

News and Views

Central Sector and Centrally Sponsored Health Schemes in India

Central Sector Schemes

- Pradhan Mantri Swasthya Suraksha Yojana
 - National AIDS and STD Control Programme
 - Family Welfare Schemes
 - Establishment and strengthening of NCDC Branches and Health Initiatives, Inter Sectoral co-ordination for preparation and control of Zoonotic Diseases and other neglected tropical diseases, Surveillance of Viral Hepatitis, Antimicrobial Resistance
 - National Pharmacovigilance Programme
 - Development of Nursing Services
 - Health Sector Disaster Preparedness and Response and Human Resources Development for Emergency Medical Services
 - National Organ Transplant Programme
 - Impacting Research Innovation and Technology (IMPRINT) Scheme.
 - Swachhta Action Plan (SAP)
- #### Centrally Sponsored Schemes
- National Health Mission (NHM)
 - Rashtriya Swasthya Bima Yojana
- #### National Health Mission
- National Rural Health Mission (NRHM)
 - RCH Flexible Pool including Routine Immunization Program, Pulse Polio Immunization Program, National Iodine Deficiency Disorders Control Program, etc.
 - Health Systems Strengthening under NRHM
 - Flexible Pool for Communicable Diseases
 - Flexible Pool for Non-Communicable Diseases, Injury and Trauma
 - Infrastructure Maintenance
 - Forward linkages to NRHM
 - Strengthening of State Drug Regulatory System
 - Pilot Schemes (Sports medicine, Deafness, Leptospirosis Control, Control of Human Rabies, Medical Rehabilitation, Oral Health, Fluorosis)
 - Human Resources for Health
 - Prime Minister's Development Plan for Jammu & Kashmir
 - Strengthening National Programme Management of the NRHM
 - National Urban Health Mission
 - Tertiary care Programmes
 - National Mental Health Programme
 - Capacity Building for Trauma Centres
 - National Programme for prevention and control of Cancer, Diabetes, Cardiovascular Diseases and Stroke
 - National Programme for Health Care for the Elderly
 - National Programme for Control of Blindness
 - Telemedicine
 - Tobacco Control Programme and Drug De-addiction Programme
 - Human Resources for Health and Medical Education
 - Upgradation/Strengthening of Nursing Services (ANM/GNM)
 - Strengthening/Upgradation of Pharmacy School/College
 - District Hospital - Upgradation of State Government Medical Colleges (PG seats)
 - Strengthening Government Medical Colleges (UG seats) and Central Government Health Institutions
 - Establishing New Medical Colleges (upgrading District Hospitals)
 - Setting up of State Institutions of Paramedical Sciences in States and Setting up of College of Paramedical Education.

(PIB, August 10, 2018)

A New Vaginal Ring for 1 Year of Birth Control

The US Food and Drug Administration (FDA) has approved Annovera (segesterone acetate and ethinyl estradiol vaginal system), which is a combined hormonal contraceptive for women of reproductive

age used to prevent pregnancy and is the first vaginal ring contraceptive that can be used for an entire year. Annovera is a reusable donut-shaped (ring), non-biodegradable, flexible vaginal system that is placed in the vagina for 3 weeks followed by 1 week out of the vagina, at which time women may experience a period (a withdrawal bleed). This schedule is repeated every 4 weeks for 1 year (thirteen 28-day menstrual cycles).

Older Adults Undergoing Dialysis at Risk of Dementia

Older adults who initiate dialysis for kidney failure are at a greater risk of being diagnosed with dementia and Alzheimer's disease. Age ≥ 86 years, Black race, female sex and institutionalization were found to be the strongest risk factors for dementia and Alzheimer's disease. The study is published in the *Clinical Journal of the American Society of Nephrology*.

Monitoring Work Emails During Non-work Hours is a Significant Stressor Beyond Actual Workload

Organizational expectations to monitor work-related electronic communication during non-work hours, affects personal relationships and home life suffer for those tied to their work emails round-the-clock, according to a new study published in the Academy of Management Best Paper Proceedings. According to the authors, organization expectations is an insidious stressor beyond actual workload that not only increases employee anxiety, decreases their relationship satisfaction and has detrimental effects on employee health, including partner health.

FDA Approves First-of-its Kind Targeted RNA-based Therapy to Treat a Rare Disease

Onpattro (patisiran) infusion for the treatment of polyneuropathy caused by hereditary transthyretin-mediated amyloidosis (hATTR) in adult patients has been approved by the US FDA. It is also the first FDA approval of a new class of drugs called small interfering ribonucleic acid (siRNA) treatment.

Glaucoma may be an Autoimmune Disease, Says Study

A new study from MIT and Massachusetts Eye and Ear has found that glaucoma may in fact be an autoimmune disorder. In a study of mice, it was shown that the body's own T cells are responsible for the progressive retinal degeneration seen in glaucoma. Furthermore, these T cells appear to be primed to attack retinal neurons as the result of previous interactions with bacteria that normally live in our body.

Steps taken by the Govt. to Maintain the Polio-free Status of the Country

India has been certified Polio free by the Regional Polio Certification Commission on the 27th March 2014. Last case of Wild poliovirus in the country was reported on 13th January, 2011 from Howrah, West Bengal and no wild poliovirus case have been reported thereafter from any State/Union Territory of the country. To maintain the polio-free status of the country, government is taking following measures:

- Population immunity against polio is being maintained by observing polio campaigns every year. In the year 2018, two National Immunization Days (NID) have been conducted and two sub-national polio immunization rounds (SNID) are planned, in addition to polio vaccination through routine immunization. Inactivated Polio Vaccine (IPV) has also been introduced across the country to further boost the population immunity as additional protection against polio.
- Vaccination to international travelers to and from 8 other countries and continuous vaccination at the international borders of India are being carried out throughout the year to mitigate risk of importation.
- Sensitivity of polio surveillance is maintained through Acute Flaccid Paralysis (AFP) surveillance in human and environment surveillance to detect any polio threat as early as possible and respond quickly to mitigate the risk of circulation

(Source: PIB, MOHFW, August 10, 2018)

Age of Onset of Type 1 Diabetes Influences Survival

According to a large nationwide cohort study reported in *The Lancet*, women who had been diagnosed with type 1 diabetes by the age of 10 lost an average of 17.7 years off their life, while men lost around 14.2 life-years.

Enteric Infections are Common in Patients with IBD Flares

Non-*Clostridium difficile* enteric infections were identified in 17% of symptomatic patients with IBD. Endoscopic and histologic findings may not differentiate flare from infection. The study is published August 3, 2018 in the *American Journal of Gastroenterology*.

FDA Panel Recommends Omadacycline for ABSSSI and CABP

The US FDA's Antimicrobial Drug Advisory Committee has recommended omadacycline (Paratek) for acute

bacterial skin and skin structure infections (ABSSSI) and community-acquired bacterial pneumonia (CABP).

Nocturnal Oximetry can Identify Children with sleep-disordered Breathing Who would Benefit from Adenotonsillectomy

Nocturnal oximetry results can be used to identify children with sleep-disordered breathing who are most likely to benefit from adenotonsillectomy, as reported online August 7, 2018 in *Pediatrics*. The median decline in the number of episodes per hour of oxygen desaturation of 3% or greater by nocturnal oximetry between baseline and follow-up was significantly greater in the adenotonsillectomy group (3.2) than in the control group (1.7).

Catch-up HPV Vaccination Effective for Women Under 21 years

Catch-up quadrivalent HPV vaccination with three doses was effective against CIN2+ and CIN3+ in girls and women aged 14-20 years at time of first vaccine dose but not for women aged 21 years and older at first dose, as per a study published online August 7, 2018 in *The Lancet Child & Adolescent Health*.

Paraguay Interrupts Vector Transmission of Chagas Disease

Paraguay has succeeded in interrupting the vector transmission of *Trypanosoma cruzi* in the home, the parasite that causes Chagas disease. This was verified last week by a group of international independent experts convened by the Pan American Health Organization (PAHO).

There are now 18 countries in the region, including Paraguay, that have achieved this on a national level or in part of their national territory where the disease is endemic. In the Region of the Americas, there are 21 endemic countries. There are around 30,000 new cases of Chagas each year, and 14,000 people die as a result. In addition to this, there are more than 70,000 million people who live in areas where they are at risk of contracting the disease... (PAHO/WHO, August 7, 2018.)

Prenatal Tdap Vaccination not Associated with Autism Spectrum Disorder

A study of women who received a Tdap vaccination during pregnancy found no increase in risk that their children would later be diagnosed with autism spectrum disorder. The study is published online August 13, 2018 in the journal *Pediatrics*. The incidence rate of autism spectrum disorder was 3.78 per 1,000 people in the

Tdap-vaccinated group. The rate of autism spectrum disorder was 4.05 per 1,000 in the unvaccinated group.

Enteric Infections may Coexist with Disease Flares in Patients with IBD

Non-*C. difficile* enteric infections were present in almost 1 in 5 patients with symptomatic IBD, as per a cross-sectional analysis of 9,403 patients reported in *The American Journal of Gastroenterology*.

Chikungunya Fever may Lead to Chronic Articular Pain

According to a systematic review and meta-analysis published in the journal *Joint Bone Spine*, 52% of the patients with Chikungunya virus infection may have persistent chronic articular pain or arthritis after acute infection.

Study Identifies Risk Factors that Predict MACE 1-year Post-MI

A study reported online August 10, 2018 in *JAMA Open Network* has identified 19 risk factors that are associated with major adverse cardiovascular events (MACE) 1 year after acute myocardial infarction (AMI) and help to identify high-risk patients who would benefit most from intensive follow-up and aggressive risk factor reduction. These risk factors include 15 unique variables of age, education, prior AMI, prior ventricular tachycardia or fibrillation, hypertension, angina, pre-arrival medical assistance, >4 hours from onset of symptoms to admission, ejection fraction, renal dysfunction, heart rate, systolic blood pressure, white blood cell count, blood glucose and in-hospital complications.

Risankizumab Increases Clinical Response and Remission Rates in Moderate-to-severe Crohn's Disease

Extended induction treatment with open-label intravenous risankizumab was effective in increasing clinical response and remission rates at Week 26 in patients with moderate-to-severe Crohn's disease. Open-label subcutaneous risankizumab maintained remission until Week 52 in most patients who were in clinical remission at Week 26, according to data from an extended phase 2 trial published online July 25, 2018 in *The Lancet Gastroenterology & Hepatology*.

World Must 'Scale-up' Soil Health to Beat Hunger and Combat Climate Change

Healthy soils are essential to achieve 'Zero Hunger' and other Sustainable Development Goals (SDGs) - peace

and prosperity, the United Nations agriculture agency chief underscored in Brazil at the World Congress of Soil Science.

Recently, more than 2,000 scientists gathered in Rio de Janeiro under the theme "Soil Science: Beyond Food and Fuel," for a week of exploring the increasingly complex, diverse role of soils; grappling with resilient agriculture practices to address environmental and climatic changes; and confronting threats to food security and sovereignty.

"Soil degradation affects food production, causing hunger and malnutrition, amplifying food-price volatility, forcing land abandonment and involuntary migration-leading millions into poverty," said José Graziano da Silva, the Director-General of the Food and Agriculture Organization (FAO), in a video message noting that approximately one-third of the Earth's soil is degraded.

The FAO "The Status of the World's Soil Resources" report had identified 10 major threats to soil functions, including soil erosion, soil organic carbon loss, nutrient imbalance, soil acidification, soil contamination, waterlogging, soil compaction, soil sealing, salinization and loss of soil biodiversity.

Mr. Graziano da Silva stressed the importance of sustainable soil management as an "essential part of the Zero Hunger equation" in a world where more than 815 million people are suffering from hunger and malnutrition... (UN, August 13, 2018)

Vitamin D Supplementation During Pregnancy does not Benefit Fetal or Infant Growth

In women with prenatal vitamin D deficiency and fetal and infant growth restriction, maternal vitamin D supplementation from mid-pregnancy until birth or until 6 months postpartum did not improve fetal or infant growth in a study published in the August 9 issue of the *New England Journal of Medicine*.

Notification of Patient Overdose Deaths Reduces Clinician Opioid Prescriptions

Clinicians were more likely to reduce the number and dose of opioid drugs they prescribed after learning that one of their patients had died from an overdose from a controlled substance than those not notified, according to a recent study appearing in the August 10 issue of *Science*

Regular Exercise for 45 Minutes 3-4 Times in a Week Benefits Mental Health

A study of 1.2 million US adults found that regularly exercising for 45 minutes 3-5 times a week is associated

with superior mental health compared to those who do not exercise. Team sports, cycling, aerobics and going to the gym had the largest reductions. The study was published online August 8, 2018 in *Lancet Psychiatry*. More exercise was not always better.

Low Normalized Grip Strength may be Indicative of Cardiometabolic Risk

A study published online July 30, 2018 in the *Journal of Pediatrics* has suggested low normalized grip strength as a prognostic indicator of cardiometabolic risk and to identify adolescents who would benefit most from lifestyle interventions to improve muscular fitness. Adolescents who had low normalized grip strength had a significantly greater prevalence of health decline or poor health persistence than those who had strong normalized grip strength.

New WPSI Guidelines Recommend Screening Women Annually for Urinary Incontinence

The Women's Preventive Services Initiative (WPSI) has recommended "screening women for urinary incontinence annually beginning in adolescence and continuing across the lifespan. Screening ideally should assess whether women experience urinary incontinence and whether it affects their activities and quality-of-life. The WPSI recommends referring women for further evaluation and treatment if indicated" in new guidelines published August 14, 2018 in the *Annals of Internal Medicine*.

AYUSH Ministry Introduces Scheme for Monitoring Drugs Safety Aspects

The AYUSH Ministry introduced a new central sector scheme for monitoring of the safety aspects of Ayurveda, Siddha, Unani and Homoeopathy drugs and documenting their adverse effects. The ministry introduced the scheme for promoting pharmacovigilance of these drugs.

"The prime objective of the scheme is to develop the culture of documenting adverse effects and undertake safety monitoring of Ayurveda, Siddha, Unani and Homoeopathy drugs and surveillance of misleading advertisements appearing in the print and electronic media," it said. The scheme intends to facilitate the establishment of three-tier network of National Pharmacovigilance Centre (NPvCC), Intermediary Pharmacovigilance Centres (IPvCCs) and Peripheral Pharmacovigilance Centres (PPvCC), an official statement said. All India Institute of Ayurveda, New Delhi, an autonomous body under the AYUSH Ministry,

was designated as the NPvCC for coordinating various activities under the initiative.

In the initial phase of implementation, five national institutes of AYUSH are designated as the IPvCCs and 42 institutions of AYUSH having clinical facilities as peripheral pharmacovigilance centers to take up the work of reporting, documentation, analysis, causality assessment of the adverse reactions and events associated with the consumption of such drugs.

Overweight and Obesity Impair LV Systolic Function

According to a study published August 14, 2018 in *Cardiovascular Diabetology*, overweight and obesity impair left ventricular ejection fraction and global longitudinal strain in both patients with type 2 diabetes mellitus and nondiabetic persons. Patients who gained weight from baseline to follow-up changed left ventricular ejection fraction (median and interquartile range) by -1.0 (9.0) % and patients who lost weight changed left ventricular ejection fraction by 1.0 (10.0) %.

Most Sudden Cardiac Deaths in Adolescent Soccer Players are Due to Cardiomyopathies

A study examining the incidence and causes of sudden cardiac death among adolescent soccer players in the UK identified diseases that are associated with sudden cardiac death in 0.38% of adolescent soccer players who underwent cardiovascular screening. The incidence of sudden cardiac death was 1 per 14,794 person-years, or 6.8 per 100,000 athletes. Cardiomyopathy accounted for 7 of 8 sudden cardiac deaths (88%) that had not been detected on screening. These findings are reported online August 9, 2018 in the *New England Journal of Medicine*.

New NIH Reference Book on Diabetes

Researchers at the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), part of the National Institutes of Health along with leading diabetes experts from around the country and world have developed the third edition of a reference designed to be a one-stop source for crucial scientific information on diabetes and its complication titled "Diabetes in America."

Guidelines for Medical Management of Perianal Fistulizing Crohn's Disease

Clinical practice guidelines for the medical management of perianal fistulizing Crohn's disease published August 6, 2018 in the journal *Inflammatory Bowel Diseases* recommend imaging and surgical consultations in the

initial assessment of patients with active fistulizing Crohn's disease, particularly those with complicated disease. Antibiotics are also recommended for initial symptom control and antitumor necrosis factor (anti-TNF) therapy to induce symptomatic response, which was continued to achieve and maintain complete remission.

The First Direct-to-consumer Birth Control App

The first direct-to-consumer mobile medical app, called Natural Cycles, which can be used for birth control by women aged 18 years or older has been approved by the FDA. The algorithm in the App calculates the days of the month a woman is likely to be fertile based on daily body temperature readings and menstrual cycle information.

Improving Influenza Virus Detection in Latin America and the Caribbean

Laboratory specialists from 11 countries across Latin America and the Caribbean have received training from the US Centers for Disease Control (CDC) and the PAHO in a bid to improve the detection of influenza viruses circulating in the region. The international course on molecular diagnostics of influenza is part of "a joint effort to better prepare ourselves to deal with the flu," said José Narro Robles, Secretary of Health of Mexico during the inauguration ceremony for the training, which took place in Mexico City from August 6 to 10, in partnership with Mexico's Institute of Epidemiological Diagnosis and Reference (InDRE)... (WHO/PAHO, August 10, 2018).

AHA Advisory on Low-calorie Sweetened Beverages and Cardiometabolic Health

The first ever advisory on low-calorie sweetened beverages from the American Heart Association (AHA) recommends against prolonged consumption of low-calorie sweetened beverages by children, but says that for adults who are habitually high consumers of sugar sweetened beverages, the low-calorie sweetened beverages may be a useful replacement strategy to reduce intake of sugar-sweetened beverages. The report is published online July 30, 2018 in *Circulation*. The advisory suggests that the use of other alternatives to sugar-sweetened beverages, with a focus on water (plain, carbonated, and unsweetened flavored), should be encouraged.

Restoring Blood Flow may be Best Option to Save Your Life and Limb

Treatments that restore blood flow to the lower limbs of people with critical limb ischemia may be cheaper

and associated with longer survival, than amputation according to new research published August 15, 2018 in *Journal of the American Heart Association*. Over the 4 years of the study, survival was 38% with endovascular revascularization, 40% with surgical revascularization and 23% among patients who underwent major amputation.

Extended-release Methylphenidate Capsules Approved for ADHD in Children

The FDA approved extended-release methylphenidate capsules (JORNAY PM) taken in the evening for the treatment of attention-deficit/hyperactivity disorder (ADHD) in children age 6 and older.

Cetuximab with Radiation Inferior to Standard Treatment in HPV-positive Oropharyngeal Cancer

An interim analysis of data from a randomized clinical trial of patients with human papillomavirus (HPV)-positive oropharyngeal cancer found that treatment with radiation therapy and cetuximab is associated with worse overall and progression-free survival compared to the current standard treatment with radiation and cisplatin.

These results from the phase 3 trial will be presented at the upcoming American Society for Radiation Oncology (ASTRO) Annual Meeting in San Antonio, Texas.

Study Links Evening Preference and Lack of Sleep with Higher BMI in People with Prediabetes

People with prediabetes who go to bed later, eat meals later and are more active and alert later in the day i.e., those who have an "evening preference" have a higher body mass index (BMI) than people with prediabetes who do things earlier in the day, or exhibit morning preference.

The higher BMI among people with evening preference is related to their lack of sufficient sleep, according to a study published August 15, 2018 in the journal *Frontiers in Endocrinology*.

One in 4 Adults in the US Live with a Disability, Says CDC

One in 4 US adults - 61 million Americans - have a disability that impacts major life activities, according to a report in CDC's Morbidity and Mortality Weekly Report. Using data from the 2016 Behavioral Risk Factor Surveillance System (BRFSS), this is the first

CDC report of the percentage of adults across six disability types:

- Mobility (serious difficulty walking or climbing stairs)
- Cognition (serious difficulty concentrating, remembering or making decisions)
- Hearing (serious difficulty hearing)
- Vision (serious difficulty seeing)
- Independent living (difficulty doing errands alone)
- Self-care (difficulty dressing or bathing).

Mobility disability is the most common disability type followed by disability of cognition, independent living, hearing, vision and self-care. With age, disability becomes more common, affecting about 2 in 5 adults age 65 and older. The percentage of adults with disability increased as income decreased ... (CDC, August 16, 2018).

ACC/AHA Release Updated Guideline for Treatment of Adults with Congenital Heart Disease

The American College of Cardiology (ACC) and the AHA have released an updated guideline for the management of adult congenital heart disease (ACHD) patients, which are published online August 16, 2018 in the *Journal of the American College of Cardiology and Circulation*.

The updated guideline presents a new classification system for ACHD patients that retains the traditional classification based on the structural complexity of the disease while taking into account the patient's functional status and other factors, including the presence of cardiovascular and non-cardiovascular problems. This classification system provides the basis for making lesion-specific recommendations for interval clinical follow-up and testing modalities such as ECG, transthoracic echocardiography, cardiovascular magnetic resonance and exercise testing.

Retinal Thinning may be an Early Sign of Early Parkinson's Disease

A new study published in the August 15, 2018, online issue of *Neurology* has found that the thinning of the retina, most notably in the two inner layers of the five layers of the retina, is associated with the loss of such brain cells in patients with early Parkinson's disease much before the problems with movement begin. The thinner the retina, the greater the severity of disease. Also, the thinning of the retina corresponded with the loss of brain cells that produce dopamine.

