



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY

Thursday

20190404

Polio

India was the turning point in the fight against polio (Hindustan Times: 20190404)

<http://paper.hindustantimes.com/epaper/viewer.aspx>

The country's success has provided technical guidance in eradicating it in the three remaining endemic countries

Five years ago, I was fortunate enough to witness firsthand one of the world's greatest public health achievements: The South-East Asia Region (SEARO) of the World Health Organization (WHO) — a collection of 11 nations that are home to one-quarter of humanity — was declared polio free. India was the final piece of the puzzle in the region, and its success in eliminating polio set the stage for the celebration.

n The fifth anniversary of a polio-free southeast Asia region is an opportunity to reflect on lessons learned and the progress we have made globally over the last five years

Critics asked, “How can we possibly eliminate a virus that thrives on extreme poverty, poor sanitation, and social marginalisation?” India delivered the answer. It showed us that smart strategy, political leadership, effective partnerships, and public will can overcome even the toughest of microbes.

Just 12 years ago, India accounted for nearly 70% of wild polio cases worldwide, and the last communities in India in which polio held a foothold were in some of the hardest-to-reach places on earth.

But those working to tackle polio refused to give up. Ending polio required extraordinary effort and coordination by the Indian government, far-reaching vaccination campaigns, and the tireless dedication of millions of community health workers and volunteers. It was hard work,

but it yielded an amazing result: a region where nearly 3 billion people are now living free of the threat of wild polio virus.

None of this would have been possible without the strong bond that India forged with the Global Polio Eradication Initiative (GPEI), a partnership between Rotary International, the United Nations Children's Fund, the US Centers for Disease Control and Prevention, WHO and the Bill & Melinda Gates Foundation.

The Indian government, in collaboration with the GPEI, developed a surveillance network with more than 40,000 reporting sites, deployed a workforce of 2.3 million vaccinators during national immunisation days, and gave out 900 million doses of oral polio vaccine in 2011 alone, the last year India saw a case of the disease.

The programme continues to leave its mark. The infrastructure, strategies, and workforce developed by the programme are helping to deliver essential health services, including the introduction of other life-saving vaccines, with support from Gavi, the Vaccine Alliance.

Vaccinators still work tirelessly to identify and vaccinate children, and as long as polio exists in the world, these efforts will remain essential to sustain India's success. Frontline workers from the polio programme also counsel pregnant women on breastfeeding and help facilitate routine immunisation for newborns.

The fifth anniversary of a polio-free SEARO region is an opportunity to reflect on lessons learned and the progress we've made globally over the past five years. India's success has provided technical guidance for eradication efforts in the world's three remaining endemic countries — Afghanistan, Pakistan and Nigeria. In these countries, health workers have developed strategies to identify, track and vaccinate hard-to-reach populations; coordinated trainings for community mobilisers; and established innovative systems for conducting door-to-door campaigns. All these strategies were pioneered in India.

Years from now, when WHO holds another ceremony to certify the world polio free, we will look back to India as the final turning point in the fight.



Health literacy

Health literacy a must to empower patients (The Tribune: 20190404)

<https://www.tribuneindia.com/news/comment/health-literacy-a-must-to-empower-patients/752945.html>

Dr R Kumar There is a need for health policies and strategies that address health literacy. It can be used as a tool for the empowerment of people by their own participation, not just through the intervention of doctors. Better government policies can be drafted for further improvement in health services.

HEALTH literacy is the capacity to obtain, process and understand healthcare information and services needed to make appropriate decisions in the areas of wellness and patient care. It is one of the factors that lead to the acquisition of knowledge, positive attitude, self-efficacy, positive health behaviour, and better survival. It gives a sense of control and confidence to individuals to gain access to and understand aspects of health promotion for themselves, their families and communities. It further helps in mobilising communities to address the social, economic and environmental determinants of health. Low health literacy, on the other hand, has been found to be associated with lesser use of preventive services, and excessive use of emergency services, with high costs and dismal outcomes. Besides increased hospitalisation, patients with poor health literacy have high incidence of adverse drug reactions and nearly two-fold higher risk of death. Low health literacy is associated with failure to seek timely medical help, lower rate of vaccination in children, increased burden of sexually transmitted diseases in the youth, the inability to interpret and follow up with prescribed medication for the elderly, and consequently higher morbidity.

Health literacy is critical to the empowerment of communities against emerging threats such as from the pandemic influenza, climate change and non-communicable diseases. Similarly, for patients suffering from conditions like acute coronary syndrome or severe infections, those with lower health literacy are more likely to die than those empowered with it, studies have revealed. The theme of this year's World Health Day is Universal Health Coverage (UHC), which includes preventive care, medical treatment and palliative care. Can UHC succeed without health literacy?

In India, at least nine out of 10 adults suffer from low health literacy. It is reported that even in the US and the UK, more than 50 per cent of the people have low health literacy; the 'cost of ignorance' is about \$200 billion in the US alone. Such people harbour myths about food and exercise, lack knowledge about symptoms of diseases, or have misinformation about the body functions or the use of medicines. Lack of health literacy, coupled with the ever-growing population, also poses a threat to our nation's economic stability as patient-care expenditures are on the rise. India also has an unusually high rate of general illiteracy and stark poverty, both of which contribute to low rates of health literacy. An unhealthy lifestyle leads to repeated visits to the hospital. Similarly, rushing patients to top hospitals, when declared as 'unlikely to survive' by referring doctors, is choking these hospitals with dying patients. It is a myth that with advanced medicine, surgery, devices and technology, an institute like the PGIMER ensures survival, even for the terminally ill. Unrealistic expectations and attendant violence against doctors are also attributed to low health literacy. Thus, it can be the underlying cause of many deaths due to ignorance. Can the nation afford to let its premier institutes suffer from an overload of dying patients?

Universal Health Literacy (UHL), which accounts for more comprehensive understanding, aims to influence not only individual lifestyle decisions, but also raises community awareness of the determinants of health, and encourages individual and community actions, which may lead to modification of these determinants. It goes beyond a narrow concept of reading pamphlets or school health education and addresses the environmental, political and social factors that determine promotion as well as maintenance of good health for all. The skills under UHL include: reading, writing, listening, speaking, numeracy, and critical analysis, as well as communication and interaction skills in the areas of health, healthcare, health administration and patient education. It also includes the study of working conditions (exposure to common pollutants and dangerous substances such as lead, asbestos, mercury), as well as physical demands (carrying heavy load etc.), besides the availability of basic needs like adequate and clean water, proper breathing and enough oxygen, appropriate food, right exercises, exposure to sunshine, peace of mind etc.

Health literacy involves a range of abilities, including the following:

Navigating the healthcare system (includes filling forms, finding suitable doctors).

Describing symptoms and sharing personal health information.

Knowledge of how the body works, types of disease and causes.

Connecting lifestyle (smoking, drinking, diet and exercise) with health.

Weighing risks and benefits of medical tests and procedures.

Health insurance literacy to avail healthcare services.

Getting a second opinion in case treatment is invasive or expensive.

To be your own advocate. No one knows you better than you.

Partnering with your doctor.

To be familiar with correct doses, blood sugar level, cholesterol level etc.

It cannot be stressed enough that there is a need for health policies and strategies that address the issue of health literacy. It can be used as a tool for the empowerment of people by their own participation, not just by the intervention by doctors. Better government policies can, thus, be drafted for further improvement in health services. The school and college curriculum must include 'body literacy' from the primary classes onwards to sow the seeds of health literacy in the young minds, so that they grow into healthy adults. Reducing the availability of junk food, banning the promotion of unhealthy food, highlighting the perils of obesity and excessive use of mobile phones, and sensitising the media to promote health literacy are essential. A health-literate India would be a richer and more productive country. If we want to become a developed country, this is one of the first hurdles we need to cross.

Deadly air

Pollution must be made an electoral issue (The Tribune: 20190404)

<https://www.tribuneindia.com/news/editorials/deadly-air/752852.html>

The toll that air pollution is taking on lives in India is alarming. The Health Effects Institute (HEI) report serves as yet another warning to the country to take corrective measures. Toxic air proved fatal for over 1.2 million in 2017 in the country. India bears the notorious burden of repeatedly having the maximum number of cities on the WHO's list of most polluted places. What compounds the concern is that concerted efforts to improve the situation have been lax. Over the past few decades, inhaling poor-quality air has been affecting the quality of lives of millions — both rich and poor - as they gasp for a breath of unsullied air. There is hardly anyone who is free from its resultant morbid problems: allergies, coughs, watery eyes, and chronic heart or lung diseases. Even those not smoking are at equal risk, with the latest report

ranking polluted air as the third highest cause of death among all health risks, above tobacco use.

Both indoor and outdoor factors are contributing to the increasingly unlivable habitat. Only a strict check and regulation on the use of wood and kerosene stoves that convert homes into gas chambers will topple India from its present top position in indoor air pollution. The outdoor pollutants most impacting the health are soot, dust particles, ozone and sulphur and nitrous oxides. Despite efforts, villains such as emissions from vehicles and industries as well as constructions have not yet been tamed to the desired levels. The PM2.5 - particles smaller than 2.5 microns in diameter - continue to dangerously float in the ambient air and play havoc with lives by penetrating deep into the lungs in the absence of enough counter-measures.

It is time pollution is made an electoral issue in India, beginning with the current General Election. For, the rampant failure to make our air clean has already cast dark clouds on our next generation: the HEI report predicts that the lifespan of a child born in India today is likely to be two and a half years shortened as against the life expectancy loss of 20 months in countries that have controlled pollution.\

Superbug infections

Blue light could treat superbug infections: Study (The Tribune: 20190404)

<https://www.tribuneindia.com/news/health/blue-light-could-treat-superbug-infections-study/752743.html>

Exposing superbugs to blue light can render them defenseless against even mild antiseptics, according to a study that may help leverage the fight against the growing global threat of drug-resistant bacteria.

Methicillin-resistant Staphylococcus aureus (MRSA), a bacterium that causes infection in various parts of the body, is often called a "superbug" thanks to its ability to dodge many common antibiotics.

Although most MRSA infections are not serious, some can be life-threatening, sometimes resulting in amputation of the infected appendage, researchers said in a statement.

Rather than trying multi-drug combinations or wasting precious time determining which medicine to prescribe, doctors could soon use light therapy for disarming the superbugs, according to a study published in the journal Advanced Science.

Researchers at Purdue University and Boston University in the US have discovered that exposing the bug to blue light can render it defenseless against antiseptics as mild as hydrogen peroxide.

"This new tool can treat any superficial wound infected with MRSA, which are typically very difficult to treat," said Mohamed Seleem, a professor of microbiology at Purdue University.

"The device itself is very small and easy to use. We're hoping that in the next few years, anyone could carry it around in their purse," said Seleem.

Some bacteria, including certain strains of staph, produce pigments, associated with the organism's ability to damage the host. If the pigment is reduced, the organism's activity in the body may also be curbed.

This practice is known as photobleaching, researchers said.

"When you bleach something in the wash machine, you're extracting the color using chemicals. What we're doing here is similar, but we're using blue light," said Seleem.

After achieving promising results in vitro, the researchers exposed mice with MRSA-infected wounds to different wavelengths of light. The infections responded especially well to light in the blue region, and combined with a low-concentration hydrogen peroxide, were reduced significantly. — P

Depression

Depression can't be predicted by a few genes: Study (The Tribune: 20190404)

<https://www.tribuneindia.com/news/health/depression-can-t-be-predicted-by-a-few-genes-study/752700.html>

A team of US scientists claim that no specific set of genes can predict the risk of depression, and efforts to treat the mental disorder by targeting a few 'genetic culprits' is bound to fail.

The researchers, who assessed genetic and survey data from 620,000 individuals, found that the 18 most highly-studied candidate genes for depression are actually no more associated with it than randomly chosen genes.

Over the past quarter-century, researchers have published hundreds of studies suggesting a small set of particular genes or gene-variants plays a substantial role in boosting susceptibility to depression.

Such research fuelled hopes that clinicians could soon use genetic testing to simply identify those at risk, and drug companies could develop medications to counteract a few genetically-driven culprits, researchers said in a statement.

According to the team from the University of Colorado Boulder in the US, previous studies were incorrect—or "false positives"—and the scientific community should abandon what are known as "candidate gene hypotheses".

"This study confirms that efforts to find a single gene or handful of genes which determine depression are doomed to fail," said Richard Border, a graduate student at University of Colorado Boulder.

"We are not saying that depression is not heritable at all. It is. What we are saying is that depression is influenced by many variants, and individually each of those has a miniscule effect," said Matthew Keller, an associate professor at University of Colorado Boulder.

For the study, published in the American Journal of Psychiatry, researchers looked at 18 genes which have appeared at least 10 times in depression-focused studies.

Among them was a gene called SLC6A4, involved in the transport of the neurochemical serotonin. Research dating back 20 years suggests that people with a certain "short" version of the gene are at significantly greater risk of depression, particularly when exposed to early life trauma.

The researchers also looked at genes involved in the production of brain-derived neurotrophic factor (BDNF) a protein involved in nerve formation, and the neurotransmitter dopamine.

Using genetic and survey data gathered from individuals via the UK Biobank, 23andMe, and the Psychiatric Genomics Consortium, they set out to see if any of the genes, or gene variants, were associated with depression either alone or when combined with an environmental factor like childhood trauma or socioeconomic diversity.

"We found that, as a set, these candidate genes are no more related to depression than any random gene out there," said Keller.

Keller said that in the field of genetics, scientists have known for years that candidate-gene hypotheses were flawed.

However, hopeful researchers in other fields, including psychology, have continued to publish studies—often based on smaller sample sizes—which have kept the idea of a small set of "depression genes" alive.

"It's like in 'The Emperor Wears No Clothes.' There's just nothing there. I hope this is the final nail in the coffin for those kind of studies," said Keller. — PTI

Health

Reaching for smartphone may be bad for your health: Study the Tribune: 20190404)

<https://www.tribuneindia.com/news/health/reaching-for-smartphone-may-be-bad-for-your-health-study/752742.html>

Past research has examined wellbeing in terms of life satisfaction and whether people tend to experience more positive emotions than negative emotions. Photo Credit: Thinkstock.

Using your smartphone to relax and pass time may be associated with negative feelings, lack of control and a reduced sense of purpose in life, a study warns.

The study, published in the journal *Computers in Human Behavior*, is the first to thoroughly evaluate how smartphone use is associated with measures of subjective and psychological wellbeing.

Researchers at Deakin University in Australia showed habitual smartphone use and entertainment use—to relax, escape and pass time—were the best predictors of lower wellbeing.

The survey of over 500 students found problematic smartphone use was associated with feelings of negative emotions, lack of control, a reduced sense of purpose in life, and a ability to resist social pressure.

"There's a constant stream of news and entertainment in our life now, and if that content is not necessarily positive it might be contributing to technological overload or techno-exhaustion," said lead researcher Sharon Horwood from Deakin's School of Psychology.

"While there has been some analysis of smartphone use and subjective wellbeing, this study goes into much greater depth," Horwood said in a statement.

Past research has examined wellbeing in terms of life satisfaction and whether people tend to experience more positive emotions than negative emotions.

"This research offers a more complete picture of what makes the 'good life' including positive social relationships, a sense of personal growth, autonomy, and having a sense of control over one's life," Horwood said.

"While we found that smartphone use is unrelated to people's overall life satisfaction, it is associated with mood and these broader indicators of human flourishing," she said.

"Wellbeing is about feeling satisfied with your life, managing day-to-day activities, and positive relationships. We found that problematic smartphone use impacts all those things," he said.

Horwood said there are four main areas of wellbeing which negatively related to problematic smartphone use.

These included how much control people felt they had over their use, whether smartphone use interferes with a person's day-to-day life, whether the phone gets in the way of positive relationships with others, and whether smart phone use was a panacea for boredom and lack of personal growth.

"The question is, does using your smartphone in a problematic way lower wellbeing, or is someone whose wellbeing is low for other reasons more likely to turn to their smartphone for comfort, distraction, or perhaps escapism?" she said.

However, Horwood said it was important to note her study showed smartphone use was not all bad.

"For what we term 'communication use' —calls and text messages—we found a slight positive association with wellbeing," she said.

"So using phones to facilitate a direct connection with people seems to be good, as opposed to passively looking at what people are doing on social media," said Horwood.

The next step in Horwood's research is to drill down into the impact of smartphone use on children's social and emotional wellbeing, as well as their family relationships. — PTI

Air pollution

In India, air pollution is the third-highest cause of death among all health risks: report (The Hindu: 20190404)

<https://www.thehindu.com/sci-tech/energy-and-environment/over-12m-early-deaths-in-india-in-2017-due-to-air-pollution-report/article26719117.ece>

Overall, long-term exposure to outdoor and indoor air pollution contributed to nearly 5 million deaths from stroke, diabetes, heart attack, lung cancer, and chronic lung disease in 2017. File

Study claims poor air quality caused 1.2 mn deaths each in India and China in 2017

The current high level of air pollution has shortened the average lifespan of a South Asian child by two-and-a-half years while globally the reduction stands at 20 months, according to a global study released on Wednesday.

State of Global Air 2019, published by Health Effects Institute (HEI), said exposure to outdoor and indoor air pollution contributed to over 1.2 million deaths in India in 2017. The report added that worldwide, air pollution was responsible for more deaths than many better-known risk factors such as malnutrition, alcohol abuse and physical inactivity.

In India, air pollution is the third-highest cause of death among all health risks, ranking just above smoking; each year, more people globally die from air pollution related disease than from road traffic injuries or malaria.

In China and India

The study found that China and India together were responsible for over half of the total global attributable deaths, with each country witnessing over 1.2 million deaths from all air pollution in 2017. China has made initial progress, beginning to achieve air-pollution decline.

Overall, long-term exposure to outdoor and indoor air pollution contributed to nearly 5 million deaths from stroke, diabetes, heart attack, lung cancer, and chronic lung disease in 2017.

Out of these, 3 million deaths are directly attributed to PM2.5, half of which are from India and China together. The South Asian region — Bangladesh, India, Nepal and Pakistan — led the world as the most polluted, with over 1.5 million air-pollution related deaths according to the report.

‘Steps taken in India’

“At the same time, India has initiated major steps to address pollution sources: the Pradhan Mantri Ujjwala Yojana Household LPG program, accelerated Bharat Stage 6/VI clean vehicle standards, and the new National Clean Air Programme. These and future initiatives have the potential, if fully implemented as part of a sustained commitment to air quality, to result in significant health benefits in coming years,” said Robert O’Keefe, vice president, Health Effects Institute.

In India, air pollution is the third-highest cause of death among all health risks: report

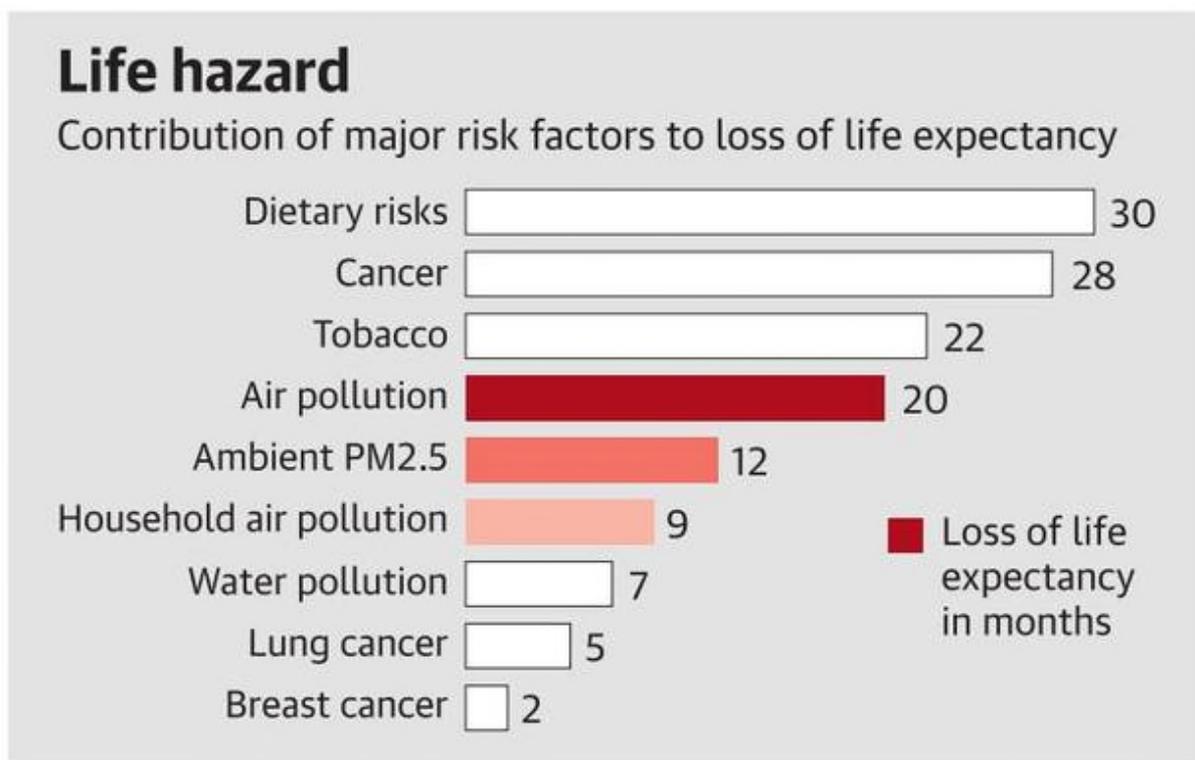
Meanwhile, for the first time, this year’s report and website include worldwide estimates of the effect of air pollution on life expectancy.

Worldwide, air pollution reduced life expectancy by an average of 20 months in 2017, a global impact rivaling that of smoking; this means a child born today will die 20 months sooner, on average, than would be expected without air pollution.

The report also highlighted that nearly half of the world’s population — a total of 3.6 billion people — were exposed to household air pollution in 2017. Globally, there has been progress: the proportion of people cooking with solid fuels has declined as economies develop.

But in India, 60% of the population still uses solid fuels; in Bangladesh that number rises to 79%, underscoring the importance of achieving success in government initiatives to address the problem.

The State of Global Air 2019 annual report and accompanying interactive website are designed and implemented by the Health Effects Institute in cooperation with the Institute of Health Metrics and Evaluation (IHME) at the University of Washington, the University of British Columbia, and the University of Texas, Austin.



Clean air plan

Our clean air plan is a missed chance (Hindustan Times: 20190404)

<http://paper.hindustantimes.com/epaper/viewer.aspx>

It sets a target without a realistic road map, and is more a something-for-everyone laundry list

We are in the midst of that season in north India, when air quality debates die down, and parents send their children out to play. After all, the air quality index suggests “moderate” and “poor” air days, with hardly a “very poor” or “severe”. Of course, at moderate levels, the level of PM2.5 is still 2.5-3.5 times the World Health Organization (WHO) safe levels, and poor is 3.5-5 times higher. But given what Delhi feels like in the winter months, February and March seem positively inviting. After all, one cannot worry about air quality all year round, right?

Unfortunately, wrong. We may have no option but to send our children out to play, but we should also be simultaneously working hard on long-term solutions. During the apocalyptic winter months, justifiable cries of alarm translate to reactive measures: an (ineffectual) firecracker ban, throwing money at “Happy Seeders” to stop crop burning, and periodic bans on truck traffic. Some shortterm response measures are needed for emergencies. But to make a real dent in the air problem requires measures to address the deep-rooted causes and not simply react to the symptoms. This is best done when we are not in panic mode.

The recent National Clean Air Programme (NCAP) is a missed opportunity to establish a long-term strategy. It sets a target without a realistic road map, proposes a city-based approach that downplays regional effects, and adopts a something-for-everyone approach rather than prioritising action. In the midst of election season, formulating a serious approach to air quality plan remains a missed political opportunity. So, what are elements of a long-term plan that truly starts the long, slow business of addressing root causes?

First, a truly effective strategy will place the challenge of ensuring compliance and enabling enforcement at the heart of pollution regulation. Too often, actions are written as if enforcement is a secondary challenge when it is actually primary. For example, to limit industrial pollution, will a combination of monitoring technology, strengthened laws, and enhanced capabilities of pollution control authorities work? Or is the enforcement challenge so great that we should simply force industries to switch to cleaner, if costlier, fuels, which may be easier to monitor? The answer is not entirely clear, but this is the question that should inform strategic policymaking.

Second, many pollution sources need multifaceted responses. For example, waste burning may best be addressed by upstream shifts in consumer behaviour, to limit waste at source. Transport emissions need a mix of public transport investments, behavioural change in transport patterns, and new transport technologies such as electric vehicles. Reactive solutions, such as banning waste burning or certain forms of transport, are but band aids.

Third, many solutions require negotiated solutions to political and economic challenges. Crop burning is unlikely to be solved by a technical solution if not burning crops costs more. The resolution lies in political negotiations around cropping pattern shifts, agricultural support policies and water use policies. Political negotiations take time and need to start now, before pressure for quick fixes sets in.

Fourth, a city-by-city approach is invariably limited. Much pollution occurs outside cities — by industry, brick kilns, power plants and crop burning. City boundary-based regulation only encourages emissions leakage such as relocation of industries to the outskirts. India has to develop regulatory institutions that operate at the level of the regional “airshed”.

Fifth, we need to pick a short list of big wins to demonstrate progress and rally the public. But equally, these need to be carefully selected and maximally supported rather than the current scattershot approach. The Ujjwala scheme to provide clean cooking gas, introducing Bharat Stage VI fuels, improved power plant regulations and investment in public transport are three winning mediumterm solutions. A strategic and limited set of such solutions need aggressive action.

Let us not fool ourselves. North India’s air pollution will not improve substantially for at least a few years. The scale is too large, the pollution patterns too entrenched, and the enforcement challenges too deep. But this time frame of years will stretch to decades if we do not lay the groundwork now. Reactive, limited and short-term action taken in the panic of the winter smog won’t even put us on the path to a medium-term solution. We have to keep our eye on the ball, even when the air appears clear, and invest in the necessary long-term technological, institutional and political changes.

Toxic air

Telling Numbers: Of deaths due to toxic air in 2017, half in China and India, claims report (The Indian Express: 20190404)

<https://indianexpress.com/article/explained/deaths-due-to-toxic-air-in-2017-half-in-china-and-india-report-5657371/>

The report found that long-term exposure to ambient PM2.5 contributed to 2.9 million deaths in 2017, making PM2.5 exposure responsible for 5.2% of all global deaths.

Explained: Why RBI may cut lending rates at MPC review today

Why 3 corporators may not be ousted for failing to provide proof of caste

‘Coordinated inauthentic behaviour’: Why Facebook removed pages in India

Telling Numbers: Of deaths due to toxic air in 2017, half in China and India, claims report

The report cites an analysis of the Global Burden of Disease data from 2016 to conclude that air pollution collectively reduced life expectancy by 1 year, 8 months on average worldwide, rivalling the effect of smoking.

A study released Wednesday has found that China and India together were responsible for half the total global attributable deaths from air pollution in 2017. Long-term exposure to outdoor and indoor air pollution is estimated to have contributed to 4.9 million deaths in 2017, of which China and India accounted for 1.2 million deaths each, states the State of Global Air report 2019, prepared by the Boston-based Health Effects Institute (HEI).

The report cites an analysis of the Global Burden of Disease data from 2016 to conclude that air pollution collectively reduced life expectancy by 1 year, 8 months on average worldwide, rivalling the effect of smoking. “This means a child born today will die 20 months sooner, on average, than would be expected in the absence of air pollution. When considered separately, exposure to ambient PM2.5 is responsible for just over 1 year, household air pollution is responsible for almost 9 months, and ozone is responsible for less than 1 month of life span lost,” it states.

PM2.5 exposure

The report found that long-term exposure to ambient PM2.5 contributed to 2.9 million deaths in 2017, making PM2.5 exposure responsible for 5.2% of all global deaths. The highest burden was concentrated in the world’s two most populous countries: China (8.52 lakh deaths) and India (6.73 lakh deaths), together accounted for 52% of the total global PM2.5-attributable deaths.

Annual PM2.5 exposures were highest in South Asia, where Nepal (100 micograms/cubic metre), India (91 micograms/cu. m), Bangladesh (61 micograms/cu. m), and Pakistan (58 micograms/cu. m) had the highest exposures. Bhutan’s exposure level (38 micograms/cu. m) was the lowest in the South Asia region. The 10 countries with the lowest national PM2.5 exposure levels were the Maldives, the United States, Norway, Estonia, Iceland, Canada, Sweden, New Zealand, Brunei, and Finland. Population-weighted PM2.5 concentrations averaged 8 micograms/cu. m or less in these countries.

Household air pollution

In South Asia, household air pollution contributes to an additional life expectancy loss of about 1 year and 3 months, bringing the total life expectancy loss from air pollution to 2 years and 6 months, the report states. In sub-Saharan Africa, where more than 80% of people cook with solid fuels, household air pollution dominates the impact on life expectancy, accounting for 1 year and 4 months of the nearly 2 years in life expectancy loss from air pollution overall.

(Reuters) - The U.S. Food and Drug Administration on Wednesday warned of potential safety risks from the use of e-cigarettes after it found certain users had suffered from seizures.

The announcement

<https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm635157.htm> comes at a time when the regulator is aiming to curb the surge in teenage use of the popular nicotine devices, which the FDA Commissioner Scott Gottlieb, due to leave the agency this month, has termed as an "epidemic".

The agency said it had observed a slight increase in the reports of seizures since last June and has identified 35 cases of seizures following use of e-cigarettes between 2010 and early 2019. The seizures, which mostly involved youth or young adult users, had occurred after a few puffs or up to one day after use.

E-cigarettes have been a divisive topic in the public health community, with some focusing on the benefit of shifting smokers to less harmful nicotine products, while others fear it would create a new generation addicted to nicotine.

Seizures or convulsions are known potential side effects of nicotine poisoning and have been reported in relation to intentional or accidental swallowing of nicotine-containing e-liquids, according to the FDA statement.

However, the agency said it could not yet say for certain that e-cigarettes had caused the seizures and the cases warrant an investigation into whether there is in fact a connection.

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Last month, the FDA had released formal plans to curb the sale of flavored e-cigarettes, which involve restricting the availability of flavors other than tobacco, mint and menthol, to stores or online portals where strong age-verification protocols are in place.

The agency on Wednesday said that it was also looking into any additional consequences to nicotine use as some e-cigarettes deliver high concentrations of nicotine.

The FDA said many of the reports it had received lacked enough information to identify a specific brand or sub-brand of e-cigarettes.

E-Cigarettes

U.S. FDA Warns of Potential Seizure Risk in Some Users of e-Cigarettes (The New York Times: 20190404)

<https://www.nytimes.com/reuters/2019/04/03/us/03reuters-usa-vaping.html?partner=IFTTT>

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Last month, the FDA had released formal plans to curb the sale of flavored e-cigarettes, which involve restricting the availability of flavors other than tobacco, mint and menthol, to stores or online portals where strong age-verification protocols are in place.

The agency on Wednesday said that it was also looking into any additional consequences to nicotine use as some e-cigarettes deliver high concentrations of nicotine.

The FDA said many of the reports it had received lacked enough information to identify a specific brand or sub-brand of e-cigarettes.

Universal Health (The Asian Age: 20190404)

<http://onlinepaper.asianage.com/article/detailpage.aspx?id=12746774>

Why universal health coverage is universally, and urgently, essential



Mala Kapur Shankardass

focus

■ While governments in China, India, Malaysia and Thailand are currently strengthening the package of services and quality of care at the primary healthcare level along with augmenting provisions at the secondary and tertiary segments, scientific data to analyse who is being missed out is not available before policymakers

As we observe World Health Day, the emphasis on achieving universal health coverage (UHC) in countries in all regions of the world and particularly in the Southeast Asian and African regions becomes stronger and stronger. It is not only the World Health Organisation's (WHO) number one goal this year but also a focus of many governments to ensure that everyone can obtain the healthcare they need, have access to it closest to their home, community and whenever they need it. Many nations including India realise that often their citizens have to choose between spending on healthcare and meeting their daily living expenses. People in general and especially those residing in rural and remote areas do not have access to quality and affordable healthcare. Primary healthcare centres lack the basic health facilities for newborn and child health, for maternal health, for non-communicable diseases for adult as well as geriatric populations, for mental health diseases and other ailments arising out of environmental issues. The gap between regions across countries and within a country reinforces the importance for equity in health care services after all health is a human right which must be realized by all leaving no one behind. While many governments, be they in China, India, Malaysia, Thailand, to name a few countries, are currently strengthening the package of services



Age, income, education and other differentials are frequently ignored during planning of healthcare

April 7 is World Health Day

and appropriate quality of care at the primary healthcare level along with augmenting provisions for healthcare at the secondary and tertiary segments, sound and scientific data to analyse who is being missed out is not being taken into account for policy programme and delivery matters, which then limits the scope of providing effective access to health services for all, given the age, gender, education, income and other differentials. For instance, as populations are ageing across nations, older people are being left behind in accessing affordable comprehensive health care. Not only are geriatric services underdeveloped in many emerging economies, older people are also most vulnerable in not being able to use the limited health care facilities available because of distance, unfriendly and non enabling environmental factors, poor transport facilities, illiteracy, disability, lack of family support, financial constraints, and so on. It has been observed that most healthcare systems

emphasise on treatment, disease control, on medical conditions rather than on prevention, rehabilitation and promotion of health and well-being which should be the goal of primary healthcare as part of universal healthcare coverage. While efficient screening of health problems is still an unaccomplished goal, immunization and vaccine program for young and adults alike is also not yet universal. The primary health care system has much to be desired in terms of cost-effective, equitable short- and long-term care as well as emergency care. Scarcity of allocation of funds, shortage of medical, nursing and paramedical personnel, clinics and hospitals, medical education facilities, all contribute towards challenges for achieving universal health care coverage. As it is recognised worldwide, UHC can only be achieved if there is sufficient health work force and medicines. A disturbing

fact of India's health status is that every year as per certain estimates 35 million people are propelled into poverty because of spending on medicines. Out-of-pocket expenditures on healthcare are high in India as surveys and research indicates. In India the new and recent policy directive to upgrade existent medical centres into 1.5 lakh health and wellness centres and convert 1,50,000 sub-centres into active delivery points for comprehensive primary health services is a promising initiative of the central government for improving antenatal care, immunisation, family planning, disease prevention, diagnostic and treatment services, community-based health promotion in dealing with communicable and non-communicable diseases. Further the provision of insurance payments, which would ease use of network of secondary and tertiary level

of private hospitals and facilities for care, is an encouraging sign of making the UHC robust. However, a pertinent question arises as to whether the private sector, which caters to 80 percent outpatient health care and 60 percent inpatient healthcare, will engage with the public sector that for many is a chronically ill system in India. The implementation of the UHC in this private public partnership is not going to be an easy task as observed by many critics of the government policies. Private healthcare system with its emphasis on profits may not function in rural and remote areas and in addition may not welcome regulations and monitoring of its functioning, without which we cannot have a desirable accountable and transparent healthcare system. Through the "Modicare" mechanism India has no doubt fast-tracked many initiatives aimed at achieving UHC, what needs to be considered is how the healthcare system will be strengthened to

provide diagnostic services at reduced and affordable costs as well as improve access to free medicines. A worthwhile step taken by the central government is the initiative called Amrit, an acronym for Affordable Medicines, Reliable Implants for Treatment. The government has planned centres that provide medicines for cancer, cardiovascular diseases and cardiac implants at significantly reduced prices, thus making affordable the much-needed facility. It has also opened Jan Aushadhi (people's medicine) stores to make available quality essential medicines to people in need.

We have progressed over a year since Ayushman Bharat, the thrust for India's journey towards UHC, was announced in the Union Budget 2018. Budget allocations for the success of the programme have taken place but much still needs to be done in order to make available trained health personnel at all levels to provide treatment and care for prevention, promotion and diagnostic facilities for all age groups, including for the emerging non-communicable medical needs such as end-of-life care. In India, the achievement of the UHC goal will depend on ramping up and revitalising the health system with services available at the community level for all sections of the population. The nexus between public and private healthcare provisions to ensure quality of care is a big challenge towards achieving the goal of UHC with all its core tenets intact, but it must be met so as to reach sustainable development goals by 2030.

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Superbug Infection (The Asian Age: 20190404)

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=12747762>

COOL | TOOL Very small portable device, which is easy to use, being developed by researchers

Blue light could treat superbug infections

Boston, April 3: Exposing superbugs to blue light can render them defenseless against even mild antiseptics, according to a study that may help leverage the fight against the growing global threat of drug-resistant bacteria.

Methicillin-resistant *Staphylococcus aureus* (MRSA), a bacterium that causes infection in various parts of the body, is often called a "superbug" thanks to its ability to

dodge many common antibiotics. Although most MRSA infections are not serious, some can be life-threatening, sometimes resulting in amputation of the infected appendage, researchers said in a statement. Rather than trying multi-drug combinations or wasting precious time determining which medicine to prescribe, doctors could soon use light therapy for disarming the superbugs, according to a

WHAT IS SUPERBUG?

■ They dodge many common antibiotics.

■ MRSA, a bacterium that causes infection in various parts of the body, is often called a "superbug"

■ MRSA infections not serious, some life-threatening

study published in the journal *Advanced Science*. Researchers at Purdue University and Boston University have discov-

ered that exposing the bug to blue light can render it defenseless against antiseptics like hydrogen peroxide. "This new tool can

treat any superficial wound infected with MRSA, which are typically very difficult to treat," said Mohamed Seleem, a professor of microbiology at Purdue University.

"The device itself is very small and easy to use. We're hoping that in the next few years, anyone could carry it around in their purse," said Seleem.

Some bacteria, including certain strains of staph, produce pigments, associ-

ated with the organism's ability to damage the host. If the pigment is reduced, the organism's activity in the body may also be curbed. This practice is known as photobleaching, researchers said.

"When you bleach something in washing machine, you're extracting the colour using chemicals. What we're doing here is similar, but we're using blue light," he said. —PTI

