

### DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE Day Wnesday 6.8.2014

### Heart transplant unit

### Heart transplant unit at AIIMS turns 20 (The Hindu:6.8.2014)

Celebrating 20 years of its existence here on Tuesday, the heart transplant unit at the All India Institute of Medical Sciences (AIIMS) ushered the day in its own unique style, with doctors successfully transplanting a heart and saving the life of a 40-year-old man from Haryana.

1994

Speaking at a press conference to announce its achievements over the past two decades, AIIMS Cardio-Thoracic Sciences Centre chief Balram Airan said: "AIIMS did its first heart transplant on August 3, 1994. Thirty-three heart transplants took place in the unit on Tuesday. AIIMS was the first medical centre in the country to have successfully conducted a heart transplant," he noted.

Giving details of the latest case, Dr. Balram added: "AIIMS admitted a 20-year-old resident of Gonda in Uttar Pradesh at its trauma centre on August 2. He was suffering from a severe head injury and was declared brain stem dead two days later. His family was counselled and they agreed to donate his heart, which we used for a 40-year-male patient from Haryana, who was on our waiting list for over three months after he suffered a heart attack. The patient is now recovering well after the surgery."

Organ transplant

AIIMS Organ Transplant Coordinator, ORBO, Rajeev Maikhuri added: "After counselling the mother and two brothers of the deceased they took a brave decision and consented to donate his organs for the benefit of patients waiting for the organ transplant. His heart, liver, kidneys, eyes and bones were donated."

Good care

Meanwhile, a heart transplant survivor Preeti, who is currently working at the Institute, said: "I got a heart transplant at AIIMS in 2001 and am grateful to all the help given to me so far. There have been medical complications during the past decade but the doctors here have taken good care of me."

### A mathematical formula can tell how happy you are

### A mathematical formula can tell how happy you are (The Times of India:6.8.2014)

A simple mathematical equation can now correctly tell how happy you are. The happiness of over 18,000 people worldwide has been predicted by a mathematical equation developed by researchers at UCL, with results showing that moment-to-moment happiness reflects not just how well things are going, but whether things are going better than expected.

Scientists found that overall wealth accumulated during the experiment was not a good predictor of happiness.

Instead, moment-to-moment happiness depended on the recent history of rewards and expectations.

The team used functional MRI to demonstrate that neural signals during decisions and outcomes in the task in an area of the brain called the striatum can be used to predict changes in moment-tomoment happiness.

The striatum has a lot of connections with dopamine neurons, and signals in this area of the brain are thought to depend at least partially on the levels of dopamine. These re sults raise the possibility that dopamine may play a role in determining happiness.

In the study, 26 subjects completed a decision-making task in which their choices led to monetary gains and losses and they were repeatedly asked to answer the same question "How happy are you right now?" The study investigated the relationship between happiness and reward and neural processes that lead to feelings central to our conscious experience, such as happiness.

### Prenatal alcohol exposure leads

## Prenatal alcohol exposure leads to poor development of kid's brain (New Kerala:6.8.2014)

A new study has revealed kids who are exposed to alcohol in their mother's womb have poor development of brain functions.

According to the study by The Saban Research Institute of Children's Hospital Los Angeles, children with fetal alcohol spectrum disorders (FASD) showed weaker brain activation during specific cognitive tasks than their unaffected counterparts.

Prapti Gautam and her colleagues found a possible neural mechanism for the persistent attention problems seen in individuals with FASD.

During the period of childhood and adolescence, brain function, working memory and attention performance all rapidly improve, suggesting that this is a crucial time for developing brain networks. To study how prenatal alcohol exposure may alter this development, researchers observed a group of unaffected children and a group of children with FASD over two years. They used fMRI to observe brain activation through mental tasks such as visuo-spatial attentionâ€"how we visually perceive the spatial relationships among objects in our environment â€"and working memory.

The researchers said they found that there were significant differences in development brain activation over time between the two groups, even though they did not differ in task performance. While the healthy control group showed an increase in signal intensity over time, the children with FASD showed a decrease in brain activation during visuo-spatial attention, especially in the frontal, temporal and parietal brain regions.

These results demonstrate that prenatal alcohol exposure can change how brain signaling develops during childhood and adolescence, long after the damaging effects of alcohol exposure in utero.

The study was published in Cerebral Cortex.

### Diabetics

## Interval walking healthier than continuous walking for diabetics (New Kerala:6.8.2014)

A new research has demonstrated that training with alternating levels of walking intensity i.e. interval training can be better than walking at a continuous speed that will ultimately help manage blood sugar in people with type 2 diabetes.

The research conducted by Dr Thomas Solomon, University of Copenhagen, Denmark, and colleagues showed that effects of exercise on blood sugar (glycaemic) control in individuals with type 2 diabetes were well documented but the optimal exercise intensity and type remained to be defined.

The researchers found that improved blood sugar control was only evident in the intervalwalking training (IWT), group, and this was likely to be caused by IWT-induced increased in insulin sensitivity and increased peripheral glucose disposal, indicative of improved glucose metabolism No changes occurred in the continuous-walking training (CWT) or CON groups.

The authors asserted that the most important finding of this study was that IWT, but not CWT, increased insulin sensitivity without a compensatory decrease in insulin secretion, which improved the overall impact of insulin on blood sugar in these patients.

The study is published in Diabetologia (the journal of the European Association for the Study of Diabetes).

#### **Poor diabetics**

#### Poor diabetics at greater risk of limb amputation (New Kerala:6.8.2014)

Diabetics in low-income neighbourhoods are up to 10 times more likely to lose a limb than patients residing in affluent areas, says a study.

"When you have diabetes, where you live directly relates to whether you will lose a limb to the disease," said lead author Carl Stevens, a clinical professor of medicine from David Geffen School of Medicine at University of California, Los Angeles (UCLA). To reach this conclusion, researchers used data from the UCLA Center for Health Policy Research's California Health Interview Survey.

It estimated the prevalence of diabetes among low-income populations by ZIP code.

The result was a detailed set of maps showing diabetic amputation rates by neighbourhood for patients 45 and older - the age range at greatest risk for amputation from disease complications.

"Neighbourhoods with high amputation rates clustered geographically into hot spots with a greater concentration of households falling below the federal poverty level," said co-author Dylan Roby, director of health economics at UCLA.

Amputation patients were most likely to be black or non-English speaking, male, and older than 65.

People with poorly managed diabetes often suffer from a compromised immune system.

As a result, a blister or other foot injury may rapidly progress to a serious, even lifethreatening infection.

Earlier diagnosis and proper treatment could prevent many of these amputations, researchers noted.

The findings, published in the journal Health Affairs, will motivate health providers to reach out to patients at risk of late intervention and inspire policymakers to adopt legislation to reduce barriers to care, researchers concluded.

### Hepatitis C

### Hepatitis C may become rare by 2036: Study (New Kerala:6.8.2014)

The deadly hepatitis C could become a rare disease by the year 2036 owing to new effective drugs and widespread screening, says a study.

"If we can improve access to treatment and incorporate more aggressive screening guidelines, we can reduce the number of chronic HCV (hepatitis C) cases, prevent more cases of liver cancer and reduce liver-related deaths," said Jagpreet Chhatwal, an assistant professor at the University of Texas of the MD Anderson Cancer Center in the US.

In the study, Chhatwal and his collaborators used a mathematical model with information from several sources including more than 30 clinical trials to predict the impact of new therapies called "direct-acting antivirals" and the use of screening for chronic HCV cases.

Researchers developed a computer model to analyse and predict disease trends from 2001-50.

With new screening guidelines and therapies, HCV will affect only one in 1,500 people in the US by 2036, researchers predicted.

HCV - a virus transmitted through the blood - is spread by sharing needles, the use of contaminated medical equipment and by tattoo and piercing equipment that has not been fully sterilised.

Those at the highest risk of exposure are baby boomers - people born between 1945-65.

The model predicts one-time HCV screening of baby boomers would help identify 487,000 cases over the next 10 years.

The study appeared in the journal Annals of Internal Medicine.

### Weight

# Five out ten urban Indians trying to lose Weight: Fitho Study (New Kerala:6.8.2014)

Studies since 2012 have estimated that over 74 per cent of urban Indians are overweight (i.e. BMI over 23 kg/m2).

A recent survey conducted by Fitho, a leading wellness services organization that works with partners like Lal Pathlabs, showed that along with increasing weight, there is also increasing awareness and 5 out of 10 urban Indians are trying to lose weight.

While 40 percent of the overweight people have intent to lose weight but are not taking action to control their weight, the remaining 60 per cent are making an effort to lose weight.

The survey revealed that looking good, keeping fit and staying confident are the major reasons for the women and men under 35 to lose weight, while people aged over 35 and the heavily overweight (BMI>25 kg/m2) are doing it primarily for a better health.

The survey covered 4100 people from different cities and towns in India. They were asked about their health conditions, food habit, reasons for trying to lose weight, and how they were trying it. As the participants (46 per cent men, 54 per cent women, age: 18-75) shared their lifestyle, interesting figures showed up. While the level of obesity in urban India is steadily

rising, the awareness and efforts reflect people's understanding of the health threats that obesity poses.

The survey further revealed that the most commonly used tools to control weight loss were diet control, walking, yoga and gym exercises.

Women were twice as likely as men to choose diet as a primary means of weight loss, while men were 3 times more likely to choose the gym compared to the women.

Yoga and home exercises proved to be more popular than joining the gym, with balanced share of practitioners of both the genders.

Walking turned out to be the most common form of physical activity.

Apart from finding out who are trying and how they are trying, the survey was also purposed to find the food habits that lead to obesity or weight management.

Those who ate a mid-day snack had a lower BMI than those who didn't.

Those who ate out primarily weight 12 kg more than those who mainly ate home cooked food.

Non-vegetarians weighed five percent more than their vegetarian counterpart.

Alcohol consumers weighed 6 kg more than the teetotallers.

Fifty-two percent of those who were overweight had heart related problems, 26 per cent suffered from diabetes and 22 per cent reported thyroid and hormonal issues. 83 per cent of the people who suffered from knee pain or back pain were overweight or obese.

Fitho founder Dhruv Gupta and author of popular weight loss book, Losing It said, "While many findings in the survey correlated with estimates around the obesity levels in India and their impact on people's health through lifestyle disorders, it was very interesting to note motivational factors for people, and their health habits.

For example, 1/4th of the people don't have any mid-day snack, and 14% ate fried food during the day as their mid-day snack. There was a ton of information that will help us improve weight management programs for people."

Fitho Wellness is a leading digital wellness services company, providing personalized weight management programs through their website www.fitho.in and Android mobile application.

Launched in 2010, Fitho has over 70,000 members, and works with companies like GE, Indiabulls, Vodafone, NDTV and others for employee wellness programs.

Fitho has been featured on ET Now, DD, NDTV, and leading newspapers & magazines. Fitho founders Prachi and Dhruv Gupta are also authors of the book, Losing It- Making Weight Loss Simple, published by Pan Macmillan, and have been featured on NDTV, ET Now, CNBC, DD & other media.

### Dementia

### Midlife hypertension linked to greater dementia risk (New Kerala:6.8.2014)

A new study has revealed that hypertension during the age of 48 to 67 years may pose as a greater threat of cognitive decline and dementia as compared with individuals who had normal blood pressure.

The decline in global cognitive scores for participants with hypertension was 6.5 percent greater than for individuals with normal blood pressure. An average ARIC participant with normal blood pressure at baseline had a decline of 0.840 global cognitive z score points during the 20-year period compared with 0.880 points for participants with prehypertension and 0.896 points for patients with hypertension.

Individuals with high blood pressure who used medication had less cognitive decline during the 20 period than participants with high blood pressure who were untreated. A greater decline in global cognition scores also was associated with higher midlife blood pressure in white participants than in African Americans.

Although it was noted that a relatively modest additional (cognitive) decline associated with hypertension, lower cognitive performance increases the risk for future dementia, and a shift in the distribution of cognitive scores, even to this degree, was enough to increase the public health burden of hypertension and prehypertension significantly.

Initiating treatment in late life might be too late to prevent this important shift. Epidemiological data, including their own study, supported midlife BP as a more important predictor of and possibly target for prevention of late-life cognitive function than was later-life BP.

#### Syndrome

### Flores bones suggests new 'hobbit' human had Down's syndrome (New Kerala:6.8.2014)

A reanalysis of the flores bones have revealed that what they called as new 'hobbit' human might just had a Down's Syndrome and was not a distinct species.

In October 2004, excavation of fragmentary skeletal remains from the island of Flores in Indonesia yielded what was called "the most important find in human evolution for 100 years." Its discoverers dubbed the find Homo floresiensis, a name suggesting a previously unknown species of human.

Now detailed reanalysis by an international team of researchers including Robert B. Eckhardt, professor of developmental genetics and evolution at Penn State, Maciej Henneberg, professor of anatomy and pathology at the University of Adelaide, and Kenneth Hsu, a Chinese geologist and paleoclimatologist, suggests that the single specimen on which the new designation depends, known as LB1, does not represent a new species.

Instead, it was the skeleton of a developmentally abnormal human and, according to the researchers, contained important features most consistent with a diagnosis of Down syndrome.

Initial descriptions of Homo floresiensis focused on LB1's unusual anatomical characteristics: a cranial volume reported as only 380 milliliters suggesting a brain less than one third the size of an average modern human's and short thigh bones, which were used to reconstruct a creature standing 1.06 meters. Although LB1 lived only 15,000 years ago, comparisons were made to earlier hominins, including Homo erectus and Australopithecus. Other traits were characterized as unique and therefore indicative of a new species.

The two papers are published in the Proceedings of the National Academy of Sciences.

### Three new vaccines

Three new vaccines added to immunization programme (New Kerala:6.8.2014)

The government has given in-principle approval to inclusion of three new vaccines in the universal immunization programme of the country which includes the Injectible Polio Vaccine, parliament was told Tuesday.

The other vaccines are the Rubella vaccine and Rotavirus vaccine, Health Minister Harsh Vardhan told the Rajya Sabha.

"The centre has not been delaying the introduction of injectable polio vaccine due to cost implications," he said in a written reply.

Harsh Vardhan said the National Technical Advisory Group on Immunization (NTAGI) had in July itself recommended IPV as an additional dose along with 3rd dose of Diphtheria, Pertussis and Tetanus (DPT) in the country.

### **Sleep apnea**

### Sleep apnea 'does not cause cancer'(Medical New Today:6.8.2014)

Research published in CMAJ finds - contrary to previous studies - that there is no link between obstructive sleep apnea and the development of cancer.

Sleep apnea patient receiving cpap

Previous research has linked sleep apnea to cancer progression. However, these studies included only a small number of participants, and there may have been some bias in their measurements.

Obstructive sleep apnea is a breathing disorder in which the airways repeatedly close while the patient is sleeping, causing fragmented sleep that increases risk for a variety of other health problems. About 18 million Americans have sleep apnea.

Some previous studies have linked sleep apnea to cancer progression. However, these studies included only a small number of participants, and there may have been some bias in their measurements.

The new study looked at 10,149 sleep apnea patients who took part in a sleep study between 1994 and 2010, and researchers cross-referenced that information with health administrative databases from 1991-2013.

At the start of the study, 5.1% of participants had been diagnosed with cancer. Study participants were followed for an average of 7.8 years, and during this follow-up period, 6.5% of the participants who did not have cancer at the start of the study developed cancer. The most common cancers in the study were prostate, breast, colorectal and lung cancers.

However, after adjusting their results to take into account various cancer risk factors, the researchers were unable to find a causal link between sleep apnea and cancer.

Although the researchers could not confirm the findings of previous studies that had suggested this link, when analyzing subgroups of data they did find an association between oxygen desaturation - a decrease of oxygen in the blood caused by sleep apnea - and the development of smoking-related cancers.

"The mechanisms are still unclear," author Dr. Tetyana Kendzerska - of the Institute for Clinical Evaluative Sciences and Women's College Hospital, University of Toronto in Canada - told Medical News Today, "and those results obtained from subgroup analyses should be interpreted with caution."

She explained, however, that some research has shown low levels of oxygen can increase cancer progression:

"In experimental studies on animals, hypoxia (low level of oxygen) has been shown to cause tumors to grow more quickly by triggering the growth of blood vessels and preventing timely death of cancer cells, thus resulting in metastasis."

Why did this study not confirm earlier research?

The researchers note that in some previous studies, the participants were older than the participants in this study, with higher body mass index (BMI) and more severe obstructive sleep apnea - so oxygen desaturation might have been common within this group, which could have influenced cancer development.

Other studies, meanwhile, had too few participants to provide robust evidence, or used unreliable measures and classification systems.

This was a large study, which incorporated a long follow-up time. However, the study was unable to gather data on the participants' cancer stage and the management of their cancers, which could potentially have affected the results.

Also, because there were relatively few patients in the study who developed cancer, it was not possible for the researchers to fully examine how different types of cancer may be associated with sleep apnea.

MNT asked Dr. Kendzerska whether her team was surprised by the findings.

She replied:

"The longitudinal evidence on this relationship is very limited, and one of four studies published before ours also reported a lack of association. The mechanism of an association is unclear, and only chronic intermittent hypoxemia was postulated as a potential link. As such, we were not surprised at the lack of association."

Earlier this year, we reported on another study published in CMAJ that found people with sleep apnea have a higher risk of pneumonia.

And in 2013, MNT looked at a study conducted by researchers from the University of California-Los Angeles, which found that sleep apnea may increase the risk of various health problems for women in particular.

### Hepatitis C 'could become a rare disease by 2036'

## The US, 1 in every 100 people has chronic hepatitis C. But according to a new (Medical News Today:6.8.2014)

Study published in the Annals of Internal Medicine, current screening and treatments for the disease will make it "rare" by the year 2036, affecting only 1 in every 1,500 people. They note this could even happen 10 years earlier if treatment and screening methods are further improved.

hepatitis

Researchers estimate that by the year 2036, only 1 in 1,500 people will have hepatitis C.

These findings come from a predictive computer model created by researchers at the University of Pittsburgh Graduate School of Public Health, PA, in collaboration with investigators from the University of Texas MD Anderson Cancer Center.

Hepatitis C is an infection caused by the hepatitis C virus (HCV). Mainly spread through contact with blood from an HCV-infected individual, hepatitis C is the leading cause of chronic liver disease in the US and is accountable for more than 15,000 deaths each year.

Around 70-80% of individuals with HCV, however, do not experience any symptoms, meaning many people are not aware they have it until they undergo blood screening.

Because of this, in 2012, the Centers for Disease Control and Prevention (CDC) and the US Preventive Services Task Force recommended that everyone born between 1945 and 1965 - deemed "baby boomers," a population that incorporates around 81% of people with chronic HCV infection - should undergo a one-time screening for HCV.

As well as improved screening recommendations, treatment for hepatitis C has come a long way. Up until 2 years ago, there were only two drugs approved by the Food and Drug Administration (FDA) to treat the virus - pegylated interferon, which can be used alone, and ribavirin, which is used in combination with pegylated interferon.

But earlier this year came the first drug regimens for hepatitis C that could be taken orally. Sofosbuvir - brand name sovaldi - is a once-daily pill approved to treat HCV genotypes 1, 2, 3 and 4. It is used in combination with ribavirin or both ribavirin and pegylated interferon. Such regimens have demonstrated high effectiveness, making the virus undetectable in the blood of some patients. Current screening recommendations effective, but more can be done

In this latest study - led by Mina Kabiri, a doctoral student of the Department of Health Policy and Management at the University of Pittsburgh Graduate School of Public Health - the team accounted for recent improvements in HCV screening and treatment to create their predictive model of HCV prevalence in the US, using data from the National Health and Nutrition Examination Survey (NHANES) and an array of clinical studies.

Fast facts about HCV

Approximately 75-85% of people who become infected with HCV develop chronic infection

Although HCV can be asymptomatic, some people will develop symptoms, such as fever, fatigue, abdominal pain and nausea

HCV symptoms occur, on average, 6-7 weeks after infection.

Their model, they say, uses the data to predict the number of people in the US with HCV infection at any given time between 2001 and 2050, while taking into account a range of different scenarios.

To validate the model, the team used it to predict HCV prevalence in the US between 2003-10. It reported 2.7 million cases - the same number reported by NHANES.

Using the model to predict long-term prevalence of HCV, the researchers estimate that the one-time screening of baby boomers currently in action can help identify 487,000 HCV cases in the next decade.

From this, they say that current screening guidelines, along with the highly effective treatments available, could make hepatitis C a rare disease in the next 22 years - with only 1 in 1,500 people becoming infected.

But the team calculated that if one-time screening was offered to all Americans - allowing more individuals to receive earlier treatment - 933,700 cases could be identified in the next 12 years, meaning hepatitis C could become a rare disease 10 years earlier than with current screening recommendations.

Furthermore, they estimate that universal HCV screening would further prevent 161,500 liver-related deaths, 13,900 liver transplants and 96,300 cases of hepatocellular carcinoma - the most common form of liver cancer.

"Although recent screening recommendations are helpful in decreasing the chronic HCV infection rates, more aggressive screening recommendations and ongoing therapeutic advances are essential to reducing the burden, preventing liver-related deaths and eventually eradicating HCV," says senior author Jagpreet Chhatwal, PhD, assistant professor of health services research at the University of Texas MD Anderson Cancer Center.

Kabiri adds:

"Making hepatitis C a rare disease would be a tremendous, life-saving accomplishment. However, to do this, we will need improved access to care and increased treatment capacity, primarily in the form of primary care physicians who can manage the care of infected people identified through increased screening."

However, the researchers point out that offering universal screening for HCV would bring increased costs with it. The current oral treatment regimen for HCV alone, for example, costs \$1,000 a day.

The team plans to conduct further research looking at how the reduction of deaths and transplants as a result of increased HCV screening and treatment could counteract the rise in costs.

Medical News Today recently reported on a study published in the journal Hepatology, which identified the global prevalence of HCV genotypes. They found that HCV genotype 1 is the most common, accounting for 46% of all hepatitis C infections.

### Happiness

# Scientists find what happiness adds up to with new equation (Medical News Today: 6.8.2014)

The pursuit of happiness is an inherent and inalienable right, but how exactly is it acquired? A group of scientists has analyzed how people's happiness is affected by making decisions and their consequences; from their research, they have come up with an equation that can calculate how happy people will say they are, based on their rewards and expectations.

The research project of the team from University College London (UCL) in the UK involved over 18,000 participants from around the world and found that moment-to-moment happiness was more likely to be predicted by a person's recent history of expectations, with regard to whether choices could lead to good or bad outcomes.

Published in the Proceedings of the National Academy of Sciences, the research team focused on how the decisions that people make and the outcomes resulting from those decisions affected how happy people said that they were, moment by moment. Finding out precisely what impacts the most on happiness could lead to more effective treatments for people with mood disorders, as well as helping governments such as the UK's, who are currently measuring the well-being of the public in order to inform policy.

The accumulation of wealth was found to not be a good predictor of happiness. The authors write, "our computational model suggests momentary happiness is a state that reflects not how well things are going but instead whether things are going better than expected."

#### 'The Great Brain Experiment'Happy nerd

An equation to predict happiness could help improve the treatment of various mood disorders, as well as governments who measure well-being to inform policy.

The research began with asking 26 participants to complete a decision-making task, where the choices could lead to monetary gains and losses. During the task, the participants were repeatedly asked the question, "how happy are you right now?"

The neural activity of the participants was also observed during this investigation using functional MRI, and the data were used by the scientists, along with the answers given to the question, to create a computational model that related self-reported happiness to recent rewards and expectations.

The next stage of the study involved testing this model on 18,420 participants with a smartphone app, a game called "The Great Brain Experiment." The game replaced winning and losing money with a point-scoring system.

The scientists found that the equation they had built during the study's initial decision-making task to predict how happy participants were still worked during the second stage.

Lead author of the study Dr. Robb Rutledge is pleased with how effective the smartphone app was in conducting the research. He says the fact that their happiness equation worked for both the app users and those examined in the initial experiment demonstrated "the tremendous value of this approach for studying human well-being on a large scale."

#### Happy expectations

Dr. Rutledge was surprised that the study found expectations to have such an important role in determining happiness, observing that "the rewards associated with life decisions [...] are often not realized for a long time, and our results suggest expectations related to these decisions, good and bad, have a big effect on happiness."

"Expectations also affect happiness even before we learn the outcome of a decision. If you have plans to meet a friend at your favorite restaurant, those positive expectations may increase your happiness as soon as you make the plan. The new equation captures these different effects of expectations and allows happiness to be predicted based on the combined effects of many past events."

The functional MRI utilized by the team observed that neural signals made in an area of the brain called the striatum during the decisions and outcomes of the task could be used to predict changes in momentary happiness.

The signals in this area of the brain are believed to be partially reliant on the neurotransmitter dopamine, suggesting that it could be possible that dopamine plays a part in determining happiness.

Taking the equation out of the rigid structure of a game would be a way of finding out whether the research adds up, but if these findings can make the treatment of mood disorders and certain government policies more effective, they could make a great number of people very happy indeed.

Recently, Medical News Today reported on a study that suggested genetics could influence happiness.

### **HIV infection**

### HIV infection linked to reduced risk of MS(Medical News Today: 6.8.2014)

New study published in the Journal of Neurology, Neurosurgery and Psychiatry - a journal of the BMJ - suggests that individuals infected with HIV may be at much lower risk of developing multiple sclerosis.

HIV infection

A new study finds that HIV infection may significantly reduce the risk of MS.

The research team, including Prof. Julian Gold of The Albion Centre at the Prince of Wales Hospital in Sydney, Australia, says if their findings are confirmed, this could hold important implications for the treatment of multiple sclerosis (MS) - a disabling disease of the central nervous system.

Combined, there are more than 1 million peer-reviewed studies documenting HIV and MS. Among these, there has only ever been one case report of an individual with both conditions who was treated with HIV antiretroviral drugs. After 12 months of treatment, the patient's MS symptoms disappeared.

In this particular case report, Danish researchers hypothesized that antiretroviral therapy for HIV could be coincidentally treating MS or halting its progression. In this latest study, Prof. Gold and colleagues wanted to further investigate this theory.

Patients with HIV '62% less likely to develop MS'

The team analyzed data from English Hospital Episode Statistics between 1999 and 2011, involving 21,207 patients in England with HIV and more than 5 million controls.

For 7 years, all patients were monitored for development of MS. The researchers calculated the number of expected MS cases among HIV patients and controls, and compared these numbers with the actual number of cases.

During follow-up, there were 18 expected MS cases among HIV patients and only seven actual cases. Based on this, the team calculated that patients with HIV were 62% less likely to develop MS, compared with control patients.

In addition, the researchers found that the possible protective effect of HIV against MS appears to be stronger the more time that elapses between diagnosis of each condition.

Based on 16 expected MS cases and four actual MS cases among patients who were diagnosed with HIV more than 1 year ago, the researchers calculated that these patients were 75% less likely to develop MS. Those who were diagnosed with HIV more than 5 years ago were 85% less likely to develop MS, based on 6.5 expected cases of MS among these patients and only one actual case.

Prof. Gold and colleagues say their findings are consistent with the theory previously presented by the Danish researchers, but that this latest research shows statistical significance.

They stress, however, that these results are purely observational and further studies are needed, but that they could hold important implications for MS development and treatment if confirmed:

"If subsequent studies demonstrate there is a causal protective effect of HIV and/or its treatment, and if the magnitude of it proves to be similar [...] this would be the largest protective effect of any factor yet observed in relation to the development of MS."

Why does HIV appear to protect against MS?

The research team points out some theories that may explain the observed protective effect of HIV against MS.

For example, they say that immunodeficiency triggered by HIV, even without antiretroviral treatment, could prevent development of MS. "HIV impairs immune cell homoeostasis and targets a wide range of immune cells and signaling pathways overlapping with MS pathogenesis," they explain.

Furthermore, they note that antiretroviral drugs used to treat HIV may also curb other pathogens linked to MS, such as herpes viruses and human endogenous retroviruses (HERVs).

Fast facts about MS

It is estimated that around 400,000 people in the US are living with MS

Onset of MS is most common between the ages of 20 and 40

What causes MS is unclear, although past research has suggested the disease occurs when the immune system launches a defensive attack against its own tissues.

"If having HIV is associated with a significantly lower risk of subsequent MS and the association is in the causal chain, it is either because of some biological effect of HIV itself on the pathogenesis of MS, or because the treatments for HIV are coincidentally also treating or preventing development of MS," the team says.

"Unfortunately," they add, "neither this study nor any study design that is feasible at present can prove which mechanism may be correct."

They point out that their research is subject to a number of limitations. For example, they lacked data on how many individuals were exposed to antiretroviral treatment and the exact combination of drugs that were used in such treatment, which could have influenced the results. They also note that they lacked information on the ethnicity of patients.

In an editorial linked to the study, Mia van der Kop, an epidemiologist at the University of British Columbia in Vancouver, Canada, notes that despite the limitations of this study, the researchers have made a "significant contribution" to past research suggesting HIV may protect against MS.

"However, additional work is required to move beyond hypothesis generation," she adds. "A logical next step would be to directly examine the association between exposure to antiretroviral therapy and the development of MS."

Earlier this year, Medical News Today reported on a study published in Stem Cell Reports, which detailed how researchers implanted human stem cells in the spinal cords of mice with MS, restoring their ability to walk and run.

### **Cancer and rare genetic disorders**

### UK to lead fight against cancer and rare genetic disorders(Medical News Today:6.8.2014)

Minister David Cameron says the UK is going to map 100,000 human genomes by 2017, putting the National Health Service at the forefront of scientific discovery. He is pledging £300 million (\$504 million) toward a project that he says will unlock the power of DNA to deliver better tests, better drugs and better care for patients.

#### British flag

The UK will map 100,000 human genomes by 2017, putting the NHS at the "forefront of global advances in modern medicine."

The cash injection, together with new partnerships, is a big boost to the 100,000 Genomes Project, and promises to put the UK's life sciences sector at the "forefront of global advances in modern medicine," says a National Health Service (NHS) news release.

The research is expected to pave the way for genomics medicine to become routine in the NHS, and it is thought 40,000 NHS patients will benefit directly from it.

To better understand cancer and rare diseases - and particularly how they arise in individuals - scientists need to study genetic data taken from thousands and thousands of people.

To collect the data, the NHS will be asking tens of thousands of patients if they want to take part. Participation will only be by consent of patients, whose data will be held in Genomics England's secure databases. Pilot schemes in London, Cambridge and Newcastle have already collected data from a few hundred patients.

Mapping genomes 'on a scale never seen before'

Life Sciences Minister George Freeman says the project will map genomes on a scale never seen before and "bring better treatments to people with cancers and rare diseases for generations to come."

The prime minister also unveiled a new partnership between Genomics England, a company established by the Department of Health to deliver the 100,000 genomes project, and Illumina, a private firm based in California that is providing the DNA sequencing technology.

Genomics England is providing £78 million (\$131 million) in funds, while Illumina is investing around £162 million (\$272 million) in the work in England over the 4 years of the project. The UK's Medical Research Council is also putting in £24 million (\$40 million) for computer power to ensure patient data is properly analyzed, secured and used. NHS England is giving a further £20 million (\$33 million).

The enterprise is expected to generate new jobs and expertise in genome sequencing, mainly in Cambridge, where the Wellcome Trust, a global charity that has already invested more than £1 billion (\$1.6 billion) in genomic research, is also giving £27 million (\$45 million) to set up a world-class sequencing hub at its Genome Campus in nearby Hinxton.

NHS in unique position to deliver world-class genomics medicine

Simon Stevens, chief executive of NHS England, says the NHS is set to become one of the world's "go-to" health services for the development of innovative genomic tests and treatments.

He says the UK's large and diverse population, with universal access to health care, data gathered over several years spanning diverse settings, combined with world-class medicine and science, are some of the many advantages that enable the NHS to deliver this groundbreaking project.

NHS England is now in the process of selecting the first NHS Genomics Medicine Centres, where cancer and rare disease patients will be invited to take part in the project and have their genomes sequenced.

Sir John Chisholm, executive chair of Genomics England, says the move represents a "real milestone," and Jay Flatley, CEO of Illumina describes it as a "momentous day for the UK."

Dr. Jeremy Farrar, director of the Wellcome Trust, says medicine is increasingly relying on understanding what is going on in DNA, and in "rare congenital diseases, in cancer and in infections, genomic insights are already transforming diagnosis and treatment."

The project is another step toward individualized medicine that is gradually set to take over from the "one-size-fits-all" approach of chemotherapy in the treatment of cancer. It will become increasingly possible to treat not just a certain type of cancer, but also a certain type of cancer as it occurs in an individual.

In a comment reported by the Daily Telegraph, Dr. Farrar says we will look back in 20 years time at all the chemotherapy drugs that gave us all those nasty side effects and we will think "gosh, what an era that was."

Meanwhile, Medical News Today recently learned how a new study by researchers in France has identified individuals who may benefit from new treatments for breast cancer by testing all the DNA in the genome of cancer cells.

View all articles written by Catharine, or follow her on: Follow Catharine Paddock PhD on Twitter Follow Catharine Paddock PhD on Google+

### Organs

### जाते-जाते दे गया कई को जिंदगी (Amar Ujala:6.8.2014)

ब्रेन डेड गोंडा निवासी युवक के परिजनों ने दान किए अंग, एम्स ट्रॉमा सेंटर में था भ्ार्ती

नई दिल्ली। यूपी के गोंडा निवासी बबलू इस दुनिया से जाते-जाते कइयों को नई जिंदगी का तोहफा दे गए। बबलू तो अब इस दुनिया में नहीं है, लेकिन उनका दिल अब किसी और के शरीर में धड़कता रहेगा। ब्रेन डेड घोषित होने के बाद बबलू के अंगों से सोमवार को ही चार लोगों को नई जिंदगी मिल गई और अभी कइयों को नई जिंदगी मिलनी बाकी है। युवक दो अगस्त को निजामुद्दीन इलाके में ट्रेन हादसे में बुरी तरह से घायल हो गया था। बबलू के अंगों को दान करने का निर्णय उनकी मां और भाइयों ने लिया। एम्स ट्रॉमा सेंटर में ब्रेन डेड घोषित होने के बाद सोमवार को अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स) के ऑर्बो विभाग की पहल पर बबलू के अंगों को जरूतरमंद मरीज को देने की तैयारी शुरू की गई। बबलू की मां और भाई के हामी भरने के बाद सुरक्षित तरीके से अंग निकालने की तैयारी शुरू की गई। एम्स ऑर्बो विभाग की प्रमुख डॉ. आरती विज की देखरेख में उनके शरीर से हृदय, दोनों किडनी, लिवर, कॉर्निया और लोवर लिम्ब्स को निकाला गया। इसके पहले एम्स के सभी संबंधित विभाग को इसकी सूचना दे दी गई थी।

हृदय प्रत्यारोपण सबसे मुश्किल था, लेकिन ब्रेन डेड होने के बाद हृदय प्रत्यारोपण में छह घंटे से ज्यादा का समय नहीं मिलता। लिहाजा इसी समय में उस मरीज को अस्पताल बुलाना और ऑपरेशन के लिए तैयार करना भी चिकित्सकों के लिए एक चुनौती थी। हृदय प्रत्यारोपण कराने का इंतजार कर रहे कुछ लोगों से संपर्क किया गया लेकिन अंत में हरियाणा के रेवाड़ी के रहने वाले 42 वर्षीय एक व्यक्ति का हृदय प्रत्यारोपण किया गया।

एक किडनी एक बच्चे को जबकि दूसरी किडनी एक वयस्क व लिवर भी एक वयस्क को ही प्रत्यारोपित किया गया। ये तीनों ही मरीज दिल्ली के रहने वाले हैं।

हृदय प्रत्यारोपण करने वाले एम्स के कार्डियोथोरोसिस सेंटर के प्रमुख डॉ. बलराम एरॉन ने बताया कि संयोग से ब्रेन डेड का ब्लड ग्रुप ए पॉजिटिव था और जिसका प्रत्यारोपण किया जाना था उसका ब्लड ग्रुप एबी पॉजिटिव था। एबी पॉजिटिव ब्लड ग्रुप यूनिवर्सल डोनर होता है, इस वजह से हृदय प्रत्यारोपण करने का निर्णय लेने में आसानी हुई।

### धड़कता रहेगा दिल

सोमवार को हृदय, किडनी और लिवर प्रत्यारोपण किया गया युवक के कॉर्निया, लोअर लिम्ब्स को एम्स में सुरक्षित रखा गया इन अंगों के प्रत्यारोपणसे कई लोगों को मिल सकती है नई जिंदगी

### **Ebola Virus**

इबोला वायरस: न इलाज न रोकथाम का तरीका (Amar Ujala:6.8.2014)

पश्चिम अफ्रीका में इसकी चपेट में आकर अब तक 887 लोगों की गई जान, 1300 पीडि़त

फ्रीटाउन (सियरा लियोन)। मेरे परिवार में बहुत से लोगों की जान जा चुकी है। मैं घर छोड़ चुका हूं, यह भी नहीं मालूम कि जाना कहां है। इबोला की मार से पीड़ित शरणार्थी की आंखें इस दर्दनाक दास्तान को बताते हुए कहीं शून्य में देख रही थीं। 1976 में कांगो की एक नदी के नाम पर इस खतरनाक वायरस को इबोला कहकर संबोधित किया गया था। तब यह भी नहीं मालूम था कि आने वाले समय में इस वायरस से कैसी तबाही फैलेगी।

आज स्थिति यह है कि पश्चिम अफ्रीका में 887 लोगों की जान जा चुकी है और 1300 से ज्यादा पीड़ित हैं। इबोला के विख्यात विशेषज्ञ शेख उमर खान की इसी रोग से जान जा चुकी है। लाइबेरिया में दो अमेरिकी डॉक्टर इसकी चपेट में आ गए। नाइजीरिया में 69 लोगों पर नजर रखी जा रही है। इनके इबोला से संक्रमित होने की आशंका है, अगर ऐसा हुआ तो शहर की दो करोड़ जनसंख्या पर खतरा मंडराने लगेगा।

सियरा लियोन, गिनी और लाइबेरिया इस साल मार्च से ही इस खतरनाक वायरस से जूझ रहे हैं। स्वयंसेवी संगठन मेडिसिन सान फ्रंटियर्स के 552 कार्यकर्ता जगह-जगह वायरस से जूझ रहे हैं लेकिन संस्था मानती है कि इस बीमारी पर काबू पाना मुश्किल है। परेशानी यह कि इसका कोई इलाज भी नहीं है। हां, अगर शुरुआत में रोग का पता चल जाए तो कुछ हद तक बात बन सकती है, लेकिन गांवों में लोग बिना चिकित्सा के तेजी से मर रहे हैं। फ्रूट बैट (फल खाने वाला चमगादड़) से शुरू हुए इस रोग को लेकर पूरी दुनिया में चिंता है। संतोष की बात इतनी है कि रोग का विषाणु हवा से नहीं फैलता। जब तक कोई पीड़ित के निकट न जाए वह चपेट में नहीं आएगा।

लाइबेरिया और सियरा लियोन में सेना तैनात ः

मोनरोविया। पश्चिम अफ्रीका में महामारी का रूप ले चुके इबोला के संक्रमण से निपटने के लिए सियरा लियोन और लाइबेरिया में सेना तैनात कर दी गई है। इस अभियान को 'ऑक्टोपस' नाम दिया गया है, जिसके तहत सैनिकों और डॉक्टरों को अलग-अलग क्षेत्रों में तैनात किया गया है।

नाइजीरिया और सऊदी में भी दस्तक ः

नाइजीरिया मेें तीन नए मामले सामने आए हैं। सऊदी अरब में सियरा लियोन से लौटे एक कारोबारी के नमूने लिए गए हैं, उसके इबोला वायरस से संक्रमित होने की आशंका है। बंदरों पर प्रयोग वाली दवा अमेरिकी को दी गई ः पश्चिम अफ्रीका में इबोला वायरस से संक्रमित दूसरे अमेरिकी नागरिक को मंगलवार को अटलांटा लाया गया। उसकी हालत गंभीर बनी हुई है।

नैंसी राइटबोल (59) को सोमवार को मेडिकल सुविधाओं से लैस विशेष विमान से लाइबेरिया से निकाला गया। डॉ. केंट ब्रैंटली और राइटबोल को अलग-अलग लाया गया क्योंकि विमान में ऐसी मेडिकल सुविधा नहीं थी कि दो संक्रमित मरीजों को एक साथ लाया जा सके। उन्हें ऐसी दवा दी गई जो पूरी तरह से अभी टेस्ट भी नहीं की गई थी। हां, बंदरों पर इसका प्रयोग सफल रहा है।

दुनिया पर मंडरा रहा इबोला का खतरा

कांगो में पहली बार पता चला

प्रभावित देशों को विश्व बैंक देगा मदद

पीड़ित लोगों के स्वास्थ्य में सुधार के लिए विश्व बैंक और अफ्रीकी विकास बैंक ने इबोला प्रभावित तीनों देशों (सियरा लियोन, गिनी और लाइबेरिया) की आपातकालीन मदद के तौर पर तुरंत 26 करोड़ डॉलर देने की घोषणा की है।

### **Ebola Virus**

### इबोला वायरस से फिलहाल खतरा नहीं (Amar Ujala:6.8.2014)

नई दिल्ली (ब्यूरो)। अफ्रीकी देशों में भले ही इबोला वायरस सैकड़ों जान ले चुका है, लेकिन फिलहाल भारत में इस वायरस का कोई खतरा नहीं है। लेकिन अफ्रीकी देशों से काफी संख्या में लोग भारत आते हैं इससे भविष्य में भारत में कोई खतरा न हो इसके लिए एहतियात बरतने की जरूरत है। इसी वजह से केन्द्रीय स्वास्थ्य मंत्रालय इबोला वायरस पर गंभीर है। इसके लिए कोई वैक्सीन नहीं है।

इंडियन मेडिकल एसोसिएशन के महासचिव डॉ. नरेंद्र सैनी ने बताया कि इबोला वायरस से फिलहाल भारत में कोई खतरा नहीं है। उन्होंने बताया कि भारत में आज तक यह वायरस कभी सक्रिय नहीं हुआ है, लेकिन एहतियात बरतने की जरूरत है। दिल्ली में नाइजीरिया से काफी लोग आते हैं। भारत की सेना भी अफ्रीकी देशों में है, लिहाजा भारत को सतर्क रहने की जरूरत है।

इबोला वायरस का पहला मामला सूडान में आया था।

डॉ. सैनी ने बताया कि इबोला वायरस का खतरा मधुमेह और एचआईवी पीड़ित लोगों में ज्यादा होता है। इबोला का वायरस हवा में नहीं रहता यह मरीज के संपर्क में आने से ही होता है। बचाव के तौर पर सभी से हाथ मिलाने से परहेज करें।

बीमारी का पता सीबीसी और वायरल एंटिजन जांच से हो जाता है।

लक्षण

तेज बुखार, शरीर पर दाने निकल आना, सिर दर्द, नाक से पानी चलना, उल्टी, पेट में दर्द और पीठ के निचले हिस्से में दर्द, कंजेक्टिवाइटिस.

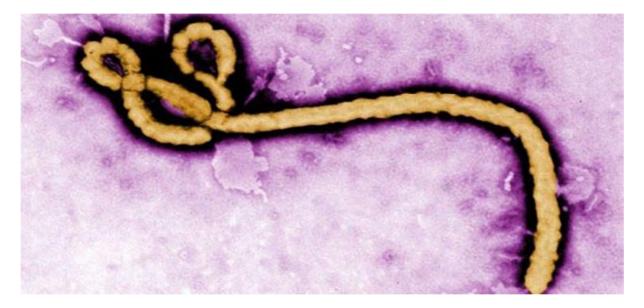
### **Ebola Virus**

### दुनिया पर मंडरा रहा है ईबोला का खतरा! (Dainik Tribune:6.8.2014)

दुनिया में एक नये वायरस का खतरा मंडरा रहा है। अफ्रीकी देशों में ईबोला नाम का वायरस का प्रकोप तेजी के साथ बढ़ रहा है। बहुत से लोग इससे संक्रमित हो रहे हैं। ये वायरस पहले तो बुखार, सिर दर्द आदि के रूप में अपना असर दिखाता है और फिर धीरे-धीरे इंसान के लीवर और किडनी तक पहुंच जाता है। वल्र्ड हेल्थ ऑर्गेनाइजेशन ने बताया कि अब तक ईबोला के प्रकोप से 800 से अधिक लोग मर चुके हैं। इसके इलाज के लिए वैक्सीन खोजा जा रहा है, लेकिन अब तक कोई सफलता नहीं मिली है।

अब तक 1300 से ज्यादा मामले

इससे ग्रस्त 1,300 से ज्यादा मामले सामने आ चुके हैं। गिनी में 460 मामलों में 339 लोगों की मौत हो चुकी है। वही सीयरा लीयोन में 533 में से 233 और लाइबेरिया में 329 में से 156 लोग इस बीमारी के कारण मर चुके हैं। अलग-अलग देशों से बहुत से लोग इन अफ्रीकी देशों में जाते हैं। अगर उनमें से कोई भी शख्स इस वायरस से संक्रमित होकर देश लौटा तो उस देश में भी ईबोला वायरस फैल सकता है। इसके उपचार के लिए जल्द से जल्द वैक्सीन की खोज करना जरूरी है।



### क्या हैं लक्षण

इबोल वायरस की वजह से व्यक्ति इबोला वायरस बीमारी (ईवीडी) या ईबोला रक्तस्त्राव बुखार (ईएचएफ) की चपेट में आ जाता है। इसके लक्षण वायरस के संपर्क में आने के 2 दिन से 3 हफ्ते में फैलते हैं। इससे प्रभावित व्यक्ति में बुखार आना, गले में खराश, मांसपेशियों में दर्द, सिरदर्द, जी मिचलाना, उल्टी, डायरिया शुरू हो जाता है। इससे लिवर और किडनी काम करना कम कर देते हैं। इस स्थिति में कुछ लोगों में रक्तस्त्राव की समस्या शुरू हो जाती है।

### 1976 में पहली बार

सबसे पहले ये वायरस 1976 में सुडान और कांगो लोकतांत्रिक गणराज्य में पाया गया था। ये बीमारी उप सहारा अफ्रीका के ऊष्णकटिबंधीय क्षेत्रों में फैली है। वर्ष 1976 से 2013 तक कम से कम 1,000 लोग प्रति वर्ष इस लोग से संक्रमित हुये हैं। चालू वर्ष में इसका सबसे ज्यादा प्रकोप पश्चिमी अफ्रीका में फैल रहा है, जिससे गिनी, सीएरा लीयोन, लाइबेरिया और संभावित रूप से नाइजीरिया प्रभावित हो रहे हैं।

### कैसे फैलता है

यह वायरस संक्रमित जानवर विशेष तौर में बंदर और सुअरों के खून या शरीर के तरल पदार्थ से फैलता है। हवा के संपर्क में आने से नहीं फैलता है। एक बार कोई इंसान इस वायरस से संक्रमित हो जाता है, तो फिर बाकी लोगों में भी फैलने लगता है। इसके अलावा इससे संक्रमितों के मरने के बाद उनके शरीर को ठीक तरह से खत्म नहीं करने पर भी ये वायरस फैलने की संभावना रहती है।

#### **Ebola Virus**

#### इबोला है लाइलाज (Navbharat Times:6.8.2014)

वॉशिंगटन : इबोला बीमारी से देश को कोई बड़ा खतरा नहीं होने पर जोर देते हुए व्हाइट हाउस ने अमेरिका आ रही उड़ानों को वापस भेजने की बात से इनकार किया और कहा कि बीमारी के खतरे से बचाव के लिए जांच के पुख्ता इंतजाम किए गए हैं।' व्हाइट हाउस के प्रेस सचिव जॉश अर्नेस्ट से पूछा गया कि अमेरिका आ रही उड़ानों को इबोला की वजह से वापस भेजा जाएगा तो उन्होंने कहा, 'नहीं, इस समय नहीं।' उन्होंने कहा, 'फिलहाल दोनों जगह जांच की जा रही है, व्यक्ति जहां से विमान में सवार होता है वहां और जहां उतरता है वहां भी।' उन्होंने कहा, 'ऐसी सुविधाएं मौजूद हैं, अगर किसी व्यक्ति में इस बीमारी के लक्षण दिखते हैं तो उस पर निगरानी रखी जा सकती है और डॉक्टर से उसकी जांच कराई जा सकती है।'

### 20 करोड़ डॉलर देगा विश्वबैंक

विश्व बैंक गिनी, लाइबेरिया और सियरा लियोन को घातक संक्रामक बीमारी इबोला को फैलने से रोकने के लिए 20 करोड़ डॉलर की सहायता देगा। इससे इन देशों में सरकारी स्वास्थ्य प्रणाली सुधारने पर खर्च किया जाएगा। संक्रामक रोगों से निपटने के अनुभवी विश्व बैंक के अध्यक्ष जिम योंग किम ने कहा कि नई वित्तीय व्यवस्था उन तीनों अफ्रीकी देशों की मांग पर की गई है जो इबोला से सबसे अधिक प्रभावित हैं।

केंद्रीय स्वास्थ्य मंत्रालय ने सभी राज्यों और संबंधित विभागों से इबोला वायरस से सतर्क रहने को कहा है। इस मसले पर मंगलवार को स्वास्थ्य मंत्री डॉ. हर्षवर्धन की अगुवाई में एक बैठक हुई। इसमें कई मंत्रालयों के अधिकारियों ने हिस्सा लिया।

सूत्रों के मुताबिक, बैठक में कहा गया कि वैसे तो फिलहाल भारत में इबोला का खतरा नहीं है, लेकिन इससे सावधान रहने की जरूरत है। सिविल एविएशन मंत्रालय से कहा गया कि वह देश के सभी हवाई अड्डों पर इबोला के संदिग्ध मरीजों की जांच के लिए जरूरी इंतजाम करे। स्वास्थ्य मंत्रालय ने कहा है कि वह इबोला के मामले में राज्यों को जरूरत पड़ने पर हर तरह की मदद देने को तैयार है।

बचाव ही इलाज

इबोला वायरस का अभी कोई इलाज या टीका उपलब्ध नहीं है। पश्चिमी अफ्रीका में अब तक करीब 1500 लोग जान गंवा चुके हैं। इसका सबसे पहला मामला 1976 में सूडान में आया था। माना जाता है कि चमगादड़ों से यह वायरस इंसान में पहुंचा। यह

सार्स या स्वाइन फ्लू की तरह हवा से नहीं फैलता।

लक्षण

सिरदर्द, गले में खराश या दर्द, तेज सिरदर्द, मसल्स में पेन, भारी कमजोरी, वॉमिटंग और डायरिया। इसके कारण लिवर और किडनी फेल हो सकते हैं और शरीर में अंदरूनी ब्लीडिंग हो सकती है। इस वायरस की चपेट में आने के करीब 21 दिन बाद रोग के लक्षण प्रकट होते हैं। इसके मरीज को बचाना असंभव हो जाता है।