can make it difficult to breathe for people suffering from asthma or chronic obstructive pulmonary disease (COPD).


5. Immune-compromised patients: Bad air leaves them vulnerable to secondary infections and respiratory distress.

Advisory

Stay indoors: Early morning walks should be avoided. You should also avoid going out unless necessary, particularly areas with high traffic volume.

How plenty of fluids, healthy nutrition: This will help neutralize the effects of toxic chemicals being inhaled and fight any possible infection.

Influenza vaccination: The elderly should get influenza vaccination to reduce the risk of viral infections, which are common during this season.

Rush to doctor: If you have unusual cough or breathing difficulties, consult a doctor. Depending on the condition, doctors may prescribe medication or admit for monitoring vital parameters.

Wear the right mask

Surgical masks: They are the cheapest and widely available. However, experts say it may not help protect from PM 2.5 that are very small in size.

N-95 masks: The respirator blocks at least 95% of very small particles. This mask is advisable for the vulnerable ones.

N-99 masks: Makers claim these masks filter 99% of dust and particulate matters. They also come in multi-coloured designs.

Air purifiers

- Given rising air pollution, purifiers are selling like hotcakes. But, experts say, there is still no conclusive evidence on their health benefits.
Breathless People

Smog may slow down city traffic

Hit by illness, now trapped by smog
Patients staying outside, potential victims
Polluted SWACHH BHARAT

Pollution protesters outline clear strategy to lift haze
Urging residents to take ownership of clean air cause, put a full stop to waste burning.

Stop waste burning. Enforce the law.
The protesters said waste burning has to be tackled aggressively, composting should be incentivised.

Smoke-haze drives pollution back into ‘severe’ zone
Wind gone, haze thicker
Delhi Today, Your City Tomorrow

94 Cities Haven't Met Air Quality Standards In 5 Years

5 SINS OF POLLUTION

1. We are not monitoring air quality in real time
2. We don't have sources of air pollution
3. Governments fail to enforce
4. Ignoring health risks
5. People aren't pitching in

CPCB monitors 29 cities real-time and has just one continuous air quality monitor at most locations

LEAD POLLUTANTS DISSECTED

WHAT'S IN YOUR KIT

Experts shocked, urge all to cut down emissions
Corporates consider letting staff work from home to beat pollution

Gurgaon: As pollution levels remain alarmingly above the safe standards, there are increasing complaints of eye and throat allergies, and instances of people falling ill. To cope with this, corporate houses based in the city are thinking of various options to help their employees.

While those who can afford telecommuting are thinking of giving their employees a choice to work from home if the condition worsens, others are providing flexible timings for their employees.

“While those who can afford telecommuting are thinking of giving their employees a choice to work from home if the condition worsens, others are providing flexible timings for their employees.

“We are a small company and we can easily afford telecommuting. If the situation gets worse, we will exercise that option,” said Aparna Gupta, managing director, FirstRain, a Gurgaon-based product company.

Manu Dangi, country head at E Valueserve, told TOI that they were mulling the ‘work from home’ option in case the situation worsens.

“We have given our employees the alternative of flexi hours so that they can avoid stepping out during the time when PM2.5 concentration levels are high. We are also thinking of installing air purifiers on the office campus,” said Manas Fuloria, chief executive officer, Nagarro, who is also the state chairman at Nasscom.

He added that Nasscom has also written to the government to take action against crop stubble burning in Punjab and Haryana.

As air purifiers do not work for large floors and are more efficient in residential set-ups, there is little that the companies can do. Also, shutting down every time extreme weather conditions prevail is also not an option, as it leads to loss of business.

Meanwhile, expatriates in the city are also struggling to cope with the high concentration of PM2.5 in the air, as they are used to a different environment.

“I used to live here for nine years. I go out of town around Diwali to avoid the high pollution levels. But I definitely feel that it is time to take some corrective measures to save the environment,” said Brigit Holm, who is originally from Denmark but lives in Gurgaon.

George, who is from the UK, agreed with Holm. “Blaming the government or a single agency will not help. The citizens will have to usher in the change,” he said.
BREATHELESS DELHI

SUNDAY TIMES

Breathless In Smoke House Delhi

Even without a dictator, Delhi has its own gas chamber

Delhi a ‘gas chamber’, road ahead hazy

Long exposure to smog unsafe, but no option

Construction sites in Delhi turn to dust bowls, choke people
Healthcare Security

- Population Control- Incentives and Disincentives
- Preventive Measures for Environmental Factors
- Vaccination
- Hygiene- Education and Practice
- Lifestyle- Diet, Exercise, Smoking, Alcohol
- Hospital Reach— Patient Care Management and Costs
- Progressive Pharmaceutical Industry- Innovations and IP
- The Goal of 100% Medical Insurance
“India will succeed only when India will read”

Health and education the pillars of growth

The education, employment, social and economic development have cascading relationship.
Swachh Bharat Abhiyan 2014

“I appeal to every citizen to dedicate 100 hours a year towards cleanliness.”
Narendra Modi, Prime Minister of India

19 November
WORLD TOILET DAY

SulabhENVIS Centre on Hygiene, Sanitation, Sewage Treatment Systems and Technology
• Measures to control dust
• Providing Mass Rapid Transit System
  • Connecting last mile
• Promoting Car Pools
• Discouraging Multiple Car Ownership
• Minimizing Traffic Jams
  • Collecting Toll Money with Car Purchase
• Car Parking Facilities
Common Sources of Water Pollution & Health Hazards

- Waterborne **diseases** are caused by pathogenic microorganisms that most commonly are transmitted in contaminated fresh **water**.
- Infection commonly results during bathing, washing, drinking, in the preparation of food, or the consumption of food that is infected.
- Oro-fecal contamination
- Animals polluting water for human use
- Industrial affluent- Toxic substances, carcinogens
- Temple waste and Idol immersing polluting water
- Dead Bodies

<table>
<thead>
<tr>
<th>Category of causative agent</th>
<th>Diseases</th>
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<tbody>
<tr>
<td>Bacteria</td>
<td>Shigellosis, Typhoid fever, Cholera, Acute Gastroenteritis</td>
</tr>
<tr>
<td>Viral</td>
<td>Infectious hepatitis, Poliomyelitis, Acute Gastroenteritis</td>
</tr>
<tr>
<td>Parasitic Diseases</td>
<td>Amebiasis, Giardiasis, Dracunculiasis (Guniea Worm), Leptospirosis</td>
</tr>
<tr>
<td>Heavy Metals</td>
<td>Arsenicosis, Lead poisoning</td>
</tr>
</tbody>
</table>
Soil Pollution

Cancers, including leukemia –

through soils contaminated with chemicals (e.g., gasoline, or other petroleum products containing benzene) ... Kidney and liver damage – caused by chemicals such as Hg. In general, many effects are common with those from water pollution.
Air pollution plays a significant role in air born diseases which is linked to asthma.

Pollutants are said to influence lung function by increasing air way inflammation. ... Often, airborne pathogens or allergens cause inflammation in the nose, throat, sinuses, and the upper airway lungs.
Total global deaths attributable to household and ambient air pollution in 2012 (region-wise), WHO – 2014
Percentage distribution of deaths from ambient PM pollution in India
Councillor writes to SCorpn for ban on construction work

Senior officials claimed that in the past two weeks, the South Corporation had issued over 200 challans to construction sites for violating NGT norms. According to green tribunal’s guidelines, if construction materials are kept in the open at a project site, the civic agency can impose a hefty fine of Rs 50,000 on the builder,” said a senior official.

Parinda Saini, leader of the opposition of South Corporation, alleged that the civic body had failed to keep a track of illegal constructions.

“The corporation should launch a massive crackdown on builders indulged in illegal construction work,” Saini added.

30,000 saplings planted

From beauty queues to spiritual bodies, over 2000 turn up, twirling the area for plantation drive.
Healthcare Security

• Population Control- Incentives and Disincentives
• Preventive Measures for Environmental Factors
• Vaccination

• **Hygiene- Education and Practice**
• Lifestyle- Diet, Exercise, Smoking, Alcohol
• Hospital Reach— Patient Care Management and Costs
• Progressive Pharmaceutical Industry- Innovations and IP
• The Goal of 100% Medical Insurance
Polices for Achieving Goals

- 100% Literacy
- Vocational Education and Training
- Physical activity
- Education of Health and Hygiene
- Infrastructure for quality higher education, R&D

Cleaning of their classroom train them to keep the home and country clean.
Hygiene- Education and Practice

Hygiene Education

Should start at Primary school level like-

- Cleaning own classrooms and daily competition of most clean classroom and recognition e.g. star giving etc.
- Picking up waste from the grounds and floor of school in the morning and post-lunch etc.
- Checking for grooming e.g. Nails, Haircut, clean uniform and polishing of shoes.
- Medical care & Infection control
- Providing clean nutritious mid-day meal and water and teach kids the importance of before and after meal hand wash and cleaning space around them.
- Importance of Exercise Sports and Yoga
- Curriculum should include teaching of Healthy food, problems of tobacco, smoking spitting firecrackers etc.
Healthcare Security

- Population Control- Incentives and Disincentives
- Preventive Measures for Environmental Factors
- Vaccination
- Hygiene- Education and Practice

- **Lifestyle- Diet, Exercise, Smoking, Alcohol**
- Hospital Reach- Patient Care Management and Costs
- Progressive Pharmaceutical Industry- Innovations and IP
- The Goal of 100% Medical Insurance
Awareness Campaigns

Lifestyle - Sedantry/Hectic Sleep

Diet

Exercise

Smoking

Alcohol
Healthcare Security

- Population Control- Incentives and Disincentives
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Infrastructure of Govt. Hospitals to improve,

- Hospital within reach like Mohallah Clinics
- Patients should not be referred to pvt Labs for any test- big cause of corruption.
- Access to quality and affordable medicine to be improved Amrut Pharmacy
- Congestion, Cleaning and Hygiene to improve
- Nurses, Technicians and Doctors should be trained to be patient friendly
- Encourage Cashless transactions
Ambulance services

- Very scarce

- Network required to ensure availability within 10 mins of Telephone similar to App based taxi services to go
Addressing Corruption in Private Hospitals / Nursing Homes /Clinics -

• All Doctors and Essential Staff should be in fulltime Employment of Hospitals on fixed Salary like Govt. Hospitals:
  – “Generating Business/Revenue”
  – “Prescriptions to fleece” will be curtailed.

• Private Hospitals should be disallowed from having own in-house Pharmacies – In-house Pharmacies of the Hospitals are huge den of corruption.
  – Take example of a drug that has an MRP of Rs. 100 and available from 10 companies on different MRP. The Hospital Pharmacy will negotiate only the discounts, without any concern for the quality, efficacy, safety, even relevance and would choose the brand of highest MRP and lowest procurement price. This pressurizes Pharma companies to compete for higher MRP. Patients are coerced by hospitals that they cannot buy medicines and other medical supplies from outside the hospital. Since, almost all profits are usurped by the Hospitals, there is no incentive left for the quality. How will the country attract investments and entrepreneurs? Even the same tactic is used by Wholesale and Retail Pharmacy Stores. There is need to have policy in place that charging more than standard trade discounts in healthcare is unethical practice and there should be punitive action for not passing on additional discounts to the patients.

• Industry looses and get frustrated and patient is fleeced by pushing high MRP products. So the need is- No Pharmacy to be allowed inside Private Hospital.

• No Wholesale or Retail Pharmacy be allowed to charge from the patients more than standard discounts.

• Find ways to stop “Sink Test” by the Pathology Labs and Imaging Labs etc. for conducting unnecessary tests by offering cuts to prescribing Doctors
Breaking the Pharma Co - Doctors nexus

• “Conference Sponsorship Corpus” by charging cess from all the businesses

• Ban sponsoring Doctors and Conferences

• Sponsored prescription - The merits of the drug are of no consequence

• The Corpus fund be disbursed by the Government for Conferences, Workshops or other educational programs.

• Giving cuts and receiving cuts has to be declared “punishable offence”. It should be mandatory for all Doctors to provide along with Income Tax Return details of all travel undertaken by them and their dependents and source of funds

• Similar to “Sex Determination Test Labs” raids and investigations may be conducted to get rid of “cut menace”.
Healthcare Security

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- The Goal of 100% Medical Insurance
Universal Medical Insurance is the only solution to ensure Healthcare for All. Any other measure will address only the tip of the Iceberg.

- Rashtriya Swasthya Bima Yojna (RBSY / NHIS: National Health Insurance Program)
- Cashless scheme for people in rural areas since April 2008.
- provides health insurance of Rs 30,000/year to five members of every below poverty line family.
- according to data given by RSBY, there are 41,33,073 active smart cards and total hospitalization cases are 11,841,283 as of 31/03/2016.
- Every Citizen of India shall be mandatorily provided Medical Insurance for the Employees’ Family by their Respective Employer be it Government/Public Sector, Private Sector, Small Business, Domestic Help or any Employer-Employee relationship. Still those who are not covered shall be considered “Deemed Insurance” as long they have Aadhar Card. Such “Deemed Insured” shall be provided Medical Insurance Facility by the Government through countrywide “National Health Insurance Scheme (RBSY/NHIS)”. NHIS may be funded through a Medical Insurance Cess. Maximum of two children should be covered by all such Insurance. Beyond two children the insurance or Medical Care will have to self-funded / out of pocket.
On Medical Schools and Admissions:

• No donation seat, management seat, reserved seat of any kind be permitted for admission in Medical Schools either UG or PG level.

• All Schools including Private Medical Schools should give admissions through common single admission test.

• Faculty should be encouraged to be drawn from foreign schools too.

• Medical Council Of India should have non-medical members too including lawyers, retired judges, social activists, prominent educationists, scientists including prominent NRIs.

• Non-Practice Allowance as part of remuneration package should be discontinued to make it at par with other professions.

• Hostels for students across the country should be upgraded not only with respect to rooms but also toilets, kitchen, recreational areas. Hostels in general are neglected throughout the country.
On Senior Citizen Care and Children Care:

• Senior Citizen Home should be encouraged under “Corporate Social Responsibility”.

• There can be “Grand Parent- Grand Children Day Care Center Chains” that would be good for three generations. Such Day Care Centres may be networked with Senior Citizen Homes.
Know your Doctor & Hospital
On-Line Medical Records:

• All Medical Records should be electronically available on line and linked to Aadhar Card and Biometrics. These records should be accessible to treating Physicians throughout the country with control of Biometrics.
Optimizing Resources for R&D

• Social Scientists and Economists should be adequately funded for:
  • Identifying and quantifying the problems
  • Finding the solutions
  • Developing Policies for implementation

• Generating Resources for funding R&D -
  • CSR,
  • Medical Cess Corpus
  • Ministry of Health & Family Welfare

• Innovators’ Insurance
Healthcare Security

- Population Control- Incentives and Disincentives
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**Progressive Pharmaceutical Industry- Innovations and IP**

- The Goal of 100% Medical Insurance
Progressive Pharma Industry-
A Backbone of Health Care

• Irrational Price Control discourages investment
• Weak IP Protection discourages Discovery, Development and Innovations
• Product Development funding from Govt. to MSMEs should be adequate and timely for seamless progression from concept to clinic
• Regulatory agencies and funding agencies should be sensitive to erosion of patent value for the want of time bound action
• Corruption in CDSCO/ State Drug Authority- 59 & 66 Parliamentary Reports Highlighting the approvals of Irrelevant Products/ FDCs
• Procurement through Tenders have no concern of quality.
### Healthcare achievements of post-independent India

<table>
<thead>
<tr>
<th>Disease</th>
<th>Achievement</th>
<th>Current Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Expectancy</td>
<td>Increased from 32 years in 1947 to 65 years in 2011</td>
<td>Nearly 15 years less than western countries.</td>
</tr>
<tr>
<td>New-born Mortality</td>
<td>Reduced to 37/1000 in 2008</td>
<td>Approximately 10 times more than western countries.</td>
</tr>
<tr>
<td>Child Mortality (0-5yrs)</td>
<td>Reduced to 63/1000 in 2010</td>
<td>About 10 times more than western countries. About 10 times more than western countries.</td>
</tr>
<tr>
<td>Maternal Mortality</td>
<td>Reduced to 254/lakh births in 2008 from 677/lakh births in 1980</td>
<td>Almost 15-50 times more than western countries. Nearly 70,000 deaths per year.</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>In children under 5 years, reduced to 44% in 2006 from 67% in 1979</td>
<td>Nearly 20 times more than western countries. Approximately 50% children under three are underweight.</td>
</tr>
<tr>
<td>Poli</td>
<td>Eradicated almost completely</td>
<td>1 new case recorded in 2011</td>
</tr>
<tr>
<td>Leprosy</td>
<td>Eliminated in 32 States/UTs i.e. &lt;1 case/10,000 people</td>
<td>1.27 lakh new cases reported in 2011-12</td>
</tr>
<tr>
<td>Small Pox</td>
<td>Eradicated in 1977</td>
<td></td>
</tr>
<tr>
<td>Malaria</td>
<td>Number of new cases stabilized (155/lakh people in 2006 compared to 235/lakh in 1990)</td>
<td>Pesticide resistance, periodic epidemics cause increased number of deaths</td>
</tr>
<tr>
<td>Tuberculosis (TB)</td>
<td>Number of cases steadily reducing (185 cases/ lakh people in 2009)</td>
<td>Under-diagnosed and under-treated, highest number of TB cases worldwide. HIV infection causes complications</td>
</tr>
<tr>
<td>Cholera</td>
<td>Reduced to 1939 new cases/year in 2006 from 2768 new cases/year in 1997.</td>
<td>Sanitation and clean water are essential for total elimination</td>
</tr>
<tr>
<td>Kala-azar</td>
<td>Reduced incidence by 76.38% between 1992 and 2003</td>
<td>HIV infection causes complications</td>
</tr>
<tr>
<td>HIV Infections</td>
<td>Reduced to 140,000 total new cases in 2009 from 230,000 in 2002</td>
<td>Third largest HIV/AIDS population worldwide (2.0-3.1 million)</td>
</tr>
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</table>
Thank you
• 25 drugs were approved without the permission of experts

• For 14 drugs opinion of three or four experts were taken

Out of 39 drugs, PSUR report of only 8 drugs was available and in two drugs (Dronedarone of Sanofi and Aliskirnan of Novartis) clinical trial was conducted in less than 100 patients.

33 new foreign drugs were approved in 34 months – almost one every month – without the required clinical trials in India.

examples of unlawful approvals (such as Buclizine, Letrozole, Deanxit and a placental extract).
Standing committee report on CDSCO: hard facts confirm an open secret

SandhyaSrinivasan¹, AmarJesani²

You would think the mandate of the Central Drugs Standard Control Organisation (CDSCO) is to ensure that medicines on the Indian market are safe, effective, and necessary for public health. But the government thinks differently. According to a statement by the ministry to the Department Related Standing Committee on Health and Family Welfare (1), the CDSCO’s mission as stated in the committee’s report, is to “meet the aspirations…. demands and requirements of the pharmaceutical industry” (1:8). It is no wonder, then, that this industry can do just about anything it wants, at the cost of people’s health.

With the 59th report of this committee on the functioning of the CDSCO, for the first time, the internal workings of the office are laid bare for the public – with documentary proof of wrongdoing. The writers have minced no words in their indictment of the Drugs Controller General of India’s (DCGI) office, their conclusions supported by a clearly articulated methodology and hard data. The report confirms what everyone knows: the regulatory body and a coterie of medical ‘experts’ are bounden to industry, and the approval process is a sham.

In one part of its investigation, the committee drew a random sample of 42 from the total 2,167 new foreign drugs (less than 2%) approved by the CDSCO from Jan 2001 to Nov 2010. Of these 42 drugs, all documents were missing for three (7.1%). Of these three, one was not approved in countries with strong regulatory bodies, and the other two had been withdrawn. The committee expresses doubts as to whether this “disappearance of documents was accidental” (1:26).

Of the remaining 39 drugs on which information was made available, the mandatory Phase 3 trials on the drug’s safety for the Indian population were waived in 11 (28.2%). 13 (33.3%) did not have permission for sale in any major developed countries. Not one of these 13 drugs has any special or specific relevance to medical needs in India. 25 drugs (64%) were approved without seeking any expert opinion; in the remaining 14 (36%) the opinions of only three or four experts was obtained. In two of 39 (5.1%) drugs, trials were on less than the minimum 100 patients, and in one (2.6%) on less than the minimum three centres. Four (10.3%) drugs were approved with neither clinical trial nor expert opinion. Finally, the CDSCO could provide Periodic Safety Update Reports (mandatory as part of post marketing surveillance) of only eight out of 39 drugs.

The committee also obtained information on all new foreign drugs approved without any clinical trial in India from January 2008 to October 2010 (34 months). The CDSCO gave a list of 31 such drugs, but the committee identified two more drugs that met these criteria. Thus 33 new foreign drugs were approved in 34 months—almost one every month – without the required clinical trials here.