



Robert Vadra serves food to underprivileged people outside the AIIMS in New Delhi.

## 18 AIIMS Staffers Sacked For Raising Salary Cut Issue

**New Delhi:** Eighteen staff members of the All India Institute of Medical Sciences (AIIMS) here have been terminated from service allegedly for taking up the issue of "sudden cut in salary" with the AIIMS authorities.

The sacked employees, who are among the 350 other Class IV staff members employed on contractual basis, alleged that they were also manhandled by police when the matter was taken up with the hospital authorities.

They complained that the salary of Rs 9,500 was suddenly reduced to Rs 8,500, without giving any reason. According to the Delhi Hospitals

Contractual Workers Union, a facility management company — Sudarshan Facilities Pvt Ltd — was in December 2016 given the contract for hiring housekeeping staff in the main AIIMS Trauma Centre, also known as Jai Prakash Narayan Apex Trauma Centre. "The workers employed under the contract were hired for Rs 9,500. But, since January this year, the workers were receiving only Rs 8,500. On March 1, the issue was initially taken up with the management of the company, which failed to come up with any reply. "Thereafter, we approached the Additional Medical Superintendent of AIIMS Trauma Centre Dr Amit Gupta, who instead of solving the matter called police," Mriganka, General Secretary of the union, told IANS. Mriganka said the police manhandled the

group of workers and told them of return to work.

"As the Additional Medical Superintendent failed to solve the issue, we took up the matter with the Labour Commissioner, who spoke to the company representative of Sudarshan Facilities Pvt Ltd and asked us to return to work.

"However, the next day when we reported for duty, we found that the services of 18 of our colleagues were terminated, without restoring the previous salary," said Mriganka.

When contacted, there was neither any response from Amit Gupta nor from Sudarshan Facilities Pvt Ltd.

Seeking minimum wages and timely payments, the workers have also demanded that the terminated staff members be reinstated forthwith, with continuity in service. In a letter to the

AIIMS Deputy Director, the contractual workers' union has alleged that they were also being compelled to perform the work of Class III staff, like OT technicians and computer operators.

This practice was lowering the standards of medical care, as Class IV workers were supposed to do sanitation work, work as ward boys and other similar other works, the letter pointed out.

The letter also mentioned the delays in payment of wages and denial of bonus.

"The workmen are given their wages around 15th to 20th of every month, which violates the Payment of Wages Act. Though the permanent employees at both centres get bonus, these employees doing similar nature of work, even more at times, do not get any bonus during festivals," the letter read.

## Eating Fresh Fruits Everyday May Keep Diabetes At Bay

**London:** A bowl of fresh fruits a day may lower the risk of developing diabetes by 12 per cent, a study has showed.

In individuals with diabetes, consuming fresh fruit more than three days a week was associated with a 17 per cent lower relative risk of dying. Further, it can lower the risk of developing diabetes-related complications affecting large blood vessels -- ischaemic heart disease and stroke -- and small blood vessels -- kidney diseases, eye diseases, and neuropathy -- by 13-28 per cent, the findings revealed.

Although the health benefits of diets including fresh fruit and vegetables are well established, the relatively high sugar content of fruit has led to uncertainty about associated risks of diabetes and of vascular complications of the disease, said Huaidong Du of the University of Oxford. This has led to frequent abstention from fruit consumption among individuals with diabetes in many parts of the world, he noted in the paper published in the journal PLOS Medicine.

The study, which assessed nearly 500,000 people from China, also showed that people who reported elevated consumption of fresh fruit had an estimated 0.2 per cent reduction in the absolute risk of diabetes over five years.

In addition, higher consumption of fresh fruit in people with diabetes, led to the decrease in mortality risk of 1.9 per cent at five years, and lower risks of microvascular and macrovascular complications.

## Breaking The Barrier Of The Skin For Better Management Of Skin Health

**Ratneshwar Thakur**

**Entry of nanocomplexes into skin layers may eliminate the need of painful needles and injections.**

A team led by Dr. Munia Ganguli, Scientist at Institute of Genomics and Integrative Biology (IGIB)-New Delhi, -- from the field of Nano-biotechnology -- is the first to develop a unique approach whereby pre-treatment of skin with silicone oil can improvise the entry of nanocomplexes, comprising of plasmid DNA and a peptide carrier, up to deeper layers of skin just by a topical application. The results of the study were published in the journal Molecular Therapy.

Large surface area of the skin makes it convenient for skincare formulation to treat a multitude of skin conditions. Skin is a major barrier against absorption of external agents in our body. Therefore aiming for topical/transdermal delivery across such interface is itself a challenging task. A topical medication is intended to have an effect at the site of application. Transdermal medications are absorbed through the skin to have an effect in areas of the body away from the site of application.

"Recently there has been an upsurge in number of individuals affected from skin related disorders which in turn affects their overall quality of life," says Manika Vij, one of the author of the paper. She

says, this motivated her to focus her research on understanding of the

life saving therapy in cutaneous disorders. "Nucleic acids (DNA or



intricacies of biomolecule delivery in skin and to develop an effective treatment modality for such individuals whereby they can regain the confidence and are no more ostracized for skin related issues".

The group has been working on peptide mediated delivery of DNA to cells and organs for many years. The motivation of Dr. Ganguli and her team was to develop a non-invasive and non-toxic method of nucleic acid delivery to skin. "In this study we have used, in a synergistic manner, a chemical enhancer namely silicone oil and a peptide to allow large negatively charged molecules like DNA to get into the skin layers," says Dr. Ganguli. "Usually the techniques that are used for DNA delivery to skin are harsh, toxic and often cumbersome to use. Thus it was very exciting for us to observe that we could efficiently deliver DNA to deeper skin layers in a simple manner," she said.

Getting under the skin has always been challenging prospect for

RNA) have potential to be used as therapeutics for different skin disorders. Our method is simple to use, non-invasive and does not damage the skin integrity, and hence possibly patient compliant", says the study leader.

The study leader and her team believe that a detailed study of this method could dramatically redefine this strategy for transdermal delivery of other such molecules that can eliminate the need of painful needles and injections.

"We can extend this strategy for easy delivery of other large molecules which can be important for anti-aging applications, and cosmeceuticals, the combination of cosmetics and pharmaceuticals. There is also a possibility of easier delivery of growth factors for improved skin health. These are of course long term projections and a lot more validations will be needed to reach there", Dr. Ganguli explained about the future perspectives of her finding.

## One-Third Pregnant British Women Drink Alcohol: Survey

**London:** Despite recommendations to abstain from alcohol during pregnancy, nearly one in three pregnant women in Britain drinks alcohol, a survey of 11 European countries has shown.

Britain (28.5 per cent) scored highest in alcohol consumption during pregnancy, followed by Russia (26.5 per cent) and Switzerland (20.9 per cent).

In contrast, women in Norway (4.1 per cent) were found to consume alcohol the least during pregnancy. They were followed by Sweden (7.2 per cent) and Poland (9.7 per cent).

"Differences in pregnant women's drinking behaviour between countries can have many explanations besides variations in willingness of women to provide information about their alcohol consumption during pregnancy," said Hedvig Nordeng, Professor from the Norwegian Institute of Public Health.

There could also be differences in national guidelines or educational campaigns about drinking during pregnancy, differences in prenatal care and attitudes towards alcohol use in pregnancy, or a combination of all these

factors. Further, women who reported alcohol consumption during pregnancy were more likely to be older, highly educated, employed and had smoked before pregnancy, the researchers said in the paper appearing in the journal Women and Birth.

Alcohol can seriously affect the development of an unborn baby, increasing the risk of miscarriage, premature birth, low birth weight, learning difficulties and behavioural problems.

"There is no defined safe minimum amount of alcohol to drink during pregnancy. We therefore recommend that all pregnant women should adhere to the guidelines for total alcohol abstinence during pregnancy," Nordeng noted. For the study, a total of 7,905 women from 11 European countries were surveyed, of whom 53 per cent were pregnant and 46 per cent were new mothers (with a child up to one-year-old). The surveyed countries included Croatia, Finland, France, Italy, Norway, Poland, Russia, Serbia, Sweden, Switzerland and Britain.

## Childhood Cancer Cases Up By 13 Per Cent Over Two Decades: WHO

**London:** Childhood cancer incidences worldwide increased by about 13 per cent in the last decade, with annual cases reaching 140 per million children aged 0-14 years, according to a new WHO report.

Part of this increase may be due to better, or earlier, detection of these cancers, the report said.

Based on information collected globally on almost 300,000 cancer cases diagnosed in 2001-2010, the study showed that leukaemia is the most common cancer in children younger than 15 years, making up almost a third of childhood cancer cases.

Tumours of the central nervous system ranked second (20 per cent of cases), and lymphomas accounted for 12 per cent of cases, according to the study

by the International Agency for Research on Cancer (IARC), part of the World Health Organisation (WHO).

In children younger than five years, a third of the cases were embryonal tumours, such as neuroblastoma, retinoblastoma, nephroblastoma, or hepatoblastoma.

The report also, for the first time, shows cancer occurrence in adolescents aged 15-19 years. The annual incidence rate was 185 per million adolescents, based on records of about 100,000 cancer cases.

The most common cancers were lymphomas (23 per cent), followed by the cases classified as carcinomas and melanoma (21 per cent). "Cancer is a significant cause of death in children and adolescents, in spite of its relatively rare occurrence before the age of 20

years," said IARC 10 per cent of the world's



Director Christopher Wild.

"This extensive new set of information on the pattern and incidence of cancer in young people is vital to raise awareness and to better understand and combat this neglected area of health early in life," Wild said.

Data for the study was collected by 153 cancer registries in 62 countries, departments and territories, covering about

population of children. However, results reported are based on child population coverage of almost 100 per cent in North America and western Europe and of five per cent or less in Africa and Asia.

Incidence rates, which indicate the number of new cases per population at risk per year, are the first piece of information needed to start

fighting this disease.

In low-resource settings, cancer may go undiagnosed, because awareness is lacking or diagnostic equipment is unavailable.

Also, social factors may explain the unexpectedly low rates reported particularly for infants or for girls in certain low-resource countries. "This study provides the essential data we need to offer early detection, treatment, and care programmes and services for children with cancer," said Tezer Kutluk, from the Union for International Cancer Control (UICC). "It is very important that we improve global monitoring of cancer in children and address the gaps in surveillance data across regions," said Kutluk. The research was published in The Lancet Oncology journal.

## Check Preparedness Against Vector Borne Diseases In Hospitals: Nadda

**New Delhi:** Union Health Minister J.P. Nadda on Wednesday directed health officials to conduct regular supervisory visits to hospitals to check the preparedness against vector-borne diseases, and if needed, provide on the spot technical guidance.

The decision was taken after 79 new cases of chikungunya and 24 cases of dengue were reported in the national capital since January 1. These cases were reported though the season for vector borne diseases in Delhi is between July and December.

The minister has also asked the health officials across the country to intensify Information, Education and Communication (IEC) campaigns on prevention and control of the vector borne diseases.

Nadda on Wednesday held a meeting of health officials to check the preparedness against vectors in the central government hospitals.

According to the ministry, advisories have already been sent to all states for strengthening their preparedness before the dengue season. Nadda also directed the officers to review the preparedness of the states through a video conference.



Dr. N K Pandey (R) Chairman & Managing Director, Asian Institute of Medical Sciences, 15 years old girl from Iraq Banin Mohamad Humza (2nd R) and Humza's father at a press conference at Press Club in New Delhi. Matched Unrelated Donor technique saved 15 year old girl from Iraq suffering from aplastic Anemia.

## First Light-Activated Drug Offers Hope For Pain Treatment

**London:** In a first, scientists have developed a drug activated by light which has therapeutic applications for the treatment of pain.

The new "photo-drug" -- JF-NP-26 -- is a molecule that can be specifically activated at any wished moment (that is, with a high spatiotemporal resolution) with light, the researchers said.

"This is the first light-activated drug designed for the treatment of pain in vivo with animal models," said Francisco Ciruela, Professor at the University of Barcelona.

JF-NP-26 is activated when receiving light -- using an optical fibre -- of a suitable wave length and with an exact precision on the target tissue (brain, skin, articulations, etc).

The drug does not show toxic or unwanted effects even if the dose is high in short-length studies on animals.

The discovery, published in the journal eLife, will overcome the problems faced with the uses and effects of current drugs

such as slow and inexact distribution of the drug, lack of spatiotemporal traits in the organism and difficulties in the dose adjustments, the researchers said.

JF-NP-26's lightening includes a treatment on the molecule that releases the active molecule (raseglurant) that blocks the metabotropic glutamate type 5 (mGlu5) receptor, found in lots of neuronal functions such as the spread of neuronal pain.

Blocking this receptor allows preventing the pain from spreading into the brain. This can be produced both due to the outlying neurons and the central nervous system (brain) and create, in both cases, an analgesic effect as a result. "The molecule created by the action of light, the raseglurant, does not belong to any group of drugs from the classic anti-pain list of drugs: non-steroidal anti-inflammatory drugs or NSAID (paracetamol, ibuprofen, etc.) and opioids (morphine, phentanyl)," Ciruela said.