HOSPITAL AND HEALTH INSIGHT

When kitchen smoke can kill
Dr. Christopher Sola Olopade, Professor of Medicine, Department of Pulmonary and Critical Care Medicine, University of Chicago, U.S. — who has done extensive research on the threat from indoor air pollution in Nigeria — says that overall exposure to household air pollution accounts for about four million premature deaths every year globally; of these, a million occur in India. Read full text

CM kicks off vaccination drive in city
Chief minister Manohar Lal launched the Intensified Mission Indradhanush (IMI) campaign in Gurgaon on Sunday. Besides Gurgaon, the drive will be held in four districts, including Faridabad, Palwal and Mewat also. Read full text

New target identified for anti-malaria drugs
A newly described protein could be an effective target for combatting drug-resistant malaria parasites. The protein regulates a number of genes involved with a critical part of the parasite's complex life cycle -- its invasion of a person's red blood cells. Now that the researchers know the protein's role in this invasion process, they have a completely new angle for developing new antimalarial drugs for targeting the malaria parasite. Read full text

Quality worries pop up in public healthcare
Medicines were given to patients without ensuring prescribed quality checks, says CAG report on Reproductive & Child Health. The comptroller and auditor general's performance audit report showed that Kerala, did not ensure quality of medicine in the public health sector. Read full text
Government working towards Ayurveda hospital in each district: Narendra Modi

The government is working towards setting up an Ayurveda hospital in each district of the country, Prime Minister Narendra Modi asserted that time had come for a “health revolution” under the aegis of the traditional medicine system. Addressing a gathering after dedicating the country’s first All India Institute of Ayurveda to the nation here, the prime minister pitched for affordable and accessible healthcare for the poor on ‘Ayurveda Day’ today. Read full text

Underweight women at greater risk of early menopause

Women who were underweight as teenagers or in their mid-30s are at greater risk of facing an early menopause compared to lean or normal weight women. Read full text

Woes of rampant urbanisation

More and more scientific data is proving that both our environment and cities are crumbling. The authorities though, prefer to live in denial. A recent study by the Centre for Atmospheric Sciences at the Indian Institute of Technology (IIT-Delhi) concluded that unbridled urbanisation in Delhi-NCR region in the last five decades has led to rise in surface and air temperatures in the region. Read full text

World Obesity Day: Obesity-related diseases to cost India $13 bn by 2025: Report

The annual cost of treating the consequences of obesity such as heart disease, diabetes, liver disease, depression and many types of cancer will reach a staggering $13 billion in India by 2025, according to a new experts estimate. Read full text

Scientists link new virus to kala-azar

Kala-azar is endemic to the Indian subcontinent in 119 districts in four countries (Bangladesh, Bhutan, India and Nepal). India itself accounts for half the global burden of the disease. Read full text
MSF drags govt to Delhi HC over Pfizer's pneumonia vaccine patent

Two months after US drug giant Pfizer received a patent for its blockbuster vaccine to prevent cases of pneumonia, global aid organisation Médecins Sans Frontières has moved the Delhi High Court to overturn the decision. The move sets in motion one of the long standing contentions of India’s intellectual property law—that of incremental innovation. Read full text

RECENT RESEARCHES

Six science research scholars scoop governors’ award

The Governor of Uttarakhand Krishan Kant Paul conferred Governor’s Award for Best Research Publication in Science and Technology to six researchers from State Government universities in a function at Raj Bhawan on Thursday.

Speaking on the occasion he said that universities are places where knowledge is created. “The Vice Chancellors should encourage students and research scholars to carry out original and high standard research. The research work should be such that it can be referred to by other people. Good research improves ranking of universities,” he said. Read full text

Quality R&D key to India’s future

The recent awarding of Nobel Prize for Economics to US economist Richard Thaler not only underlined the importance of research especially in the field of global economics, but also highlighted the fact that quality research is a much sought-after aspect of economics. Read full text

Researchers explore spinal cord with silk

Researchers have discovered that cleaned, sterilised silk from Asian wild silkworms had properties well suited to spinal repair, according to a study released on Thursday by the University of Oxford.

Currently there is no cure for serious spinal cord trauma, in part because spinal nerves are unable to cross the scar tissue barrier and the cavity that forms in the cord after the injury, Xinhua news agency reported. Read full text
TALK ON ‘GENDER EQUITY AND HEALTH IN INDIA’

A learning session was organized on Gender Equity and Health in India’ by Dr Anita Raj, Tata Chancellor, Professor of Medicine, Director of University of California San Diego's Center, Department of Medicine on 27th October 2017. She is recognised as a world renowned expert in gender equity and has been invited to speak at the United Nations General Assembly, WHO and Bill and Melinda Gates Foundation.

HEALTH IT UPDATES

Government launches mcessation programme to help kick tobacco habit

The government will soon offer a mobile phone-based intervention to tobacco users where they will be counselled to kick the habit. The Union Health Ministry will launch "Mobile(m) Cessation" to develop tobacco use abstinence among people interested in quitting. Read full text

Artificial pancreas uses phone to treat diabetes

Researchers have successfully developed an artificial pancreas system that uses an algorithm on smartphone to continuously monitor glucose levels of the user and automatically delivers appropriate levels of insulin - a game changer for diabetic patients. Read full text
Pneuma Respiratory debuts smartphone-compatible Inhaler

Pneuma Respiratory has announced a fully digital soft mist inhaler device. The inhaler can deliver several different types of medicines directly to the lungs, and by syncing with a mobile app can be used to verify dose delivery in real-time. “What we’ve done is created the first electronically breath-actuated inhaler,” James Bauler, VP of business development at Pneuma Respiratory, told MobiHealthNews.

Eminent personality in healthcare: Swati Piramal

Swati Piramal is one of India’s leading scientists and industrialists, and is involved in healthcare, focusing on public health and innovation. Her contributions in innovations in new medicines and public health services have touched thousands of lives. She is the Vice Chairperson of Piramal Enterprises Ltd (formerly called Piramal Healthcare), a leading drug discovery company which aims to bring affordable medicines to reduce the burden of disease globally.

In the last, nearly two decades, she has worked in the prevention of chronic diseases like Diabetes, Arthritis, and Heart Disease. She is a founder of the Gopikrishna Piramal Hospital in Mumbai, and has launched public health campaigns against chronic disease, Osteoporosis, Malaria, Tuberculosis, Epilepsy and polio.
As Director of the Piramal Foundation which is engaged in inter-disciplinary and field based education, she helps promote health in rural India with HMRI – a mobile health service, women empowerment projects, and supporting community education that creates young leaders. She is a Director of Sarvajal foundation for clean water.

HEALTHCARE ORGANIZATION- ZS ASSOCIATES

ZS is a management consulting firm headquartered in Evanston, Illinois that provides services for clients primarily in the pharmaceutical industry. ZS was founded in 1983 by Prabhakant Sinha and Andris Zoltners, who worked together as professors of marketing at the Kellogg School of Management at Northwestern University.

The firm employs more than 5,000 employees in 22 offices in the Americas, Asia and Europe. ZS's Capability and Expertise Center is located in large hubs in Pune and New Delhi, India.

ZS works with 49 of the 50 largest drug-makers and 17 of the 20 largest medical device makers and also serves consumer products, financial services, industrial products, telecommunications, and transportation and logistics industries.

ZS help clients gain market share at lower cost by creating data-driven strategies that they can implement rapidly, by taking on sales and marketing operations to make them more competitive, and by helping them deliver impact where it matters.
Maharashtra is planning to launch two healthcare schemes - Mahatma Phule Jan Arogya Yojana (MPJA Yojana) and Balasaheb Thackeray Accident Benefit Scheme -- shortly in the state.

"For the benefit of vast number of people of the state, we are launching two healthcare schemes - Mahatma Phule Jan Arogya Yojana (MPJA Yojana) and Balasaheb Thackeray Accident Benefit Scheme," Maharashtra minister for public health and family welfare, Deepak Sawant said here.

Addressing the CII Healthcare Conclave 2017 organised by the Confederation of Indian Industry (CII), Sawant said, "The MPJA Yojana will come with newly added processes and procedures. We are also working on an insurance scheme for the poor with orange ration cards. The scheme will cover about 2.43 crore families in the state."

The accident insurance scheme covers all accidents happening on the roads of Maharashtra and provides Rs 30,000 of cover to be paid to beneficiaries in a span of 48-72 hours from the time of the accident, the minister said.

Proposing adoption of digital health technologies extensively in the state, Sawant said, “We are planning to adopt digital health technologies, particularly for reaching out to patients in the remote areas. That is the approach the government is taking. As far as I know, IT could be a good solution for this.”

The minister has sought the technical support from the industry in this regard. While stating that lack of sufficient number of skilled manpower in healthcare
sector, including doctors, was hampering delivery of services sufficiently, Sawant suggested ‘telemedicine’ as a solution backed by appropriate technology for catering to patients in remote areas.

**NEWS IN PIPELINE**

**Three new lung cancer genetic biomarkers identified**

SNPs (single-nucleotide polymorphisms) are variations in our DNA that determine our susceptibility to developing some diseases. Using the largest genome-wide SNP-smoking interaction analysis reported for lung cancer, a research team led by Dartmouth’s Norris Cotton Cancer Center's Yafang Li, PhD, has identified three novel SNPs. The results from their study reinforce that gene-smoking interactions play important roles in the etiology of lung cancer and account for part of the missing heritability of this disease. Both environmental and genetic risk factors contribute to development of lung cancer. Tobacco smoking is the most well-known environmental risk factor associated with lung cancer. A Dartmouth research team led by Yafang Li, PhD, has conducted a study to display that gene-smoking interactions play important roles in the etiology of lung cancer.

In their study, three novel SNPs (single-nucleotide polymorphisms), or variations in our DNA that underlie our susceptibility to developing disease, were identified in the interaction analysis, including two SNPs for non-small cell lung cancer risk and one SNP for squamous cell lung cancer risk. The three identified novel SNPs provide potential candidate biomarkers for lung cancer risk screening and intervention. The team's findings, "Genome-wide interaction study of smoking behavior and non-small cell lung cancer risk in Caucasian population," have been published in *Carcinogenesis*. [Read full text](https://www.ncbi.nlm.nih.gov/pubmed/28886302)

**OWN OPINION**

**Health Insurance: India**

As per the National Sample Survey (NSS), 2014, Over 80 per cent of India’s population is not covered under any health insurance scheme, The survey data revealed that despite seven years of the Rashtriya Swasthya Bima Yojana (RSBY), only 12 per cent of the urban and 13 per cent of the rural population had access to insurance cover. Further, around 86 per cent of the rural population and 82 per cent of the urban population were not covered under any scheme of health expenditure support, the data showed. Further, it was found that coverage was correlated with living standards. In urban areas, over 90 per cent of the poorest
residents are not covered, while the figure is 66 per cent for the richest residents. It seems that poorer households appear unaware or are beyond the reach of such coverage, both in rural and urban areas. In a country where out-of-pocket expenditure by households is relatively very high, and accounts for about 71% of all health expenditure in the country, the importance of individuals taking lead in planning for their own health expenditure, especially when it comes at a cost affordable to them, cannot be over-emphasized. The increasing awareness of this protective role of health insurance, and with renewed focus on marketing of health insurance products on the part of insurers, the health insurance portfolio is now the fastest growing market segment for the non-life insurance industry. There is, however, tremendous potential, as even today, only about 5% of the country’s population has been covered by a commercial health insurance product (excluding mass government schemes).

In order to provide universal access to free / low cost health care, insurance can be an important means of mobilizing resources, providing risk protection and perhaps, improved health outcomes. In this scenario, the challenge for Indian policy makers remains to find a way to improve upon the existing situation in the health sector and to make equitable, affordable and quality health care accessible to the people, especially the poor and the vulnerable sections of the society.

HEALTH TIP