



News and Events

Public Health Updates

Compiled by Bhaswati Sengupta*

Introduction of Injectable Polio Vaccine in India:

Till December 2014, 75 countries had introduced Inactivated Polio vaccine in their Immunization Schedule and 97 countries had made a formal decision to introduce it. Doctors expressed their views at a conference held ahead of World Polio Day 2014, that although India was declared Polio Free by WHO, switching from oral polio vaccine (OPV) to injectable polio vaccine (IPV) has become necessary as there is a threat of virus being transmitted from across the border. “The Injectable vaccine planned to be introduced in 2015, is inevitable if we have to prevent vaccine -derived cases of polio and achieve total eradication of the disease.” said Dr. T. Jacob John, Chairman, Child Health Foundation. According to Professor N.K. Ganguly, former director-general of Indian Council of Medical Research “For a successful roll out of IPV in the country, the Government needs to build capacity and ensure sufficient stocks and logistics. The availability of the vaccine would be a critical factor. We also need to build advocacy among the people and have trained manpower ready from the primary immunization field to administer the vaccine.” At the National Workshop for introduction of Inactivated poliovirus vaccine held on 30.06.2015, at New Delhi, India has decided to introduce injectable polio vaccine in its universal immunization program from October 2015. This is a part of WHO’s polio endgame strategy. In 2014, India had completed the three-year mandatory period that a country needs, to stay free of fresh infections to be counted among countries that have eradicated the virus. The vaccine also known as Inactivated Polio Vaccine (IPV) will be administered by Intramuscular injection at a single shot with the third dose of oral polio vaccine (OPV). Experts have decided to withdraw the Type 2 virus throughout the world—thus replacing tOPV with

***Professor, Department of Public Health Administration
All India Institute of Hygiene and Public Health, Kolkata**

bOPV. This is due to the fact, that the Type 2 wild polio virus is absent for more than 15 years in the environment and it is this strain in the vaccine, responsible for substantial number of Vaccine Dependant Polio Virus(VDPV)cases. This great concern has led to the Global switch from “tOPV to bOPV” which is going to happen in 2016.

Though India will move to IPV in routine immunization, OPV cannot be done away with. In countries which have eradicated polio, OPV is used to contain sudden outbreaks, as has happened in Netherlands in 1992. This is because IPV cannot stop virus transmission. OPV is the vaccine of choice in outbreaks and so, though it may be discontinued in routine immunization, the vaccine may have to be brought back during outbreaks.

Source: www.timesofindia.indiatimes.com (accessed on 02.07.2015) www.indianexpress.com (accessed on 02.07.2015)

Middle East Respiratory Syndrome Coronavirus (MERS-CoV):

MERS is a Respiratory Syndrome caused by Coronavirus, first identified in Saudi Arabia in September 2012, though retrospective investigations showed that the first case occurred in Jordan in April 2012. So far, all cases of MERS have been linked to countries in and near the Arabian Peninsula. As in June 2015, MERS cases have been reported in Saudi Arabia, Jordan, Qatar, Egypt, UAE, Kuwait, Turkey, Oman, Algeria, Bangladesh, Indonesia, Austria, U.K., South Korea, U.S, China, Thailand, Malaysia, Philippines and others. Globally WHO has been notified of 1152 laboratory confirmed cases of infection with MERS including at least 434 deaths as of June 1, 2015.

A sudden rise of cases in Saudi Arabia has led the Health Ministry to issue new alert for residents to be vigilant. Between May 10-16, 2015, twelve infections with the deadly virus were recorded. In the country itself, about 1000 people have been diagnosed with about 430 deaths. WHO has warned that the virus-believed to have come from camels-would likely to be spread between humans if Saudi Arabia did not improve its detection and control measures. Saudi Authority has appealed to the people to take precautionary measures to avoid eating camel meat or drinking its milk or at least ensuring that it is thoroughly cooked. A recent report of 16 deaths due to MERS from South Korea has led the Government to quarantine 1396 people and shut more than 900 schools.

WHO has been working closely with the Ministry of Health and Welfare and the Korean Centre for Disease Control and Prevention on response measures.

The ninth meeting of Emergency Committee convened by Director General under International Health Regulation regarding MERS was conducted on June 16, 2015. The committee concluded that it is not a condition for a Public Health Emergency of International Concern till yet. CDC continues to monitor the situation closely. MERS infected people develop severe acute respiratory illness including fever, cough, shortness of breath.

CDC does not recommend any change in travel plans because of MERS. If anyone develops symptoms of respiratory illness within 14 days after travelling from countries in or near Arabian Peninsula, he/she should contact health care providers and mention their recent travel history.

Source: <http://www.cdc.gov/coronavirus/mers/travel.html> (accessed on 28.06.2015)
<http://www.wpro.who.int/mediacentre/releases> (accessed on 28.06.2015)

Swachh Bharat Abhiyan:

This is a national campaign by the Government of India, covering 4041 statutory towns to clean the streets, roads and infrastructure of the country. This campaign was officially launched on 2nd October 2014 at Rajghat, New Delhi, where Prime Minister Narendra Modi himself cleaned the road. It is India's biggest ever cleanliness drive and 3 million government employees and school and college students of India participated in this event on that day. The mission was started by Prime Minister Modi, who nominated nine famous personalities for the campaign and they took up the challenge and nominated nine more people and so on (like the branching of a tree). It has been carried forward since then with people from all walks of life joining it.

It is expected to cost over Rs. 62000 crore (US\$ 9.8 billion). Fund sharing between the Central Government and the State Government including Urban Local Bodies is 75%:25% and 90%:10% for North Eastern and special category states. The campaign has been described as "beyond politics" and inspired by patriotism.

This campaign aims to accomplish the vision of a 'Clean India' by 2nd October 2019, the 150th birthday of Mahatma Gandhi with the following objectives.

- i. Elimination of open defecation
- ii. Conversion of insanitary toilets to pour flush toilets

Eradication of manual scavenging

- iii. 100% collection and scientific processing/disposal/reuse/recycling of municipal solid waste
- iv. A behavioural change in people regarding healthy sanitation practices
- v. Generation of awareness among citizens about sanitation and its linkages with public health
- vi. Supporting urban local bodies in designing, executing and operating waste disposal systems
- vii. Facilitating private-sector participation in capital expenditure

Source: Swachh Bharat Abhiyan - <http://www.indiacelebrating.com/government/swachh-bharat-abhiyan> (accessed on 25.06.2015)

International Yoga Day Celebrations:

The word Yoga means to join or to unite, symbolising the union of body and consciousness. Recognising its universal appeal on 11th December 2014, the United Nations proclaimed 21st June as International Yoga Day (IYD) to raise awareness worldwide of the many benefits of practicing yoga.

Yoga was performed at events across the world – from New York to Trinidad and Tobago, from Maldives to Australia, from Tel Aviv to Moscow from on board Indian Naval Ships to the high Siachen glacier, at schools and at innumerable residential localities on that day. A record breaking 37,000 people led by Prime Minister Narendra Modi took part in the main early morning event at Rajpath in the health of New Delhi on 21.06.2015.

“It marks a new era of training of human mind for peace and harmony” said Prime Minister Narendra Modi. Prime Minister also said that he was overwhelmed by the Global response to the International Yoga Day.

Source: <https://www.un.org> (accessed on 30.06.2015)

https://www.en.wikipedia.org/wiki/International_Yoga_Day (accessed on 27.06.2015)

<https://www.ndtv.com/topic/international-yoga-day> (accessed on 27.06.2015)

<https://www.worldyogaday.net> (accessed on 27.06.2015)

World Health Day 2015:

The theme for World Health Day 2015 is “Food Safety”. Food Safety is an area of public health action to protect consumers from the risks of food poisoning and foodborne diseases, acute or chronic. Unsafe food can lead to a range of health problems: diarrhoeal disease, viral disease, reproductive and developmental problems, cancers etc. Yet food safety is a hidden and often overlooked, problem. World Health Organization therefore dedicated its 2015 World Health Day to food safety, to catalyse collective government and public action to put measures in place that will improve safety of food from farms, factories, street vendors and kitchens. WHO highlighted the challenges and opportunities associated with food safety under the slogan “**From farm to plate, make food safe**”.

Source: World Health Organisation, World Health Day 2015: From farm to plate, make food safe

<http://www.who.int/mediacentre/news/releases/2015/food-safety/en/>(accessed on 22.06.2015)

Ebola Virus Disease:

According to the World Health Organization, as of June 17th 2015, a total of 15,351 confirmed, probable, and suspected cases of Ebola virus disease (EVD) have been reported in six affected countries (Guinea, Liberia, Mali, Sierra Leone, Spain and the United States of America) and two previously affected countries (Nigeria, Senegal). Presenting a global case fatality rate of 35.6%, there have been 5459 reported deaths. WHO has declared that the EVD outbreak has ended in the Democratic Republic of Congo, Senegal and Nigeria. Liberia confirmed a 3rd Ebola case on July 2, 2015, nearly 2 months after it was declared Ebola free. Officials said they were investigating whether the disease had spread through animals before resurfacing.

The international health community has decided that the best approach is to establish an entry screening of all passengers coming from affected areas, combined or not with exit screening. Researchers from Manchester University used data from all Ebola outbreaks since 1976 and analysed that whilst Ebola is mutating, it isn't evolving to the point of adapting to become more or less virulent, said a study author Simon Lovell. Surprisingly the function of the virus had remained the same over the entire study period.

This can be seen as good news, emphasised the researchers. It means one can expect that vaccines and drugs, which are currently being developed, are very likely to be effective in future outbreaks. In this way, it might be possible to control a future outbreak at a much earlier stage.

Source: 1. World Health Organisation, Ebola Situation Report – 26 November 2014
<http://apps.who.int/ebola/en/ebola-situation-report/situation-reports/ebola-situation-report-26-november-2014> (accessed on 18.06.2015)
2. Ebola analysis finds virus hasn't become deadlier, yet,
<http://www.manchester.ac.uk/discover/news/article/id=14293> (accessed on 18.06.2015)

Swine Influenza:

Swine influenza, also called pig influenza, swine flu, hog flu and pig flu, is an infection caused by any one of several types of swine influenza viruses, swine influenza virus (SIV) or swine- origin influenza virus is any strain of the influenza family of viruses that is endemic in pigs. As of 2009, the known SIV strains include influenza C and the subtypes of influenza A known as H1N1, H1N2, H2N1, H3N1, H3N2, and H2N3.

Symptoms of zoonotic swine flu in humans are similar to those of influenza and of influenza-like illness in general, namely chills, fever, sore throat, muscle pains, severe headache, coughing, weakness and general discomfort. The main transmission is not from pigs to person but from person to person.

Swine flu(H1N1) outbreaks were reported in India in late 2014 and early 2015. As of March 19, 2015 the disease has affected 34,656 people and claimed over 2123 lives according to Health Ministry. States like Delhi, MP, Rajasthan and Gujarat were most affected. The CDC recommended real-time PCR as the method of choice for diagnosing H1N1. The oral or nasal fluid collection and RNA virus preserving filter paper card is commercially available.

Prevention of transmission to humans involve restriction of human and animal interaction. However, eating cooked food is not harmful. Prevention of spread can be done by early case detection, barrier nursing, surveillance of population where the virus is circulating, and vaccination of population.

Source: 2015 Indian Swine Flu Outbreak,
https://en.m.wikipedia.org/wiki/2015_indian_swine_flu_outbreak (accessed on 20.06.2015)
<https://www.medicinenet.com> (accessed on 25.06.2015.)

Red wine consumption:

This has been studied extensively over many years with impressive findings suggesting it may promote longer lifespan, protect against certain cancers, improve mental health and provide benefits to the heart. “National Health Service” UK writes that if consumed it should be in

moderation – up to one drink per day for women and two drinks for men (One drink = 5 oz). A study carried out at the University of London found that procyanidines found in red wine keep the blood vessels healthy. In addition to ethanol, antioxidants such as flavonoids or a substance called resveratrol in red-wine play an active role in limiting the initiation and progression of atherosclerosis by promoting the formation of nitric-oxide, the key chemical relaxing factor that plays a pivotal role in regulation of vascular tone. It also increases the level of HDL Cholesterol or “good cholesterol”. One or two drinks per day have been shown to increase HDL cholesterol by about 12%, this extra HDL cholesterol can serve to remove some of the ‘bad cholesterol’ (LDL) from circulation and lessen the amount of fatty plaque formation.

Red wine consumption is linked to clinical improvement as presented at the Annual Meeting and scientific sessions of the International Society for Heart & Lung Transplantation (ISHT)-regular consumption of red wine may be related to clinical improvement and delisting which waitlisted for patients registered with Eurotransplant, regardless of the patients’ age, disease severity and psychosocial characteristics. That was among the findings presented at ISHLT, held in April 2014 at Nice.

Researchers from the University of Trier, Trier Germany and colleagues analysed consumption of alcohol (beer, white/red wine, hard liquor never, occasionally or several times per week/daily) at time of listing in 318 patients registered with Eurotransplant between April 2005 and December 2006.

Controlling for covariates the effects of total alcohol were no longer significant, while the consumption of red wine remained independently associated with a higher probability of improvement compared to abstinent patients.

While the news about red wine might sound great, but doctors do not encourage to start drinking alcohol because too much of the drink can have many harmful effects on the body.

Source: [www.univadis.com/conference-report/ISHLT--Red-wine consumption is linked to clinical improvement and delisting from Heart Transplant](http://www.univadis.com/conference-report/ISHLT--Red-wine%20consumption%20is%20linked%20to%20clinical%20improvement%20and%20delisting%20from%20Heart%20Transplant). (accessed on 16.06.2015)

Wine: health Benefits and Health Risks, updated on 24.06.2015, www.medicalnewstoday.com/articles

www.mayoclinic.org/disease-conditions/heart...../redwine (accessed on 30.06.2015)

Yoga practice could improve quality of life of people living with HIV:

Regular practice of Sudarshan Kriya Yoga (SKY) may improve the quality of life (QOL) of people living with HIV (PLHIV).

It is important to improve the quality of life of healthy people living with HIV (PLHIV). Sudarshan Kriya Yoga intervention is known for its beneficial effect on health. It is hypothesised that SKY would improve QOL in PLHIV's, therefore, a study was conducted to assess the effect of SKY in patients with HIV.

A total of 61 adult PLHIV with CD4 count more than 400 cells/ μ l and Karnofsky scale score above 70 were enrolled. They were divided randomly and received the standard care + SKY intervention (I-SKY) and only standard of care (O-SOC). A validated questionnaire was used to note the effect of both interventions from baseline to three visits at 4 week interval. Baseline QOL scores, hypertension and CD4 count were comparable in both the groups. An overall 6% improvement in QOL scores was observed in the I-SKY group as compared to O-SOC group, after controlling for baseline variables like age, gender, education and occupation ($P=0.016$). Their level of independence in I-SKY group was found to be improved at both physical (12%) and psychological (11%) level. This may contribute to improve their self-esteem and decision-making ability, which in turn influence health seeking behaviour. The improvements in QOL scores in the intervention arm as compared to the control arm indicated an efficacy of Sudarshan Kriya intervention.

Source: Mawar N. et al. Sudarshan Kriya Yaga improves quality of life in healthy people living with HIV (PLHIV): results from an open label randomized clinical trial: www.ncbi.nlm.nih.gov.in (accessed on 20.06.2015)

Preventive exercise reduces risk of breast cancer:

Researchers at the Institute Gustave Roussy in Villejuif, France, in a study revealed that women who in the previous four years had undertaken physical activities equivalent to four hours of walking, two hours of cycling each week had 10% decreased risk of invasive breast cancer compared with women who were less active. Women who , undertook this level of physical activity between five and nine years earlier but where less active in the four years prior to the final data collection, did not have a decreased risk for invasive breast cancer.

The beneficial effects of regular physical activity were independent of body mass index, weight gain, waist circumference and the level of activity from five to nine years earlier.

Source: Cancer Epidemiology, Biomarkers & Preventions (abstract):
www.cebp.aacrjournals.org (accessed on 22.06.2015)

Epidemiology and social costs of haemophilia in India:

The large existing or anticipated burden of patients suggests that a national program for haemophilia needs to be initiated.

The genetic basis of haemophilia has been well studied in India. However, data on the number of patients, trends of the disorder in India, social costs of the condition and opportunities and competencies for offering genetic counselling through a public health programme have not been reported.

Haemophilia an inherited single gene disorder with an incidence of 1 per 10,000 births, manifests as spontaneous or trauma induced haemorrhagic episode in patients, progressing to chronic disability and premature mortality in untreated patients. India harbours the second highest number of global patients with haemophilia A. The reported number of patients with haemophilia A is 11,586 while the estimated prevalence could be around 50,000 patients. The lack of access to treatment remains a major factor that severely compromises the quality of life of patients. The disease also has an impact on schooling and employment of affected children. Some of the studies revealed that the proportion of school dropouts due to bleeding was 36.5% and annual number of school days lost due to haemorrhagic episodes was 19.2 days. The chronic nature of disease poses significant emotional distress to parents. Based on the current prevalence and estimated number India would require 23,17,20,000 IU to 96,81,40,000 IU of clotting factor VIII concentrate. This suggests that India needs to develop and increase its capacity for indigenous production of clotting factor concentrate.

Source: Kar A et al. Epidemiology & social costs of haemophilia in India. Indian J. Med Res. 2014; 140(1): 19-31

MRSA or Methicillin-Resistant Staphylococcus Aureus:

It is a bacterium that can cause serious infections. It is commonly called “Superbug” as it is resistant to antibiotics including methicillin, penicillin, amoxicillin, tetracycline, erythromycin etc.

Infection with MRSA can occur in hospitals and institutional health care settings like nursing homes, specially in older people, who are ill and those with weakened immune system. It is a frequent cause of surgical wound infections, urinary tract infection, sepsis and pneumonia in health care facility.

MRSA infection can also occur in community and a termed “Community associated MRSA Infections”. The infections have increased dramatically in the U.S since mid 1990s. Infection is transmitted from person to person by direct contact with skin, fomites (clothing, towels, bed-sheets, utensils etc.) and by droplet spread.

About 19000 per year have died in U.S since 2005 due to the infection. Data from CDC Atlanta in 2011 suggest that the number have decline by about 54% from 2005 to 2011, due to preventive practices at hospitals and home care.

Source: MRSA: Get Facts of This Infection www.medicinet.com/mrsa-infection/articlehtm (accessed on 30.06.2015.)