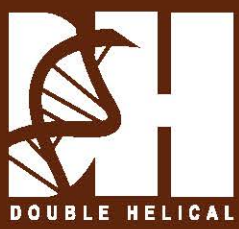


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## COLLAPSE OF THE SYSTEM

The Gorakhpur tragedy where more than 70 children perished has shocked the nation. While the Uttar Pradesh government is trying to cope with its tragic aftermath, it needs to restore sanity and order to the state's ailing health infrastructure that will leave the room for such disasters to happen





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COVER STORY



## Collapse of the System



### The War on Death



### Coping with Challenges



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### Be Breast Savvy



### Holistic MediCare



### Life At Stake



# The Loss of Innocents

**D**ear readers,  
Thank you for your continuous support. With your blessings your favourite magazine Double Helical is growing by leaps and bounds and acquiring newer readership pan-India.

In the current issue, we highlight loopholes and major negligence in the healthcare infrastructure in the country. The recent Gorakhpur tragedy where more than 70 children perished has exposed woeful lack of healthcare facilities in government-run hospitals. While the Uttar Pradesh government has ordered investigations into the incident, it needs to set its house in order as far as the state of healthcare amenities is concerned, which have disastrous implications for the poor and needy.

Tears rolled down the eyes of several parents when they saw the motionless bodies of their innocent children due to gross negligence and criminal misconduct at Gorakhpur's Baba Raghav Das (BRD) Medical College and Hospital. Oxygen shortage claimed the lives of so many poor and hapless children whose parents brought them to the hospital with great hopes of their cure. The parents want exemplary action and punishment against the culprits. They lament the present system and demand a probe against persons who are responsible for this tragedy of such unprecedented proportions.

BRD Medical College and Hospital is the biggest hospital in Gorakhpur, which is also the hometown and parliamentary constituency of Uttar Pradesh Chief Minister Yogi Adityanath. The recent tragedy in BRD shook the entire nation. Every conscientious person was shocked and mourned the heartbreaking deaths of innocent children.

The unfortunate incident has been blamed on infections and possible disruption in oxygen supply in the



paediatrics ward. The oxygen supply had been stopped by the vendor after the hospital had defaulted on the payment. The hospital had been functioning without oxygen supply for two hours. But the hospital and district administration have rejected oxygen shortage as the reason. The government denied that the deaths had been caused due to shortage of oxygen since the hospital had soon made the required arrangements.

Apart from the loss of innocent lives at Gorakhpur, we have touched upon many other relevant issues in the August issue. Of all the lifestyle diseases, diabetes & obesity are twins and spreading like an epidemic the world over. Decades of countless scientific studies and research over the years have emphatically proved that proper nutrition is many times more effective than most drugs and pills in reversing, curing and eliminating the disease.

No wonder that we turned our gaze on Ayurveda. The reason is with the help of Ayurveda, one can care for one's heart the natural way and enjoy a long life span. According to Ayurveda, the heart is one of the three main marmas (vital organs). There are many types of srotas (channels) responsible for the circulation of various materials like dhatus (tissues), energy, wastes and prana (life air). Prana vaha srotas, which are responsible for the flow of

prana in the body, are the main channels. The heart is the root of prana vaha srotas. All the main blood vessels originate from the heart. The heart is also the seat of consciousness or soul. It is also related to ojas (vital fluid), which sustains the consciousness or soul and keeps the person alive. Modern science too emphasizes the importance of heart. The heart is the basis of life and we should take proper care of it. Heart is the seat of emotions like love. So, to establish love, harmony and peace, it is important that one has a healthy heart.

Nutrition is such a potent weapon with which you can not only prevent but can control other lifestyle diseases like high blood pressure, constipation, acidity, thyroid, arthritis, heart disease, stroke, kidney disease (nephritis), hair loss, dandruff, various cancers like breast cancer, colon cancer, prostate cancer etc.

There is a growing incidence of vector borne diseases across the country, affecting a large number of population. The Union Ministry for Health and Family Welfare has made all-out efforts for prevention and control of such ailments. The mosquito borne diseases are largely preventable through the various vector control strategies. The National Vector Borne Disease Control Programme has formulated various strategies for major vector borne diseases namely malaria, dengue, chikungunya, swine flu, lymphatic filariasis, yellow fever and Japanese encephalitis.

Besides the above-mentioned stories, there is much more to read and keep oneself abreast of the latest news and views in the healthcare field. So keep reading to stay informed and enlightened!

Warm regards,  
**Amresh K Tiwary,**



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## The country gears up for second phase of Measles-Rubella campaign

**M**ission Parivar Vikas is a new initiative conceived by the Health Ministry with a strategic focus on improving access through provision of services, promotional schemes, commodity security, capacity building, enabling environment and intensive monitoring.

India, along with ten other WHO South East Asia Region member countries, have resolved to eliminate measles and control rubella/congenital rubella syndrome (CRS) by 2020. In this direction, Union Ministry of Health & Family Welfare (MoHFW) has initiated measles-rubella (MR) vaccination campaign in the age group of nine months to less than 15 years in a phased manner across the nation. The campaign aims to cover approximately 41 crore children and is going to be the largest ever vaccination campaign worldwide.

All children from 9 months to less

than 15 years of age will be given a single shot of Measles-Rubella (MR) vaccination during the campaign. Following the campaign, MR vaccine will become a part of routine immunization and will replace measles vaccine, currently given at 9-12 months and 16-24 months of age of child.

The first phase of measles-rubella vaccination campaign has been successfully completed in five states, namely, Tamil Nadu, Karnataka, Goa, Lakshadweep and Puducherry. More than 3.3 crore children were vaccinated, reaching out to 97% of the intended age group. The campaign was carried out in schools, community centres and health facilities. The next round is starting in 8 states/UTs (Andhra Pradesh, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Himachal Pradesh, Kerala, Telangana and Uttarakhand) from August 2017, aiming to cover 3.4 crore children.

The campaign aims to rapidly build up

immunity for both measles and rubella diseases in the community so as to knock out the disease, therefore, all the children should receive MR vaccine during the campaign. For those children who have already received such vaccination, the campaign dose would provide additional boosting to them.

In order to achieve maximum coverage during the campaign, multiple stakeholders have been involved, which includes, apart from the MoHFW, other ministries, development partners, Lions clubs, professional bodies, for example, Indian Association of Pediatrics, Indian Medical Association, Civil Society Organizations etc.

The Measles-Rubella campaign is a part of global efforts to reduce illness and deaths due to measles and rubella/CRS in the country. Measles immunization directly contributes to the reduction of under-five child mortality, and in combination with rubella vaccine, it will control rubella and prevent CRS.



## Health Ministry Issues Operational Guidelines for Family Participatory Care



**J**P Nadda, Union Minister for Health and Family Welfare, recently launched the 'Skill for Life, Save a Life' initiative. Speaking on the occasion Nadda said that India enjoys a demographic dividend as more than 65% youth are below the age of 35 years and the Government is determined to seize this opportunity by providing adequate skills and employability to the youth for a strong foundation for continued and sustainable growth. 'Skills for Life, Save a Life' Initiative aims to upscale the quantity and quality of trained professionals in the healthcare system. Under this initiative various courses are planned to be initiated targeting specific competencies for healthcare professionals as well as for general public.

The Union Ministry of Health and Family Welfare recently released Operational Guidelines for Planning and Implementation of Family Participatory Care (FPC) for improving new-born health. The guidelines will serve as a guiding document for those intending to introduce FPC in their facility as an integral part of facility based new-born care. The document also provides details


of infrastructure, training, role of health care providers and steps in the operationalization of FPC in the new-born care unit. The operational guidelines of FPC are for all stakeholders involved in the process of planning and delivering new-born care.

The guidelines also addresses various aspects of attitudes, infrastructural modifications and practice that will help in establishing FPC at Special New-born Care Units (SNCUs) such as sensitization of State and District Managers on FPC, prioritization of SNCUs for initiating FPC, making required infrastructural enhancement in SNCU, creating family participatory care environment in SNCU, ensuring availability of supplies for parents-attendants, training of SNCU staff for SNCU, role of healthcare providers for FPC implementation and institutional support for FPC.

Under FPC, the capacities of parents-attendants are built in new-born care through a structured training programme (audio-visual module and a training guide). The staff at new-born care unit will provide continuous supervision and support. Provisions for infrastructure and logistics strengthening required for

implementing FPC are ensured in the annual state Program Implementation Plan (PIP). The guidelines will be shared with the states for implementation and it is expected that these guidelines when implemented by states would further improve the quality of care being provided in the SNCUs across the country.

Sick and new-born are highly vulnerable and require careful nurturing in order to survive the neonatal period and first year of life. Under National Health Mission, more than 700 state-of-the art SNCUs have been established across the country to provide 24x7 comprehensive care to the new-borns by dedicated trained staff.

In the recent years, it is realized that if parents are trained, during the stay of their babies in the hospital, to provide supportive care to their sick and new-borns, it will help in not only improving survival of the babies after discharge but will also provide for psycho-social and developmental needs of the new-borns. In this regard, Family Participatory Care has emerged as an important concept of health care which provides for partnership between health care staff and families in care of sick new-borns admitted in the SNCUs. 





## Breast feeding Week to promote breast feeding

**B**reastfeeding Week is observed in the first week of August to focus attention on the important aspect of promotion and support of breastfeeding. The theme of this year's breastfeeding week (1 - 7 August, 2017) is 'Sustaining Breastfeeding Together'. The Ministry of Health & Family Welfare has planned various activities at the national level during this week in association with IAP and RammohanLohia Hospital.

To intensify the efforts further for promotion of breastfeeding, the Health Ministry has initiated a nationwide programme called "MAA-Mother's Absolute Affection" to bring undiluted focus on promotion of breastfeeding and provision of services towards supporting breastfeeding, along with ongoing efforts of routine health systems.

In addition, "National Guidelines on Lactation Management Centres in Public Health Facilities" have been recently released to facilitate establishment of lactation management centres for ensuring that the sick and pre-term

babies are fed with safe human breast milk.


The key components of the MAA programme are awareness generation, promotion of breastfeeding & inter personal counselling at community level, skilled support for breastfeeding at delivery points and monitoring and Award/ recognition of health facility. Under this programme, accredited social health activists (ASHAs) have been incentivized for reaching out to pregnant and lactating mothers and provide information on benefits and techniques of successful breastfeeding during interpersonal communication. Auxiliary Nurse Midwives (ANMs) at all sub-centres and health personnel at all delivery points are being trained for providing skilled support to mothers referred with issues related to breastfeeding.

Under National Health Mission (NHM), funding support has been recommended for all states and UTs (since 2016) for successful implementation of the MAA programme. 23 States have started implementing various activities under

MAA programme such as one-day sensitization of health staffs, convergence meetings with line departments, Infant and Young Child Feeding (IYCF) training of staffs at health facilities, communication activities using mass media and mid-media etc.

Around 2.5 lakhs ASHAs and 40,000 health staffs including programme managers at district and block level, doctors (MOs), staff nurses (SNs) and ANMs have been sensitized for breastfeeding promotion strategies under MAA programme and around 2800 health facility staffs (MOs, SNs and ANMs) are trained in 4 days IYCF training. In addition more than 75,000 mothers' meetings were also carried out by ASHAs at village level to sensitize mothers regarding importance of appropriate breastfeeding practices.

Breastfeeding is an important efficient and cost-effective intervention promoting child survival and health. Breastfeeding within an hour of birth could prevent 20% of the newborn deaths. Infants who are not breastfed are 15 times more likely to die from pneumonia and 11 times more likely to die from diarrhoea than children who are exclusively breastfed, which are two leading causes of death in children under-five years of age.

In addition, children who were not breastfed are at increased risk for diabetes, obesity, allergies, asthma, childhood leukaemia, sudden infant death syndrome etc. Apart from mortality and morbidity benefits, breastfeeding also has tremendous impact on improved IQ. The trend of breastfeeding has shown an upward trend. As per recent data, initial breastfeeding has been nearly doubled in last decade, i.e. from 23.4 per cent to 41.6 per cent (NFHS-3, 2005-06 and 4, 2015-16). Significant improvement has also been reported for exclusive breastfeeding as proportion of children, under age 6 months exclusively breastfed, has gone up to 54.9 (NFHS-4) per cent from 46.4 per cent (NFHS-3). However, there is further scope of improving initial breastfeeding rates considering the high proportion of institutional deliveries in the country. 



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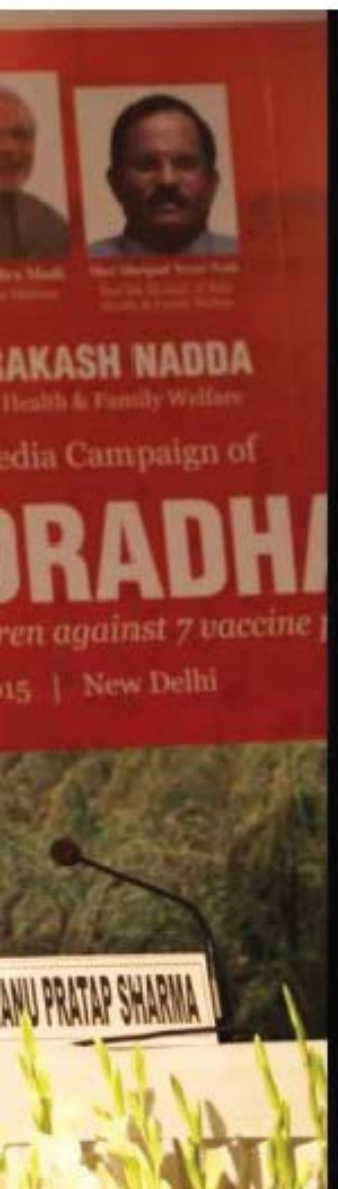


# The War on Death

Intensified Mission Indradhanush, with greater focus on convergence with other ministries / departments, targets full immunization coverage by 2018 to prevent mortality and morbidity in children and pregnant women across the country

**BY ABHIGYAN**





**W**ith the aim to accelerate the full immunization coverage and provide greater focus on urban areas and other pockets of low immunization coverage, the Ministry of Health and Family Welfare (MoHFW) has drawn up an aggressive action plan to achieve the target by 2018. According to the plan, states will conduct Intensified Mission Indradhanush drives for 7 working days from 7th day of every month starting from 7th October 2017 for four consecutive months excluding Sundays, holidays and routine immunization days. A total of 118

districts, 17 urban areas and 52 districts of North East states will be targeted under this activity.

Under Intensified Mission Indradhanush, greater focus will be given on urban areas which were one of the gaps of Mission Indradhanush. This will be done through mapping of all underserved population in urban areas and need-based deployment of ANMs for providing vaccination services in these areas. Mobility support to field staff for deployment in urban as well as rural areas will be provided.

Intensive monitoring and strong accountability mechanism is being established at all levels with Cabinet

Secretary at national level and the Chief Secretary at state level reviewing the preparations and progress. Every district identified under Intensified Mission Indradhanush will be monitored by partners through an identified nodal person for each district. Further, emphasis will also be given on integration of Intensified Mission Indradhanush sessions into routine immunization microplans after completion of rounds. The integration of these sessions will also be monitored by partners and senior government officials.

A distinctive feature of Intensified Mission Indradhanush is that greater





**LIST OF DISTRICTS AND URBAN AREAS IDENTIFIED FOR INTENSIFIED MISSION INDRADHANUSH**

| S. No. | State w         | No. of Districts | Name of Districts |            |
|--------|-----------------|------------------|-------------------|------------|
| 1      | Andhra Pradesh  | 2                | East Godavari     | Nellore    |
| 2      | Bihar           | 14               | Champan East      | Darbhanga  |
|        |                 |                  | Champan West      | Madhubani  |
|        |                 |                  | Muzaffarpur       | Sheohar    |
|        |                 |                  | Samastipur        | Gaya       |
|        |                 |                  | Sitamarhi         | Araria     |
|        |                 |                  | Saharsa           | Nawada     |
|        |                 |                  | Lakhisarai        | Katihar    |
| 3      | Delhi           | 3                | North             | South-East |
|        |                 |                  | Shahdara          | -          |
| 4      | Gujarat         | 3                | Banaskantha       | Bhavnagar  |
|        |                 |                  | Kutch             | -          |
| 5      | Haryana         | 3                | Mewat             | Palwal     |
|        |                 |                  | Faridabad         | -          |
| 6      | Jammu & Kashmir | 1                | Jammu             | -          |
| 7      | Jharkhand       | 2                | Giridih           | Pakur      |
| 8      | Karnataka       | 1                | Yadgir            | -          |
| 9      | Kerala          | 1                | Malappuram        | -          |
| 10     | Madhya Pradesh  | 13               | Tikamgarh         | Jhabua     |
|        |                 |                  | Chhatarpur        | Vidisha    |
|        |                 |                  | Sagar             | Sidhi      |
|        |                 |                  | Rewa              | Panna      |
|        |                 |                  | Raisen            | Shadol     |








focus is being given on convergence with other ministries/departments especially women and child development, panchayati raj, urban development, youth affairs, NCC etc. The convergence of ground level workers such as ASHAs, ANMs, Anganwadi workers, Zila Preraks under NULM, and self-help groups will be crucial for the successful implementation of Intensified Mission Indradhanush.

Universal Immunization Programme (UIP) of India prevents mortality and morbidity in children and pregnant women against 12 vaccine preventable diseases. In the past, it has been seen that the increase in immunization coverage had slowed down and it increased at the rate of 1% per year between 2009 and 2013. To accelerate this coverage Mission Indradhanush was envisaged and implemented since 2015 to rapidly increase the full immunization coverage to 90%.

Four phases of Mission Indradhanush have been completed in 528 districts across the country. More than 2.47 crore children and around 67 lakh pregnant women have been vaccinated under Mission Indradhanush so far. The first two phases of Mission Indradhanush led to an increase of 6.7% full immunization coverage in 1 year as compared to 1% increase in the past. This increase has been more prominent in rural areas as compared to urban areas. 

|       |               |     |                   |                  |
|-------|---------------|-----|-------------------|------------------|
|       |               |     | Singrauli         | Sheopur          |
|       |               |     | Alirajpur         |                  |
| 11    | Maharashtra   | 9   | Nasik             | Beed             |
|       |               |     | Ahmednagar        | Solapur          |
|       |               |     | Nanded            | Yavatmal         |
|       |               |     | Jalgaon           | Gadchiroli       |
|       |               |     | Nandurbar         | -                |
| 12    | Odisha        | 1   | Ganjam            | -                |
| 13    | Rajasthan     | 11  | Alwar             | Jalor            |
|       |               |     | Barmer            | Karauli          |
|       |               |     | Partapgarh        | Udaipur          |
|       |               |     | Jodhpur           | Sawai Madhopur   |
|       |               |     | Bikaner           | Dhaulpur         |
|       |               |     | Pali              | -                |
| 14    | Uttar Pradesh | 52  | Bahraich          | Unnao            |
|       |               |     | Sitapur           | Shahjahanpur     |
|       |               |     | Moradabad         | Kaushambi        |
|       |               |     | Badaun            | Banda            |
|       |               |     | Hardoi            | Farukhabad       |
|       |               |     | Gonda             | Gorakhpur        |
|       |               |     | Barabanki         | Mau              |
|       |               |     | Jaunpur           | Kannauj          |
|       |               |     | Azamgarh          | Sant Kabir Nagar |
|       |               |     | Muzaffarnagar     | Deoria           |
|       |               |     | Balrampur         | Raebareli        |
|       |               |     | Kheri             | Rampur           |
|       |               |     | Aligarh           | Mirzapur         |
|       |               |     | Siddharthnagar    | Srawasti         |
|       |               |     | Mathura           | Kasganj          |
|       |               |     | Ghazipur          | Sonbhadra        |
|       |               |     | Kushinagar        | Ferozabad        |
|       |               |     | Sultanpur         | Etah             |
|       |               |     | Ballia            | Mainpuri         |
|       |               |     | Pratapgarh        | Ambedkar Nagar   |
|       |               |     | Maharajganj       | Badohi           |
|       |               |     | Bulandshahar      | Lalitpur         |
|       |               |     | Bijnor            | Auraiya          |
|       |               |     | Fatehpur          | Chitrakoot       |
|       |               |     | Basti             | Sambhal          |
|       |               |     | Saharanpur        | Hapur            |
| 15    | Uttarakhand   | 1   | Hardwar           | -                |
| 16    | West Bengal   | 1   | 24-Parganas North | -                |
| Total |               | 118 |                   |                  |





# Collapse of the System





The Gorakhpur tragedy where more than 70 children perished has shocked the nation. While the state government is trying to cope with its tragic aftermath, it needs to restore sanity and order to the ailing state of the state's health infrastructure that always leaves rooms for such disasters to happen

**BY AMRESH KUMAR TIWARY**

**T**ears rolled down the eyes of Abdul Razak, who hails from Imambara, a famous place in Gorakhpur, when he saw his nine-year-old son Wahid motionless due to gross negligence and incorrigible misconduct in Gorakhpur's Baba Raghav Das (BRD) Medical College and Hospital where deaths of over 72 children took place.

Like Abdul Razak several parents lost their lovable kids due to oxygen shortage. They want immediate cognizance of the crime and punishment to culprits. They lament the present system and demand a probe against persons who are responsible for this tragedy of such unprecedented proportions.

BRD Medical College and Hospital is the biggest hospital in Gorakhpur, which is also the hometown and

parliamentary constituency of Uttar Pradesh's Chief Minister Yogi Adityanath. The recent tragedy in BRD shook the entire government machinery. Everybody is shocked and mourns the heartbreaking deaths of innocent children.

The unfortunate deaths of children have been blamed on infections and possible disruption in oxygen supply in the paediatrics ward. The oxygen supply had been stopped by the vendor after the hospital had defaulted on the payment. The hospital had been functioning without any oxygen cylinders for two hours. But the hospital and district administration have rejected oxygen shortage as the reason. The government denied that the deaths had been caused due to shortage of oxygen since the hospital had made arrangements.

According to Gorakhpur district





administration claims, no death took place due to shortage of oxygen supply, it was due to different medical reasons. As far as the complaint regarding non-payment of dues to the company supplying the oxygen is concerned, it is a matter of inquiry.

As per the government version, there was existing alternative arrangement of 50 oxygen cylinders which was used, so there was no shortage of oxygen. Uttar Pradesh Health Minister Siddharth Nath Singh said that if anyone was found guilty, he would be made accountable.

#### What opposition blames

Many opposition leaders like that of Congress and Samajwadi Party including Leader of Opposition in Rajya Sabha Ghulam Nabi Azad, UP Congress president Raj Babbar, Rajya Sabha members Pramod Tiwari and Sanjay Singh visited the medical college and met families of the dead children. Former Chief Minister and SP chief Akhilesh Yadav held the state government responsible for the deaths and demanded strict action and compensation of Rs 20 lakh to the kin of each child.

#### What CM says

Chief Minister Yogi Adityanath during his visit to the hospital promised exemplary punishment for the guilty. Union minister JP Nadda, who had accompanied the Chief Minister, ruled out a separate investigation by the Centre, saying the state government had his ministry's "full support".

The Chief Minister has said it would be heinous if the children had died because of a disruption in oxygen supply. He also said the government had cleared the payment for the oxygen vendor on August 7. The hospital, however, had not released the funds till August 11.

BJP chief Amit Shah said the recent death incidence in hospital was a tragedy that happened at some level, but no one could deny the government's aim to help. He dismissed the demands raised by opposition parties that Uttar Pradesh Chief Minister Yogi Adityanath must resign.

The Yogi Adityanath government has emphatically denied any deaths because of the oxygen shortage, saying the disruption lasted only two hours and oxygen was arranged from other

sources.

Chief Minister Adityanath has ordered an investigation and has promised "standard-setting" punishment for anyone found guilty of negligence. The hospital's medical chief Dr Rajeev Mishra and head paediatrician Dr Kafeel Khan have been suspended.

**Dr K K Aggarwal, National President, Indian Medical Association**, has highly objected to the suspension of the. "Why the principal of Medical College has been suspended, why not Chief Secretary and other concerned officers have been jailed. It is really anarchy. We as medical practitioners cannot be subjected to the blame game. It needs to be probed", he asked vehemently. This move was criticized by the doctors at Delhi Medical Association (DMA) too.

#### Civic Apathy

Inside the hospital wards, where the media was allowed the condition was found to be very unhygienic. Less than 50 metres from the ICU, where many children were admitted with encephalitis, there were puddles of





water where mosquitoes were breeding. The wards were untidy and dusty. In some cases, even medicine bottles had been left open.

Samajwadi Party (SP) president Akhilesh Yadav alleged that the BJP government was trying to cover up the facts in the incident and dispatched a six-member delegation led by Leader of Opposition in UP, Ram Govind Chaudhary, to the hospital to take stock of the ground situation. They would submit their report to the SP chief. The former CM alleged that the kin of the dead were handed over the bodies and chased away. A post-mortem was also not conducted and the admit cards were also made to vanish.

BSP chief Mayawati demanded a high-level probe into the incident and suggested that CM Adityanath should exercise his “discretion” and sack his Health Minister as the deaths were a case of “criminal negligence.”

“No amount of condemnation of the BJP government is enough for this horrific incident,” Mayawati said, adding that it raised “100 questions” on the “potential” of the Yogi Adityanath government.

If the data available with the hospital is to be believed of the first 30 deaths that occurred on the very first day, only five were due to acute encephalitis syndrome or acute encephalitis syndrome (AES); one was due to hepatic encephalopathy, which is related to AES. The other deaths were of terminally ill newborns. Some of them suffered from diseases such as pneumonia, sepsis, and swine flu while others were preterm babies in a critical condition. Newborn babies don't suffer from AES. The list of deceased shows that only five children died of AES and one due to hepatic encephalopathy.

According to Dr Arvind Garg, senior consultant, pediatrics, Apollo Hospital, Noida, “As per the list, all other babies were newborns who were apparently in need of expert emergency care services. Such cases are very critical and need continuous supply of ventilation. Data shows that the hospital's record in curing patients admitted to its paediatric and intensive care units isn't good.”

Till July 2017, the total number of admissions to the pediatrics department was 3,878, of which 596 patients died. The figures for the neonatal intensive care unit (newborns) arouse even more concern—of the total 2,386 admissions, 931 died.

Uttar Pradesh has the worst infant mortality rate in the country of 78 (per 1,000 live births) according to the National Family Health Survey- IV (2015-16). The national average is 41.

#### **Ailing Health**

In light of the deaths at BRD Medical College, child health specialists have pointed to the importance of strengthening emergency medical services in the state.

According to Dr Soumya Swaminathan, secretary, Department Of Health Research, Union health ministry, and director general at the Indian Council of Medical Research (ICMR), “We had conducted a special workshop on emergency care at BRD

Medical College. Intensive care management of sick patients and ventilator management is an expertise which is lacking in the state. We recently conducted a workshop at the hospital and trained doctors. We involved many private experts and doctors from government hospitals from Delhi. So many patients cannot die of encephalitis in two days. In fact, when ICMR came up with a report under National Japanese Encephalitis Control Programme in Uttar Pradesh, especially in Gorakhpur, only 5 to 10% of cases were of Japanese Encephalitis. With high death rate of infants, it is apparent that intensive care units are poorly managed and they don't have trained staff.”

In general, public health programmes in Uttar Pradesh are in a sorry state. In the last 15 years, the population of the state has increased by 25% but the number of public health centres, the core health facilities of the government, has actually fallen by 8%.

BRD Medical College hospital is the only hospital in a 300 sq km stretch of the region with decent facilities to treat encephalitis and similar infectious diseases. This hospital treats patients coming from Gonda, Basti, terai regions Nepal and eastern districts of Bihar. These are the districts where cleanliness and sanitation have been a major problem. In fact, in the Swachh Bharat Survey 2017, Gonda was declared as the dirtiest district in India.

#### **Menace of Encephalitis**

The incidence of encephalitis in these districts is very high particularly among children below 8-10 years of age. The Japanese Encephalitis and Acute Encephalitis Syndrome are caused by mosquito bites of *Culex vishnui* and *Culex tritaeniorhynchus*. Filth is home to these species of mosquito. Every year, monsoon season is the worst season for children in Gorakhpur.

Encephalitis is an inflammation of the brain which can cause fever,



headache, confusion, seizures, and, in some cases, death. Fewer than 1 percent of people infected with the virus develop symptoms. However, according to the World Health Organization (WHO), it is fatal for 30 percent of those who do develop symptoms.

AES is characterized by an acute onset of fever and clinical neurological manifestation that includes mental confusion, disorientation, delirium, or coma. Viruses have been mainly attributed to be the cause of AES in India although other sources such as bacteria, fungus, parasites, spirochetes, chemical, and toxins have been reported over the past few decades.

Apart from viral encephalitis, severe form of leptospirosis and toxoplasmosis can cause AES. The causative agent of AES varies with season and geographical location, and predominantly affects population below 15 years.

Keeping in mind the wide range of causal agents and the rapid rate of neurological impairment due to pathogenesis, clinicians face the challenge of a small window period between diagnosis and treatment. The present report is based on results obtained after reviewing various surveillance and outbreak investigations illustrating how the perspective of AES has changed in India over the years.

### AES in India

Several government initiatives have been undertaken to educate and improve the hygiene of people living in the Japanese encephalitis (JE) endemic zones. Government and non-government organizations have been instrumental in providing proper nutrition to the AES-affected population as most of the affected people belong to the lower economic strata of the society. There have been initiatives to help the people residing in the endemic zones for alternative professions such as giving up pig-rearing since pigs are the primary host



for JE viruses. Special schools have been set up to help children challenged by clinical sequelae of JE infection

AES was coined way back in 2008 by the World Health Organization to streamline the surveillance and research of AES in India. Over the years, the scenario of AES in India has improved significantly in terms of research and health care facilities. Albeit the development of vaccine against JE and minocycline is under the clinical trials, AES cases in India have not restricted itself to the JE aetiology. This is the biggest challenge clinicians in the field are facing.

Records show that at least 114 children have died this year in Gorakhpur due to encephalitis, which has claimed around 25,000 lives in the last four decades.

### What Doctors Say on JE

**Dr H P Singh, Senior Child Specialist, Mother & Child Care, Vaishali (Ghaziabad)**, said, "A person with Japanese encephalitis will probably have no symptoms at all, but if there are symptoms, they will appear 5 to 15 days after being infected. A

person with a mild infection may have only a fever and a headache, but in more severe cases, symptoms can develop quickly.

There may be a headache, high fever, tremors, nausea, vomiting, stiff neck, and spastic paralysis. Signs of altered mental status include stupor, disorientation, and coma. Children may have convulsions. There may be swelling of the testicles.

If the brain is involved, life-long neurological defects can result, such as deafness, uncontrollable emotions, and weakness on one side of the body. The chance of survival varies, but children are most at risk.

According to **Dr Sarvesh S Joshi, Senior Child Specialist and Secretary, Jaipur Medical Association, Jaipur**, "Mosquitoes become infected by feeding on wild birds and domestic pigs that have been infected with the virus. The mosquitoes then pass the virus to humans and animals. Birds and other animals cannot transmit the infection to humans. Only infected mosquitoes can pass it on. The mosquitoes mainly live in agricultural and rural areas.





Their larvae breed in pools of water, for example, flooded rice fields.

To diagnose Japanese encephalitis, the doctor will take into account the patient's symptoms, where they live, and anywhere they have been visiting. This can help to determine the likelihood of having the disease. If they suspect encephalitis, the patient will undergo tests such as a computed tomography (CT) scan or magnetic resonance image (MRI) of the brain.

A lumbar puncture or spinal tap may be used to draw fluid from the spine. The results can show which virus is causing the encephalitis. Immunofluorescence tests can detect human antibodies. The antibodies show up after being tagged with a fluorescent chemical.

### Treatment and prevention of Japanese Encephalitis

There is no treatment or cure for Japanese encephalitis, but there is a safe and effective vaccine that can prevent infection. Travelers should take precautions in areas where Japanese encephalitis is endemic. The vaccine is recommended for people

traveling to areas where the disease is endemic, for those on short-term trips lasting less than a month, for people visiting areas where there is an outbreak, and for those participating in outdoor activities.

Once a person has the disease, treatment can only relieve the symptoms. Antibiotics are not effective against viruses, and no effective anti-viral drugs have been discovered. People who spend time outdoors in rural areas should use protective clothing, bed nets, and repellents, and they should sleep in air-conditioned or well-screened rooms.

A person who is new to an area of prevalence does not usually have a natural immunity to the Japanese encephalitis virus. This means that travelers of all ages are more vulnerable to infection than those who have always lived in an area where the disease is found.

In the case of an outbreak, people who live in affected communities should remove pools of standing water, where mosquitoes can breed, and they should use an insect repellent. The most effective insect repellents contain a chemical called diet.

### Gorakhpur: In the Clutches of Encephalitis

According to government official records, between January last year and first week of September, 920 patients of encephalitis were admitted to the BRD Medical College hospital. But, this is not the story of a singular isolated year. It is being repeated every year in Gorakhpur since 1978.


This year, 114 encephalitis deaths

have been reported till now. Gorakhpur has been in the grip of JE and AES for four decades. Both kinds of encephalitis are viral infections that affect the brain, lead to coma and cause death. At times survivors are left with serious disabilities - mental and physical.

Records show that hundreds die every year in eastern UP due to encephalitis. Gorakhpur is the epicentre of encephalitis-induced deaths. According to official figures, around 25,000 children have died since 1978 due to the two types of encephalitis. And, these are only recorded deaths. Independent figures put the toll around 50,000 as many kids die without reaching hospital.

The Yogi Adityanath government launched a massive anti-encephalitis vaccination programme this year. But, the results may take some time to yield desirable results.

The children's deaths have a history which began in India with the first report of AES death in the then Madras Presidency in 1956. When it seemed that the viral outbreak had been contained, West Bengal shocked the country in 1973 when around 300 deaths took place in Burdwan and Bankura districts. By 1978, Uttar Pradesh came under attack from the encephalitis viruses. But, the encephalitis threat grabbed attention only in 2005 when 1,344 of 5,737 affected children were killed across Uttar Pradesh. In 2007, a vaccination programme was launched with drugs imported from China. The drive achieved success in many states but somehow Gorakhpur and surrounding areas continued to stay in the grip of encephalitis.

Eastern Uttar Pradesh, where Gorakhpur is located, continues to be one of the most backward areas of the country. Poverty and poor health services go hand in hand in the region. The government or charity hospitals are overburdened. Still, the government authorities cannot be absolved of the serious neglect that has been unable to prevent the deaths of children due to various reasons year after year. 



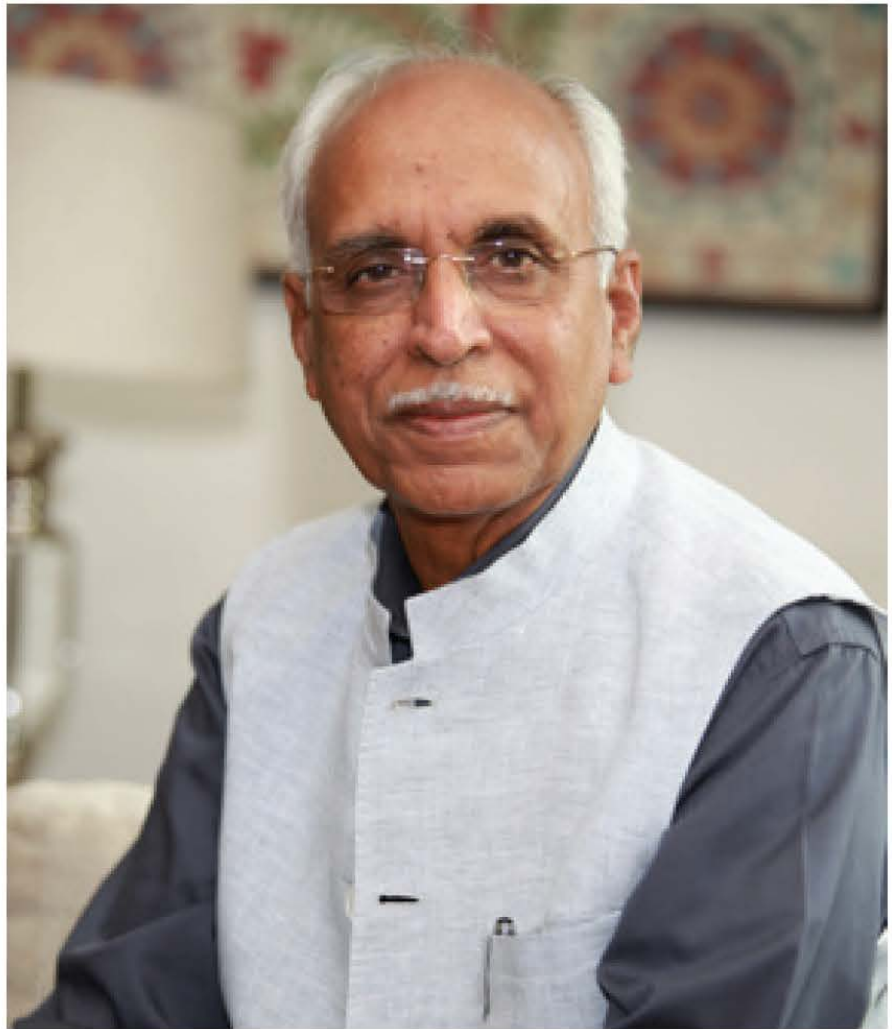


# Coping with Challenges

As unfavourable outcomes cannot be ruled out, medical professionals need to make a sincere attempt to adhere to patient safety guidelines, improve communication and adopt efficient work processes and documentation. Patients on their part need to take a realistic view of the cost of healthcare as absence of safety may cost lives

**BY DR VIJAY AGARWAL**





**T**here is hardly a gathering where medical profession is not being discussed with negative overtones. Not a day passes when the media does not draw attention to some event which serves to continue to multiply the trust deficit between public and medical professionals.

Highlighting of medical errors by media and violence faced by medical profession, has pushed medicos to the wall and has left them bewildered.

A dispassionate analysis will reveal the problems to exist at many levels. Let us look and discuss two major situations faced by the community and talked about in the media:

**Unfavorable outcomes:**

Healthcare delivery has become so complex and hi-tech that even advanced

countries are grappling with the issue of adverse events and unfavorable outcomes. The Joint Commission's Annual Report on Quality and Safety 2007 found that inadequate communication between healthcare providers, or between providers and the patient and family members, was the root cause of over half the serious adverse events even in accredited hospitals. Other leading causes included inadequate assessment of the patient's condition, and poor leadership or training. Inadequate documentation adds to the problems in case of dispute.

One of the reasons for this scenario has been the fact that clinicians have kept themselves away from learning soft skills and unfortunately this aspect is still not a part of our medical curriculum. Added to this scenario is also the inability of the clinician to

comprehend that delivery of healthcare service is now teamwork.

There is a dire need for medical professionals to make a sincere attempt to adhere to patient safety guidelines, improve on communication with patients and adopt efficient work processes. Patient safety has become a distinct healthcare discipline. Extensive research across many disciplines is enriching this specialty.

Clinicians are rather reluctant to learn from quality/hospital managers who have learnt on the job and are "specialists" in quality. Most of the time, these quality managers are much junior in hierarchical set-up of the hospital and are not able to convince senior clinicians about the need for following processes and documentation. On the other hand, senior administrators focus their entire



attention on the balance sheet and consider issues raised by the quality manager as unnecessary. Needless to say, quality implementation can happen only with the active involvement of all stakeholders and with clinicians taking up the leadership.

The SOPs and guidelines have to be owned by all the members of a department/hospital. In most hospitals there is no concept of regular structured Departmental or Functional Group meetings (Operational Excellence Meetings).

The concept of “Operational Excellence Meetings” involves all departments in association with Quality team and Management representation and has a defined agenda for discussion at predefined and regular intervals. These meetings help clinicians and nurses be responsible for quality while the role of quality personnel is to mainly audit the work; and to present the findings in these meetings.

**Exorbitant Cost of healthcare:**

In the mind of the public, the cost of private healthcare has become “unreasonably” expensive and the reason for this is perceived to be ethical and malpractice issues.

When something is termed as “unreasonable” there is a need to understand the foundation, i.e., the cost of quality healthcare delivery. No doubt, this answer is not readily available as it is far more complex than it sounds. Various efforts have been made to work out package costs for various procedures. Here again, there are many variables depending upon, whether the hospital is secondary care or tertiary care, whether it is single specialty or multi-specialty, whether the hospital is located in tier-I, II or III city. A few insurance companies have attempted to develop differential packages based on some of these considerations. In case of some of the government health insurance schemes, the costing of various procedures has been fixed on the basis of L1 (lowest) quote from the tenders invited from private hospitals. However, these efforts have not met the



expectations of either the consumers or the health care providers.

**Analyzing Operational Healthcare Cost:**

The major cost heads factored for computing the operational cost of a procedure are generally taken based on the direct cost comprising of fee to the doctor and cost of drugs and other medical consumables. There are other innumerable indirect costs i.e. salary for allied healthcare workers including nursing staff, lease of land/rent, administrative cost, power and utilities, legal and regulatory compliance and the cost incurred on marketing and advertisement of services. The interest on the capital employed for plant and machinery and the working capital is also significant. Medical equipment is expensive, has a limited life resulting in depreciation adding to the cost.

Pricing for most procedures is arbitrary and is based on market forces rather than on actual costing. Hospitals are making money on some components while losing on many others. The money making ones get highlighted while the very economical ones are not mentioned at all. Despite the perception that private hospitals make huge profits, the fact is that most of these establishments are financially stressed and ROI (Return on Investment) is very slow and poor.



Hospitals need to correct their billing and pricing procedures and the community must understand this and give time for this change to happen. One of the simple ways to understand the cost involved in healthcare delivery will be to analyze the expenditure in Government run hospitals.

Healthcare is also becoming an election agenda and an increasing number of government health insurance schemes are being launched for certain section of the society to meet with the intended objective of Universal Health Coverage. These are largely cashless schemes where patients can visit hospitals of their choice and receive





treatment for secondary/tertiary levels of ailments. As per an estimate made by the World Bank, nearly 50% of Indian population is being covered under some or other kind of insurance. Yet, the flip side is that scheme owners (government) have been fixing the package rates for various medical procedures unilaterally without involvement of healthcare providers. Most of these rates are unviable for tertiary care/ super-specialty hospitals complying with quality standards as shown by a recent study conducted by Govt of Karnataka with support from IIMB, AHPI and CAHO.

With a large majority of population getting covered either through government insurance or through private insurance, hospitals will be left with little option but to accept patients at these unviable rates. While hospitals may manage some degree of sustenance through cross subsidizing from cash paying patients, it is a situation that will ultimately affect the quality of services for very obvious reasons. The Government and insurance companies therefore need to take cognizance of the fact that safe healthcare would cost a definite amount, whereas absence of safety may cost lives and accordingly need to fix the cost of medical procedures on scientific basis, and not on basis of tendering and perception.

There is a general perception that healthcare is expensive for the simple reason that the common man does not budget for it. Sickness is never anticipated and is considered as a not-likely-to-happen event. Under the circumstances, the cost of treatment for major ailments appears deceptively high. Yet another reason for such a perception comes as government run community health centers or hospitals extend free healthcare services. We do not realize that FREE healthcare is actually not FREE. It comes from the tax payer's pocket. 🇮🇳

## STEERING HEALTHCARE STANDARDS

Dr Vijay Agarwal is, currently, the President of Consortium of Accredited Healthcare Organization (CAHO) and Advisor to Max Healthcare focused on Quality & Business Excellence. He is an Advisor to Global Association of Physicians of Indian Origin.

Over the last four decades he has played a key role in making an impact in improving the state of healthcare in India. He played an anchor role in driving national programs such as Pulse Polio Program and introducing Centralized Waste Management Scheme in Delhi. These programs have had far-reaching impact.

He has been the chairman of Nursing Home Forum of Delhi for ten years from 1992 to 2002.

Dr Agarwal is a graduate and post-graduate in paediatrics from the prestigious Maulana Azad Medical College and continues to leverage his expertise as an excellent organizer, strategist & administrator.

He is playing an important role in promoting quality through accreditation in healthcare. He is the co-chairman of Accreditation Committee of NABH (National Accreditation Board for Hospitals & Healthcare Providers).

He has conceived the idea of training quality implementers in the country. Already, more than 280 professionals have been trained in the basic program approved by NBQP. The advanced program has been approved by HSSC (Health Sector Skill Council) and has 80 plus professionals who have been trained.

He is the founder President of Society for Child Development. The society works towards vocational training of mentally challenged children and their work has footprints all over the country.

He is a recipient of Distinguished Alumnus Award of Maulana Azad Medical College and Lifetime Achievement Award of Indian Medical Association



# Shahnaz Husain: Now a “SUBJECT” AT THE HARVARD BUSINESS SCHOOL

Thanks to her extraordinary business acumen coupled with a relentless passion for promoting India's priceless legacy of natural beauty and wellness system, Shahnaz Husain has today become a 'Subject' at the prestigious Harvard Business School

**BY BIPIN SHARMA**

**P**adma Shri awardee and India's celebrated Herbal Beauty Queen Shahnaz Husain has won many laurels in her long entrepreneurial journey that began more than 35 years ago. She has been globally recognized as a beauty and wellness icon, and a global pioneer of organic beauty care and Ayurveda. Currently, her Group operates in more than 100 countries, where it runs a chain of franchise salons, direct product distributors and beauty institutes. Known for introducing a totally new concept of Ayurvedic Care and Cure worldwide, the Beauty Diva is determined to take Ayurveda to every nook and corner of the globe. Chartering phenomenal business success after having been married at the tender age of 15, and becoming a mother by the time she was 16, today she epitomizes 'women empowerment' in the truest sense, and has for the last four decades been a huge source of inspiration for women all over the globe.

Adding another feather in her cap,

Shahnaz Husain has now become a 'Subject' at the world's premier B-school, the Harvard Business School. It has been no ordinary feat since very few personalities who get chosen as 'Case Studies' eventually go on to become a 'Subject' at the Harvard Business School curriculum. Prior to becoming a regular Subject on "Brand Creation in Emerging Markets" at the HBS, Shahnaz was a 'Case Study on Brand Creation'. She has captivated audiences with brilliant lectures at the Harvard Business School, MIT, Oxford University and London School of Economics on 'Brand India and Ayurveda', wherein she has narrated how she was successful in creating an international brand alongside a global network of franchise ventures sans any commercial advertising. Her accomplishment has brought laurels to the nation, and Shahnaz on her part feels overwhelmed with the global recognition.

What really inspired the HBS to include her as a 'Subject' in their curriculum was her extraordinary









business acumen coupled with her relentless passion for promoting Ayurveda in the beauty and wellness segment,

A prized video interview of Shahnaz Husain titled "Creating Emerging Markets" conducted by Harvard Professor Sunil Gupta from Boston sometime ago has been included in a 'Question-Answer Format' as part of the HBS Teaching Curriculum. An exclusive Harvard Conference on "Creating Emerging Markets" was organized at Taj Lands End Hotel in Mumbai on 13th Feb'17 with Shahnaz as one of the key participants.

HBS is consistently ranked among the leading business schools in the world, and was ranked 1st in the United States by US News & World Report in 2016.

Notable among other participants in the conference were Professors Geoffrey Jones and Tarun Khanna from the Harvard Business School. The event was built around the video interviews conducted by Harvard on how Business Leaders have Created Emerging Markets (CEM), a foundational effort by the School to capture, through carefully curated video interviews, the history of business leadership in South Asia, Latin America, and Africa, in which Shahnaz Husain's interview has an important contribution.

In the comprehensive video interview conducted by Professor Sunil Gupta, Shahnaz had discussed the various facets of her life, initial struggles in Tehran, personal milestones, future aspirations, Corporate Social Responsibility (CSR) initiatives, and more significantly, how she broke the shackles as a young teenage bride and mother to pioneer natural beauty products market and Ayurveda'. Through the interview, one comes to know how Shahnaz had to make herculean efforts to make it to the top rung beauty training institutes of London, Paris, New York, Germany and Denmark.

Professor Sunil Gupta was accompanied in his interview by senior researchers of the Harvard Business



School Research Centre. The Interview highlights how Shahnaz's franchise model enabled her to expand her business horizons along with helping her provide employment and empowerment to countless women pan India and overseas. Her distribution network strategy synergized with her concept of shop-in-shops, with advisors, clinics, salons, spas, and also franchises out products to other FMCG companies did wonders. Then there is the mention of the vision and grit of the phenomenal entrepreneur, and how it paved the way for her to revolutionize and transform the beauty business.

The official statement from Geoffrey

Jones, Isidor Straus Professor of Business History, Harvard Business School says it all, "We felt compelled to include Shahnaz Husain in Harvard Business School's Creating Emerging Markets project, both because of her entrepreneurial role in creating India's natural beauty market and her strong belief in the importance of corporate social responsibility. In both regards, she is a pioneer and a role model, and we were delighted and humbled that she was willing to spare her time to help the project succeed. We anticipate that the interview will be widely used by educators and researchers, and by many others interested in seeing how





Shahnaz Husain with Professor Sunil Gupta

she became so successful and impactful.”

Sharing his views on the Golden journey and the landmark achieved by Shahnaz, Global Pioneer in Holistic Medicine, Dr RK Tuli said, “Shahnaz Husain becoming a Subject at the HBS is a watershed moment as it would enable educators and researchers to take a leaf out of the books of the genius. The credit goes to her for showing the world a new dimension to feel and look good the natural way with her extensive range of skin, hair and beauty care herbal formulations.

Commenting on the Harvard

achievement, Shahnaz said, “The Harvard case study is about how to build a global brand without using formal marketing or advertising techniques. They said I violate every norm they teach about advertising and publicity.”

She added, “I have incessantly followed a clinical system, diagnosing skin and hair problems and writing prescriptions. I always advise people to never give up because this way, they can never fail. Evaluating my success story in hindsight, I feel fortunate that I was in the right place at the right time. At a time when the world needed an

alternative to chemical products, I chipped in with Ayurveda and herbal solutions.”

With the passage of time, these formulations have broken new glass ceilings in the Ayurvedic industry. As a tireless crusader of Ayurveda, she has promoted country’s ancient herbal heritage and holistic beauty care at International Beauty Congresses such as CIDESCO when India had literally no representation or invitation. She earned the sobriquet ‘Global Beauty Ambassador’ chiefly for promoting India’s image in the western world.

Equally commendable has been her role in spreading awareness about the perils associated with chemical based cosmetics. A ‘trendsetter’ in the true sense, she introduced the ‘Plant Stem Cell’ Beauty products in the USA. While ‘Innovation’ has been the secret of her success, the fact that she has never been complacent about her laurels is what really sets her apart.

By holding press conferences and regular participation in trade shows/fairs, she was successful in making an everlasting impact on the world. Promoting one of the most ancient civilizations in the world was no joke, but the mission was made possible by the sheer determination of the phenomenal Shahnaz who assiduously led from the front in promoting India’s priceless legacy Ayurveda’ in the beauty and wellness segment, like no one else.

“I firmly believe that India will lead the billion dollar cosmetic Industry into the next century with its ancient herbal heritage. By incorporating some systemic changes, and getting all stakeholders on board, India stands strategically poised to win a lion’s share of the ‘beauty and wellness’ business on a global level. The creation of a dedicated Ministry of AYUSH in the year 2014 by the Government of India has done a world of good for ensuring the optimal development and propagation of AYUSH systems of healthcare,” said a beaming Shahnaz, the pioneer of natural beauty products. 





# When the ‘God of Art’ painted the Empress of Beauty’

**BY TEAM DOUBLE HELICAL**

It is not every day when you get to see two iconic geniuses of their respective fields meet under one roof. But when it actually happens, it creates ‘history’ and becomes an unforgettable moment of life that leaves one with

memories to be cherished for times to come. Shahnaz Husain has some really fond memories of the time spent with the iconic MF Husain in London.

Going into the nostalgia, she reminisces the time when she went to

pay a visit to MF Husain in London and as fate would have it, became a ‘muse’ for the ‘Picasso of India’, as the man was fondly referred to.

What really bowled her over was the sheer humility of the world renowned artist who had no fuss or qualms



being casually seated on the floor as he sketched Shahnaz's portrait.

Then there was another chance meeting of Shahnaz with MF Husain at Starbucks in London. It so happened that he was leaving, but on seeing Shahnaz, he stopped and scribbled a note, and just walked away bare foot.

#### HERE IS THE WHOLE STORY IN THE WORDS OF SHAHNAZ:

"His paintings have fetched astronomical bids, but this sketch bears testimonial to the fact that despite his colossal talent and fame, he remained a close friend, and more significantly a good human being who never lost his humility. The man had absolutely no airs about him, and I can never forget the time spent with him. He was known as "Picasso of India" because of his phenomenal talent. I remember him as a dear friend and a great human being. It seems just the other day when I met him at Starbucks in London. He always seemed to be full of energy and vitality.

He scribbled a note to me on a small paper and walked away bare feet..... the man who had the world at his feet! Whenever I made a request, he was always there for me. I feel really touched how he designed and sketched the card for my daughter's wedding. The void he has left, in the world of art and in my heart, can never be filled. We should continue to celebrate him and his works. We cannot lose the Husain magic in the archives of time. My portrait, painted by M.F Husain, is indubitably my most prized possession. He depicted me as a Mughal Empress and told me, "This is my impression of you....the way I perceive you." The portrait is very close to my heart and always will be. It has immense pride of place in our sitting room in New Delhi. It seems like yesterday when I was shopping at Selfridges in London and we met. I was wearing a red kaftan.

He suddenly insisted on painting me and wanted me to go home, so that he



could start painting at once. I cancelled an important meeting with a cosmetic buyer and went home! Later, he visited my house in Greater Kailash and left the painting with a note. Today, it hangs in my home – a reminder of that beautiful and unforgettable day in London when he painted my portrait. The sketch he made of me came under the hammer recently, at Christie's in London.

He had this habit of making

sketches. Whenever he visited us, he would make sketches of horses and leave them in our house. I remember the time he made this sketch, when I visited him in London. He sat on the floor, very casually, and sketched it. His paintings have fetched astronomical bids, but this sketch bears testimony to the fact that despite his enormous talent and fame, he always remained grounded, and never lost his humility."



**B**reast cancer is the commonest cancer of women in the world. In India, the incidence of breast cancer is increasing and it has become the leading cancer of women in major cities. While there have been tremendous advances in the treatment of breast cancer leading to excellent survival, not much headway has been made in preventing breast cancer. Detection of breast cancer at an early stage is, however, possible and effective in reducing deaths from breast cancer.

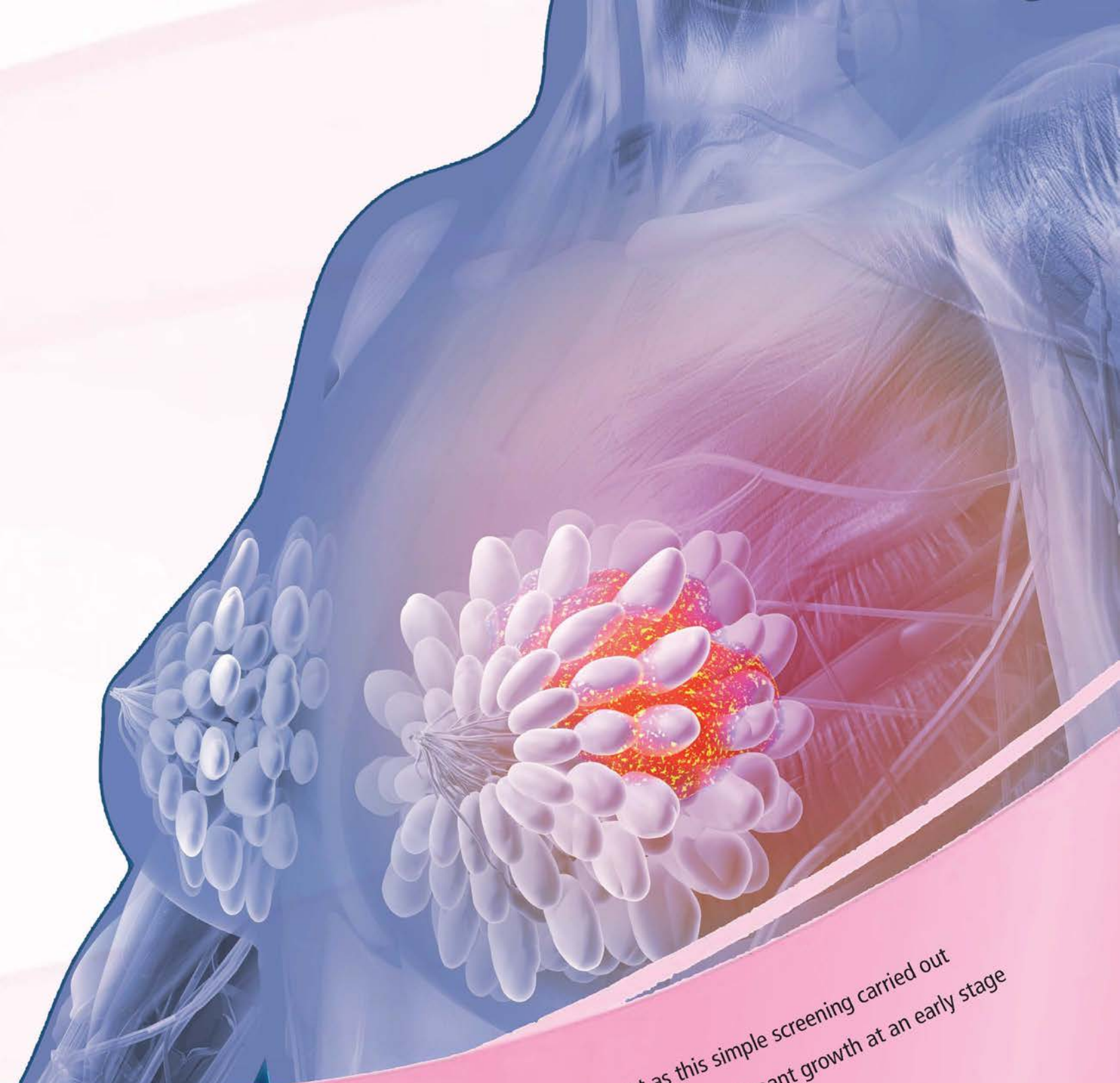
Early detection of breast cancer can be achieved by three approaches: breast self-examination, check up by a doctor and mammography. Breast self-

examination means examination of breasts done by the woman herself. A woman is the first person to know and feel the changes happening in her breasts. BSE is an essential part of taking care of oneself. Breast self-examination is the simplest and the cheapest screening test which can be carried out by every woman, in the privacy of her home.

It is advisable to carefully learn and practice the various steps of breast self-examination so that you are aware of normal feel of your breasts. With regular self-examination, it will become easier for you to know if something unusual has occurred. Any new change you observe or feel should be brought to the notice of your breast

**Be Breast Savvy**

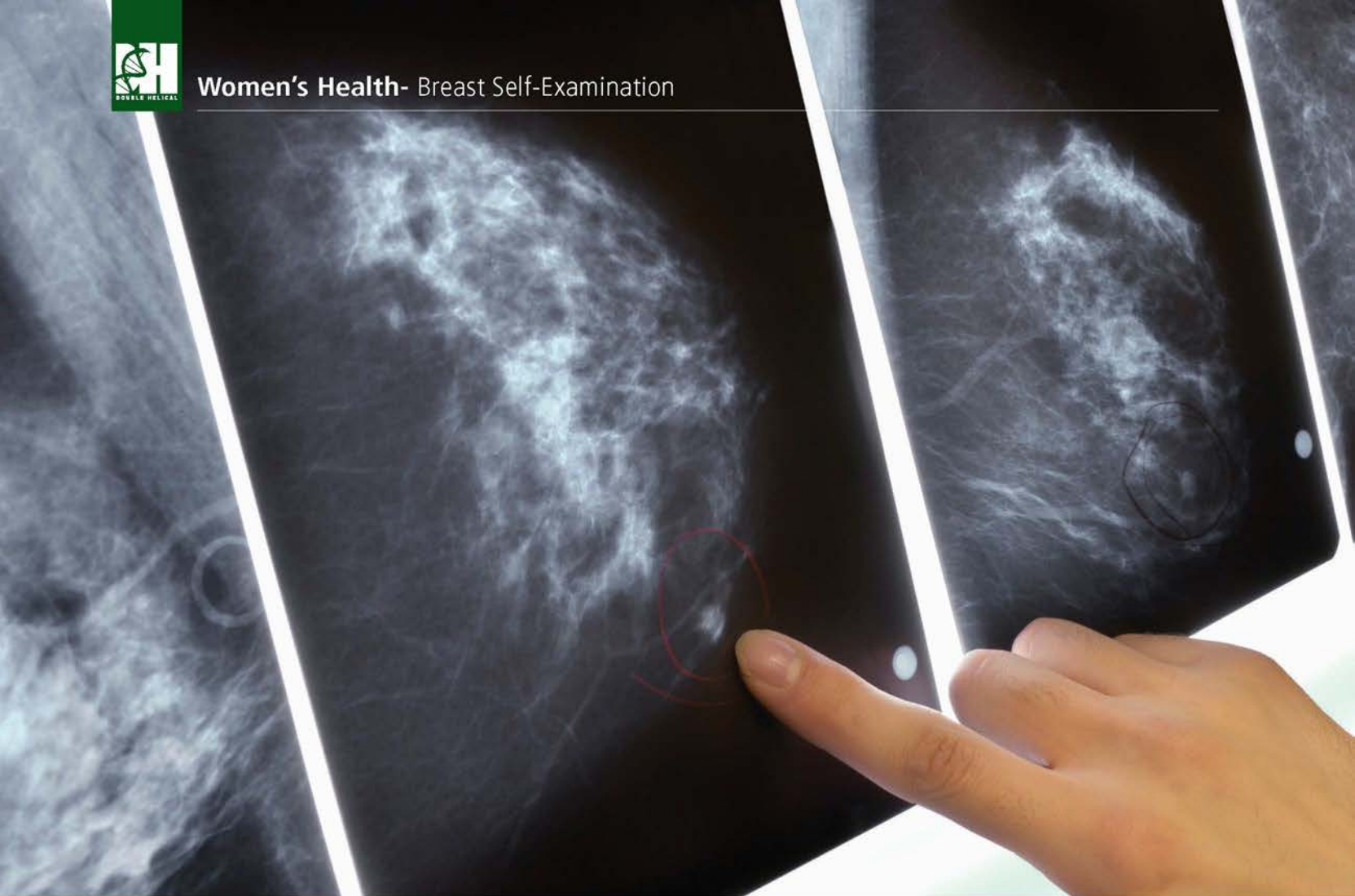




Your breasts need regular examination on your part as this simple screening carried out in the privacy of your home comes handy in the detection of any malignant growth at an early stage

**BY SURGICAL ONCOLOGY TEAM**





surgeon.

Throughout a woman's life, various changes occur in her breasts. At the onset of puberty, the breasts start gradually growing in size to attain adult size. There can be minor differences in size and shape of the two breasts. During pregnancy and lactation, the breast size again increases. During each phase of menstrual cycle certain changes occur in female breasts. Near the menstrual phase, breasts can feel lumpy, painful/tender or sore to touch. After menopause again, there are changes in breast size. Breasts can feel much softer after menopause due to more fat in them.

### What is the best time to do BSE?

The best time to do breast self-examination is one week after the last day of periods. For ladies who are pregnant and those who have attained menopause, it is advisable to mark same date each month on the calendar to conduct this examination.

### Who should do BSE?

Every woman above the age of 18 years should do BSE every month.

### How should BSE be done?

You should know the correct way of doing BSE. It should be carried out in step wise manner as described below.

#### Step 1

Begin by looking at your breasts in the mirror with your shoulders straight and your arms on your hips.

Here is what you should look for:  
Size, shape, skin colour, position of nipple, skin ulcer, rash/scaly skin of nipple or areola

- Lump, firmness or thickening
- Swelling, redness of breast skin
- Change in the size or shape of breast
- Dimpling, puckering or bulging of the breast skin
- Itchy, scaly sore or rash on the nipple/areola



- Inversion/pulling in of your nipple (Nipple retraction) instead of sticking out
- Nipple discharge especially dark brown and bloody

**Compare both breasts visually for**





your finger and thumb and check for nipple discharge. If there is any discharge, look for the colour of discharge

**B: Is it milky, clear yellow, dirty greenish, dark brown or blood?**

**Is it coming from a single opening or multiple openings?**

**Step 2**

Now, rest your palms on your hips and press down firmly while holding the shoulders back so that your chest muscles are flexed. Check for any changes in appearance. During each of these four steps you should rotate your upper body from side to side. By regular inspection you will see what is normal for you. Now bend forward with your hands still on your hips and observe again.

**Step 3**

Feel your breasts while lying down, using your right hand to feel your left breast and then your left hand to feel

your right breast. This is the most comfortable position for examining your breast.

Feel the entire breast from top to bottom and side to side—from your collarbone to the top of your abdomen, and from your armpit to the central breast bone.

**Step 4**

Finally, feel your breasts while you are standing or sitting. The easiest way to feel your breasts is when the skin is wet and slippery, that is when you are in the shower or having bath. Feel your entire breast, using the same hand movements described in Step 3.

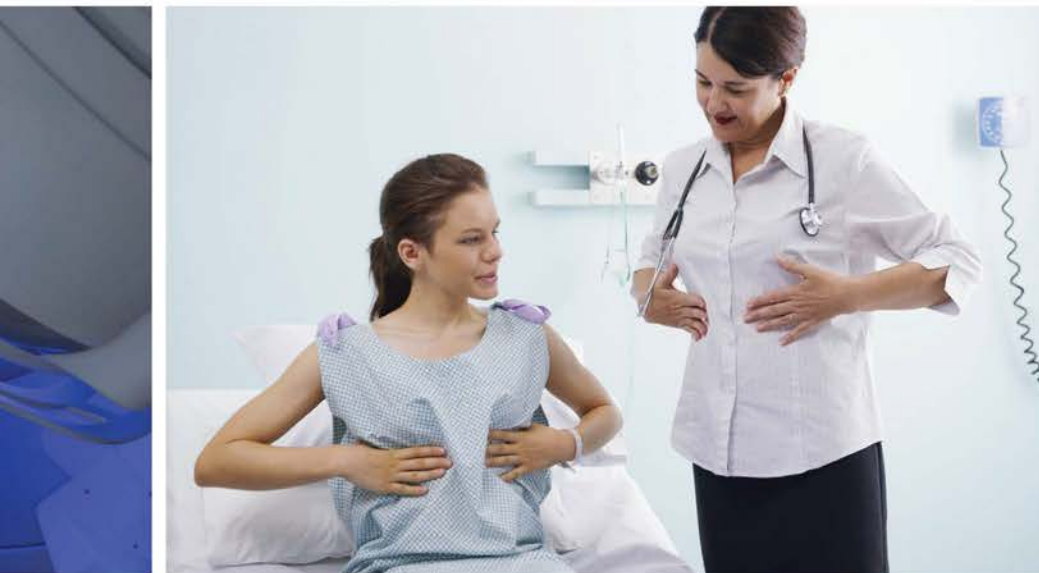
**What to do for abnormal findings?**

Do not panic if you think you feel a lump. Most women have some lumps or lumpy areas in their breasts all the time. The upper, outer area (area near your armpit) tends to have the most prominent lumps compared to the lower half of your breast. The area under the nipple can also feel granular.

What is important is that you get to know how and what to look for and how to feel various parts of the breast. Does something stand out as different from the rest? Has anything changed? Bring to the attention of your doctor any changes in your breasts that last over a full month's cycle or seem to get worse or more obvious over time.

You can record the findings of your breast self-examination. This can be like a small map of your breasts, with notes about where you feel lumps or irregularities. Especially in the beginning, this may help you remember, from month to month, what is "normal" for your breasts. It is not unusual for lumps to appear at certain times of the month, but then disappear, as your body changes with the menstrual cycle (if you are still menstruating). Only changes that last beyond one full cycle, or seem to get bigger or more prominent in some way, need your doctor's attention. 📌

**(The authors are from Sri Balaji Action Cancer Hospital, New Delhi)**



**any new asymmetrical change**

**Step 2**

**A: Raise your arms and look for the same changes.**

While you are looking at the mirror, gently squeeze each nipple between

your right breast. Use a firm, smooth touch with the fingers of your hand, keeping the fingers flat and together. Do not use the tips of your fingers; rather use the flat of the hand. Do not pinch breast tissue between thumb and fingers. Use a soft pillow under your









# Offering the Best of All Worlds

A growing number of people these days are opting for holistic medicine. This all-inclusive approach seeks to overcome inherent deficiencies in the respective systems of medicine to offer a 'synergy' of all of them to ensure 'Health For All' at all ages of life

**BY DR R K TULI**





**T**here is a growing realisation the world over that it is not feasible to meet all the health needs and expectations of humanity with the total dependence on one particular ‘pathy’ or system of medicine. Therefore, India’s National Health Policy endorses optimum integration of all the recognised systems of health comprising the allopathic modern medicine with alternate AYUSH systems of health. But, no two drug based systems can be prescribed to the same patient because of unknown hazards of drug interactions. Also, the healthcare agencies in the country do not have the expertise, nor have shown the will to effect this all-inclusive integration in the best interests of the population.

There is an urgent need for healthcare services in the country to grow beyond inherent limitations of the so-called evidence-based modern technology. An ever increasing number of people wish to explore benefits of time honoured traditional, or alternate systems of healthcare which are natural, drug-free, harmless, and highly reproducible, having helped the humanity and survived over thousands of years.

The good news is that we, now, have very rich expertise available to us that complements the best of drug-based specialities of allopathic medicine with various non-conflicting drug-free and harmless modalities of officially recognised systems of health to ‘eliminate all sickness’ from the root cause and restore positive health & total wellness comprising body, mind & spirit. This latest speciality of medicine is termed holistic medicine.

Holistic medicine is the wholesome approach involving a synergy of the evidence-based ‘science’ of modern medicine with the highly complementary and reproducible time honoured ‘art’ of drug-free modalities. It involves all the officially recognised traditional systems of health for elimination of sickness to promote positive health and total wellness.

This all-inclusive and integrative approach to health helps to extend the best of each system of medicine. It seeks to overcome inherent deficiencies in the respective systems to offer a ‘synergy’ of all of them to ensure ‘Health For All’ at all ages of life, and all stages of all sickness.



**H**olistic medicine is a board certified specialty in the US for nearly two

decades, and is catching up very fast amongst the developed nations. Therefore, it’s high time that we adopt it into our healthcare and make our living years happy and productive.

The universal efficacy of holistic medicare in eradicating sickness and restoring health is based upon tapping the very life-force, which Hippocrates – the Father of Modern Medicine described, “The natural healing force within each of us is the greatest factor in getting well”.

This approach to health gels with our Vedic concept that health is the greatest wealth, and we need health whether to achieve personal, financial or spiritual growth, and to even attain ‘moksha’.

It’s guided by the ancient Charaka Samhita which states that life is the combination of the body, the senses, the mind and the ‘atma’; they cannot be separated from each other, and from this integration ensues ‘ayush’.

**BENEFITS OF HOLISTIC MEDICINE**





### PIONEERING INTEGRATED APPROACH TO HEALTH

Dr Ravinder K Tuli is the global pioneer in spearheading the clinical concept of holistic medicine and the founder of SOHAM (Society for Holistic



1981.

In his pursuit of excellence in medical care beyond modern medicine, and without the use of any drugs, he visited various leading institutions

Advancement of Medicine). He was invited to establish the world's first-ever Department of Holistic Medicine at the state-of-the-art multispeciality tertiary care Indraprastha Apollo Hospitals, New Delhi in year 1996.

"SOHAM" is dedicated to promotion of positive health and total wellness by optimum integration of the 'science' of modern medicine with the 'art' of various officially recognised traditional systems of health, as far as possible by drug-free, natural and harmless, but highly efficient means for the cure of conventionally incurable ailments.

Holistic medicine integrates the Western, Chinese and Indian philosophies on healthcare and complements all the systems and specialities of medicine at all the levels of health to achieve positive health and wellness. It improves the final outcome of every sickness; adds 'life to the years' of each individual, and even helps in cure of a majority of conventionally incurable diseases.


Dr Tuli is a 1964 batch alumnus of the prestigious Armed Forces Medical College, Pune. After graduation, he was awarded the President's Commission into Army Medical Corps and seconded to the Indian Air Force as he was adjudged the Best-All-Round Medical Officer at the Army Medical Corps Centre & School.

He received the post-graduate training in Aerospace Medicine at Institute of Aerospace Medicine; Sports Medicine at National Institute of Sports; and Internal Medicine at Army Hospital (R&R). After a distinguished career in IAF in various capacities he was granted pre-mature retirement in

in People's Republic of China to acquire a high level of proficiency in Acupuncture. He qualified to be an Instructor in Ashtanga Yoga, Naturopathy and Panchakarma, Reiki Grand Master, Arhatic Pranic Healer, a Counsellor-Hypnotherapist, a Nutrition and a Lifestyle Expert. He has worked with and studied in detail the techniques of Dr Deepak Chopra and Dr Dean Ornish.

The beneficiaries of his skills include the who's who of the country, and from abroad, comprising a former President of India, Prime Minister, Governors of States, Union Ministers, Chief Ministers, Chiefs Of Air Staff, Army & Naval Commanders, Director Generals from different services, Chief Justice & Sr Judges of Supreme & High Courts, senior bureaucrats, diplomats, top industrialists, artists of repute, sports persons from India and abroad, many Padma & Arjuna awardees and several senior doctors.

Dr Tuli has been rewarded with various national and international accolades, including the prestigious Oration Award by Indian Medical Association (SDB) & Delhi Medical Association; American Excellence Award For Achievement & International Scholars of 20th Century Award by American Organization of Intellectuals, USA; Star of Wellness Award 2008 by World Wellness Open University; 2008 Man of the Year in Medicine by American Biographical Institute, Inc., and Honorary Doctorate (PhDD) by International University for Complementary Medicines for promoting the cause of positive health & total wellness by natural means.

1. It treats the human being as a whole, body, mind & soul.
2. It offers 'synergy' of drug-free modalities of all the recognised systems of Health.
3. It's equally beneficial at all the levels of health, at all ages, and in all diseases.
4. It adds life and improves 'quality of life' of each individual.
5. It complements all the systems and specialities of medicine to improve the final outcome of every sickness.
6. It helps to take care of all the ailments of an individual concurrently.
7. No drugs - No interventions: No Dope.
8. It's highly reproducible, universally beneficial, and cost & time efficient.
9. It's very simple and easily accessible; can be rendered anywhere & everywhere.
10. It optimizes healthcare by complementing existing infrastructure at no extra cost.
11. It tremendously enhances skills, leading to greater professional satisfaction of the practitioners and would restore old glory of the medical profession. 





Way ahead of most conventional systems of medicine operating at the symptomatic level, Ayurveda is an ancient Indian holistic medicinal system that tackles the root of the disease.

**BY DR HARSHITA SETHI**

# Restoring the Equilibrium

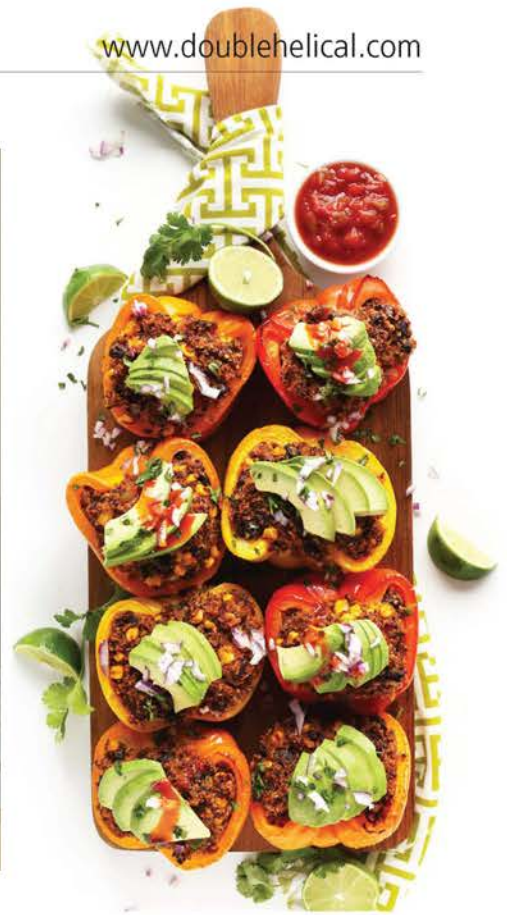
I have always been taught to look within myself to find out the causes and factors responsible for anything which did not go up to the mark. Being an Ayurvedic Practitioner, I try to find the root cause rather than just superficially looking at whatever is visible by naked eye.

If we go deep into the history of every civilization, it has the evidence of treating illnesses with the resources at its disposal such as plants, soil, sea shells, animal products like urine, dung, nail, skin etc. Our ancestors had an in-depth knowledge of properties and effect of these natural resources

which were used in treating fevers and chronic ailments and even in healing the wounds in the wars when there were no antibiotics and anesthetic drugs.

So many antibiotics have come and gone in just 200 years of time span but the ancient system of medicine of India





which is called Ayurveda (Ayu refers to life and veda refers to science, so it is science of life) still holds the same principles, same medicines, and same methods of diagnosis & treatment which were known for more than 5000 years ago.


In modern system of medicine too, one can find so many drugs which are derived from plants like chloroquine (anti-malarial) from the cinchona bark, reserpine (Anti-hypertensive) from sarpagandha and many more. Ayurveda is an ancient Indian holistic medicinal system based upon achieving physical, mental and spiritual harmony. Ayurveda sees everything in the universe, including human beings as composed of five basic elements (Panchmahabhutas): Space, Air, Fire, Water and Earth which in turn combine to give rise to three bio-physical forces or doshas within the human body.

Each individual is thought to be born with a basic body constitution (prakriti) which is a unique combination of



various proportion of three doshas: Vata (A combination of Air and Space) Pitta (Fire and Water) and Kapha. (Water and Earth). Ayurveda stresses on balance of these forces to ensure longevity. Although an individual's

prakriti (body constitution) never changes, the balance of the doshas constantly shifts in response to many factors such as natural and seasonal rhythms, diet, fatigue, lifestyle and stress.

This altered state of doshas reflects the current state of health and reveals any imbalances. It is known as the current body constitution (vikriti). When the three doshas are in equilibrium, the body enjoys health, but a lack of equilibrium can lead to ill health. While most conventional medical treatments operate at the symptomatic level, Ayurvedic treatments work at much deeper level, restoring balance and tackling the root of the problem. All this is done by making changes in our diet, taking medicines at prescribed dosage, and follow some measures in our daily life. 

**(The author is Ayurvedic Physician, Diet and Lifestyle Consultant and Director of Avedna Ayurveda Panchkarma and Yoga Centre)**





# Patient, Heal Thyself



If you are a diabetic, do not burden your life with insulin therapy or oral medication with their serious side effects. You can overcome this disease without any medication, if you adopt a three-pronged strategy of a micronutrient rich diet, herbal food supplements & exercise. To know more, read on ...

**DR HARMOHAN DHAWAN**





**O**f all the lifestyle diseases, diabetes & obesity are twins and spreading like an epidemic the world over. Decades of countless scientific studies and research over the years have emphatically proved that proper nutrition is many times more effective than most drugs and pills at reversing, curing and eliminating disease. Nutrition is such a potent weapon with which you can not only prevent but can control other lifestyle diseases like high blood pressure, constipation, acidity, thyroid, arthritis, heart disease, stroke, kidney disease (nephritis), hair loss, dandruff, various cancers like breast cancer, colon cancer, prostate cancer etc. Recently, doctors in the United States including Dr Neal Barnard, President Physician's Committee for Responsible Medicine, a team of doctors at the International Council for Truth in Medicine, Dr Joel Fuhrman, and many others through their scientific researches have established that we can achieve optimal health without any medication.

Naturopathy is a science & a way of life by which we can naturally not only prevent but reverse various lifestyle diseases. Naturopathy believes that the body has an innate amazing ability to heal itself. It treats the cause of the disease rather than the symptoms. The industrially produced synthetic drugs are all chemicals and all of them have side effects. Allopathy does



“control” the symptoms of the disease but not the cause of it. It rather suppresses the disease and one has to live a diseased life with the help of various synthetic drugs.

Both humans and animals have the most powerful inbuilt mechanism of healing themselves naturally. While animals in the wild instinctively know how to heal themselves, humans have all but forgotten this knowledge because of our lost connection with nature. Scientists have closely observed as to how the animals take care of their wellbeing.

Wild animals do not rely on industrially produced synthetic drugs and supplements to cure their illness. The medicines they require are

available in their natural environment. However, it raises questions as to how humans can supplement healthcare with natural remedies as the animals do. Let us learn from the animals. There are no veterinary doctors in the forests to treat their illness. They know very well to treat themselves with naturally occurring plants in their environment. For instance, dogs will eat grass when they have digestive problems. Chimpanzees in Tanzania, when infected with parasites, eat vernonia which was found to have anti-parasitic and antimicrobial properties. Colobus monkey in Zanzibar eats charcoal that counteracts toxic phenols which is produced by the mangoes and almonds leaves they eat. Some species of South American parrot eat soil with a high kaolin content which neutralizes the toxin effect of the seeds they eat.

As per diagnostic parameters till 1997, the fasting blood sugar level of 140mg/dl was considered to be normal and healthy. It is surprising that an expert panel reduced the fasting blood sugar level of 140mg/dl to 126mg/dl. Millions of people the world over became diabetic overnight by this revised level of fasting blood sugar level. To make things worse the American Diabetes Association in 2003 further reduced the fasting blood sugar level of 126mg/dl to 100mg/dl that means all those who were healthy prior to this suddenly fell in the



category of diabetics. Who did this all? You will be surprised that The diabetes drug manufacturing companies like Merck, Elli Lily, GSK, Pfizer and other manage the American Diabetes Association and many other such organizations.

The pharma companies resort to unethical measures to increase their sales and profits. They are unconcerned about the human sufferings. Just imagine the mental, physical pain and agony besides the financial burden the patient has to live all through their lives. The multibillion dollar pharmaceutical companies are so powerful that they are sponsoring and writing curriculum for the medical education. They influence the medical associations and the doctors to prescribe their drugs. The money power of these companies is so huge and strong that they influence the policy of the government so that they earn more and more profits. The nexus stands exposed between the drug companies and the leading respected organizations including the American Diabetes Association, American Cancer Society, Harvard university, American College of Cardiology and about 91 others research organizations had been receiving funds from these companies. Obviously, this financial relationship was used to suppress the truth about the power of nutrition in reversing diabetes and its role in achieving optimal health.

Doctors are not trained in the power of nutrition. They are trained to prescribe drugs and other medicines. They are not allowed by law to even mention natural ways to cure illness for disease using anything other than the prescription drugs. They are taught to believe that the drugs are the only way to prevent and cure various diseases.

According to International Diabetes Federation (IDF), there are 6.9 million people with diabetes in India, the second highest number in the world after China which has 109 million people with diabetes. At this rate India, may become the diabetes world




capital by 2030. Every 10 seconds a person dies of diabetes-related complications & every 10 seconds, 2 people are diagnosed of diabetes. The numbers of diabetes deaths have doubled over the last 11 years. In 2015, 3, 46,000 people died of diabetes in India. Diabetes is a chronic medical condition, which, if not controlled, can lead to serious health complications like blindness, kidney damage, nerve damage (neuropathy), impotency, various cardiovascular diseases and even foot amputation.

We at Dhawans Nature Cure, a not-for-profit organization, after eight years of extensive research & trials, have successfully treated hundreds of diabetic patients who were on insulin therapy along with oral medication. High dosage of insulin has side effects as it results in weight gain & excess weight requires more insulin. The patient is trapped in this vicious circle of excess weight and insulin. Besides



the increase in the body weight, the insulin hardens the arteries. It has been observed that 80 percent of the diabetic patients who are on insulin therapy die of heart attack.

Depending upon the metabolism of our patients, we took them off insulin within 3-20 days and all oral medications within six months. All of them are leading a happy healthy life now. While treating the patients, we adopt a three-pronged strategy of a micronutrient rich diet, herbal food supplements & exercise. Our body needs energy at regular intervals and we must eat six meals of small portion in the whole day. We design the menu of individual patient specifying what, when & how much to eat. We recommend the foods that are the richest in nutrients and low in calories. We lay emphasis in lots of raw vegetables (salads) cooked green vegetables & soups. Eat as much as you like. Fruits, Nuts, seeds and pulses are the healthy foods which are an important part of the Dhawans eating plan that meets all the nutritional requirement of the body. To achieve quick results, we advise patients to avoid animal products, all processed, refined foods and make minimal use of cooking oil. 

**(The author is ex Civil Aviation Minister and Presently National BJP Executive Council)**



# Your Guide to **Healthy Living**



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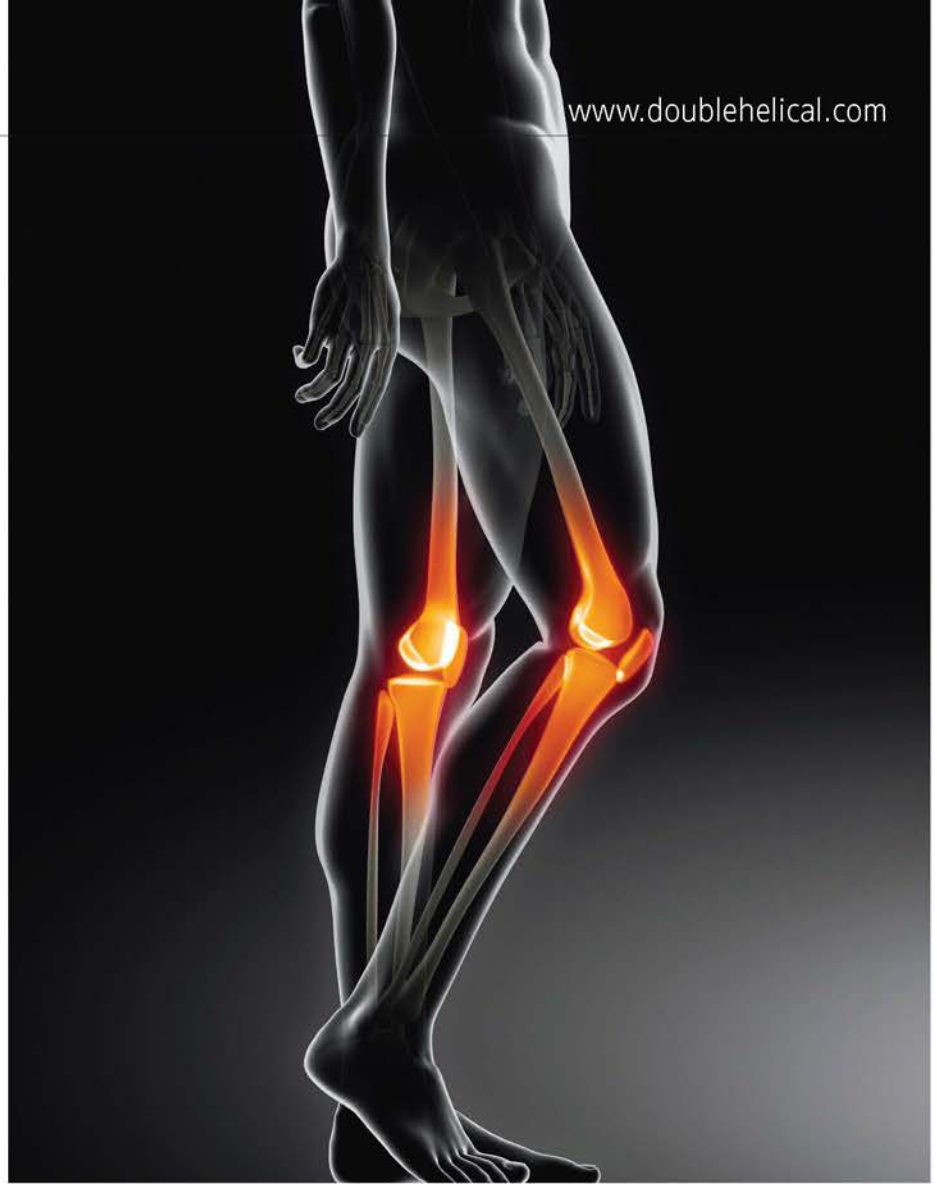


# Take Control of Arthritis

Researchers are developing newer and better treatments for arthritis, a chronic pain condition. You can discuss with your doctor which one will be the most suitable treatment for you

**BY ABHIGYAN &  
ABHINAV**





If you are experiencing symptoms like aching joints, difficulty in dressing or combing hair, gripping objects, sitting or bending over, joint being warm to the touch, morning stiffness for less than an hour, pain when walking, and stiffness after resting, swelling of joint and loss of motion in a joint, you must consult an orthopaedician. You might have arthritis because these are its common symptoms.

In common parlance, arthritis is a condition that affects more than 10 percent of the adult population. There are more than 100 different types of arthritis. The false notion that all forms of arthritis are alike has led people to try treatments that have little effect on their arthritis symptoms. Since each type of arthritis is different, each type calls for a different approach to treatment. That means an accurate

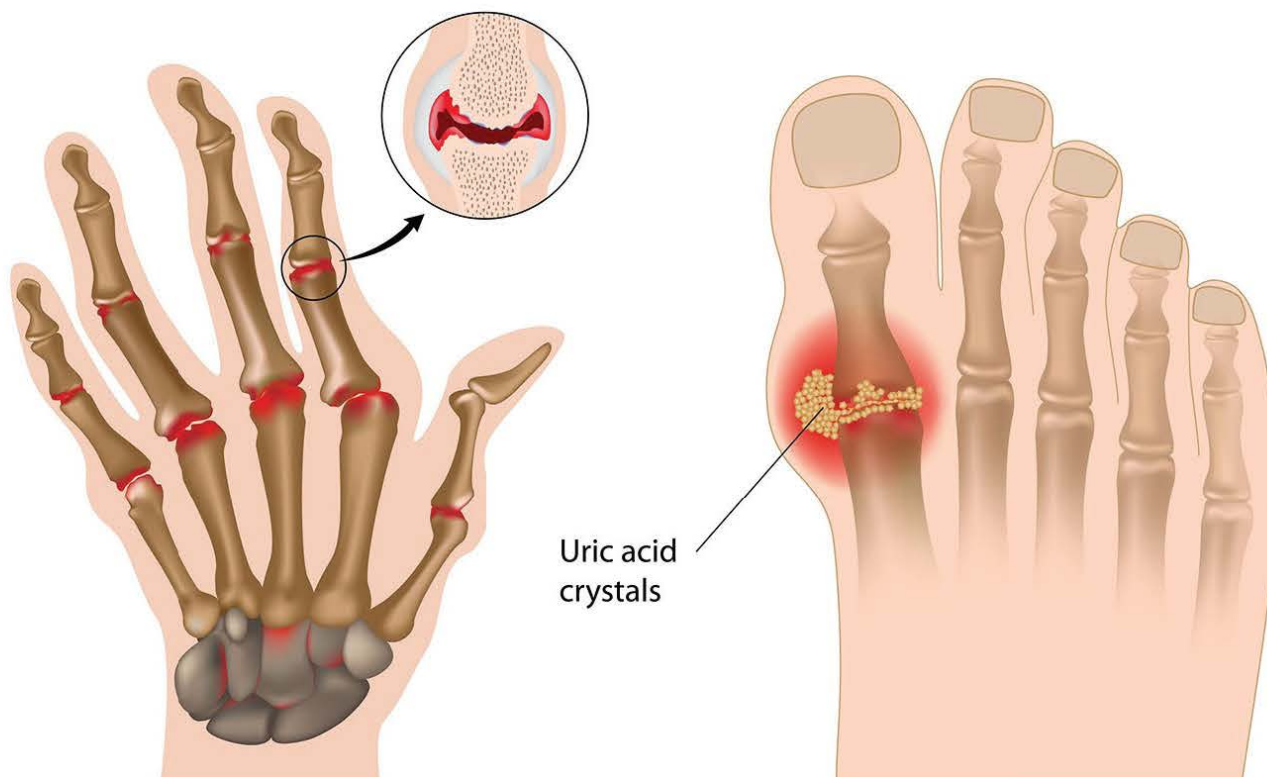
diagnosis is crucial for anyone who has arthritis.

#### **TYPES OF ARTHRITIS**

There are two major types of arthritis — osteoarthritis, which is the “wear and tear” arthritis, and rheumatoid arthritis, an inflammatory type of arthritis that happens when the body’s immune system does not work properly. Gout, which is caused by crystals that collect in the joints, is another common type of arthritis. Psoriatic arthritis, lupus, and septic arthritis are other types.

Osteoarthritis is also called degenerative joint disease or degenerative arthritis. It is the most common chronic joint condition. Osteoarthritis results from overuse of joints but most commonly it is an aging phenomenon. It can be the consequence of demanding sports where joints may





be injured or obesity, which places increased load on weight bearing joints. Osteoarthritis in the hands is frequently inherited and often happens in middle-aged women. Osteoarthritis is most common in joints that bear weight — such as the knees, hips, feet, and spine. It often comes on gradually over months or even years. Except for the pain in the affected joint, you usually do not feel sick, and there is no unusual fatigue or tiredness as there is with some other types of arthritis.

With osteoarthritis, the cartilage gradually breaks down. Cartilage is a slippery material that covers the ends of bones and serves as the body's shock absorber. As more damage occurs, the cartilage starts to wear away, or it doesn't work as well as it once did to cushion the joint. As an example, the extra stress on knees from being overweight can cause damage to knee cartilage. That, in turn, causes the cartilage to wear out faster than normal.

As the cartilage becomes worn, cushioning effect of the joint is lost. The result is pain when the joint is moved. Along with the pain, sometimes you

may hear a grating sound when the roughened cartilage on the surface of the bones rubs together. Painful spurs or bumps may appear on the end of the bones, especially on the fingers and feet. While not a major symptom of osteoarthritis, inflammation may occur in the joint lining as a response to the breakdown of cartilage.

### RHEUMATOID ARTHRITIS

It is the most common type of inflammatory arthritis. About 75% of those affected are women. In fact, between 1% and 3% of women are likely to develop rheumatoid arthritis in their lifetime. Rheumatoid arthritis is an autoimmune disease. That means that the immune system attacks parts of the body. The joints are the main areas affected by this malfunction in the immune system. Over time, chronic inflammation can lead to severe joint damage and deformities. About one out of every five people who have rheumatoid arthritis develop lumps on their skin called rheumatoid nodules. These often develop over joint areas that receive pressure, such as over knuckles, elbows, or heels.

Symptoms of rheumatoid arthritis can come on gradually or start suddenly. Unlike osteoarthritis, symptoms of rheumatoid arthritis are often more severe, causing pain, fatigue, loss of appetite, stiffness.

With rheumatoid arthritis, you may feel pain and stiffness and experience swelling in your hands, wrists, elbows, shoulders, knees, ankles, feet, jaw, and neck. Sometimes the pain occurs in one body part. But more commonly, rheumatoid arthritis pain occurs in combinations of several joints such as in the hands, knees, and feet.

With rheumatoid arthritis, the joints tend to be involved in a symmetrical pattern. That is, if the knuckles on the left hand are inflamed, the knuckles on the right hand will also be inflamed. After a period of time, more of your joints may gradually become involved with pain and swelling and may feel warm to the touch. The joint swelling is persistent and interferes with activities. For example, it can interfere with opening a jar, driving, working, and walking — the very activities that allow us to function in our daily lives.

The symptoms and effects of RA may



come and go. A period of high disease activity (increases in inflammation and other symptoms) is called a flare. A flare can last for days or months. Ongoing high levels of inflammation can cause problems throughout the body. Here RA can affect organs and body systems leading to dryness, pain, redness, sensitivity to light and impaired vision in eye, dryness and gum irritation or infection in mouth, small lumps under the skin over bony areas. Inflammation and scarring can result in shortness of breath in lungs and inflammation of blood vessels that can lead to damage in the nerves, skin and other organs.

### TREATMENT OF ARTHRITIS

Arthritis is a chronic pain condition. Pain relief is the goal of treatment and disease management strategies. Currently, there is no cure for arthritis. The treatment is aimed at controlling symptoms and slowing progression of the disease. In other words, medication and other arthritis treatments may have analgesic (pain-relieving) effects, anti-inflammatory effects, and disease-modifying effects. The goal is to feel better, maintain a good quality of life, and slow down joint destruction. People with certain types of arthritis, such as rheumatoid arthritis may achieve remission with treatment. But, remission is not a cure. Arthritis is a chronic disease. It doesn't go away with treatment. Researchers are continually developing new and better treatments for arthritis. Take an interest in learning more about what is in the pipeline. You can discuss potential new treatments with your doctor, as you decide together whether a new treatment will be an appropriate option for you or if it would be better to stay the course with your current treatment.

Over-the-counter (OTC) medications for pain relief, like acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen sodium, provide relief from arthritis pain. The OTC acetaminophen can reduce mild and moderate arthritis pain that often accompanies osteoarthritis.



In addition to medications, there are supplements and creams that you can purchase over the counter that may also alleviate arthritis pain.


Among the most popular supplements used by people with osteoarthritis are glucosamine and chondroitin. In those with moderate to severe knee pain from osteoarthritis, the combination of glucosamine and chondroitin sulfate may be effective in providing pain relief, although medical studies have not shown clear proof that they are helpful in everyone.

In addition to over-the-counter NSAID

medications, pain physicians can suggest prescription NSAIDs to treat arthritis pain and inflammation. Prescription NSAIDs may also be available in topical and injectable forms. Besides ibuprofen and naproxen, other examples of prescription NSAIDs include diclofenac and others.

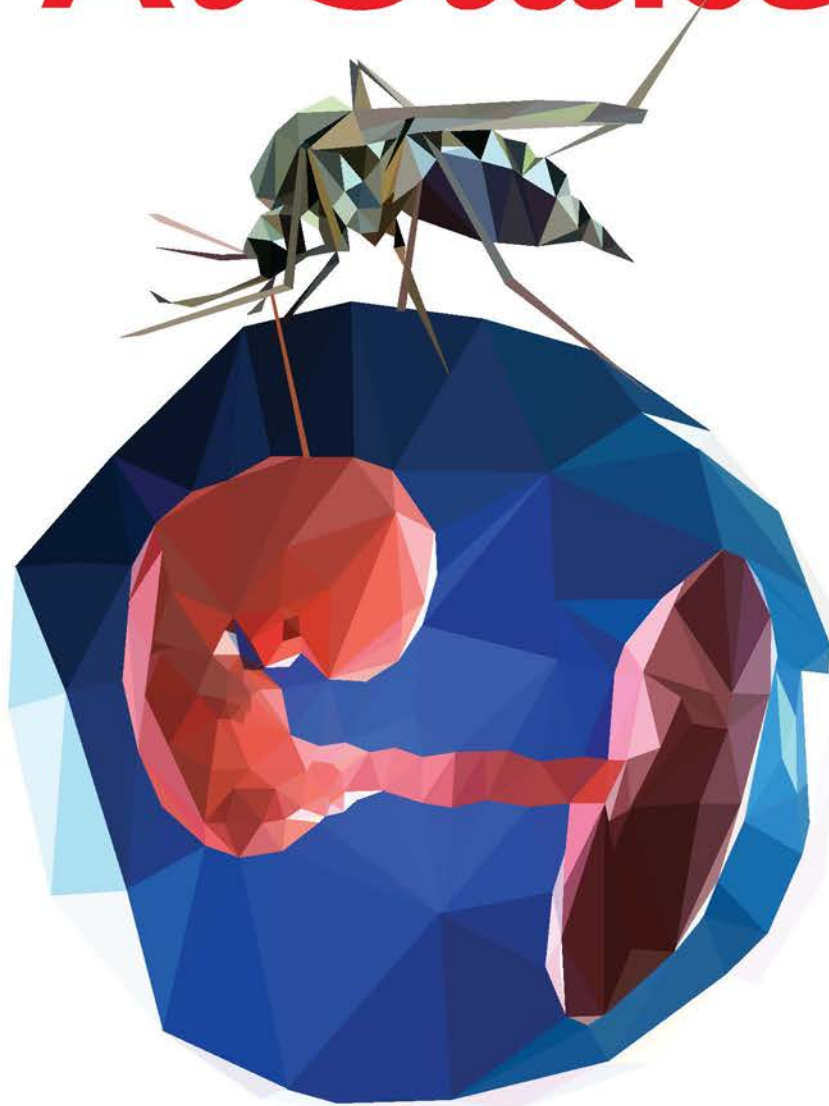
Potent anti-inflammatory agents like Synvisc One can be injected to reduce pain and inflammation. Ozone Gas injections have also clinically proven to be extremely effective at pain relief.

The stem cell/Platelet Rich Plasma (PRP) therapy involves injecting platelets from the patient's own blood to rebuild a damaged tendon or cartilage. It has been successful in not only relieving the pain, but also in jumpstarting the healing process. The patient's blood is drawn and placed in a centrifuge for 15 minutes to separate out the platelets. The platelet-rich plasma is then injected into the damaged portion of the tendon or cartilage.

The surgery procedures are used as a last resort. Like all other surgeries, these surgeries have their own issues like associated risks and high hospitalization and recovery times. However, the success rate for surgeries is limited to 60-70 percent. 



# Life At Stake



There is growing incidence of vector borne diseases across the country, affecting a large number of population. The Union Ministry for Health and Family Welfare has made all-out efforts for prevention and control of diseases such as dengue, malaria, chikungunya and swine flu

**BY DR MANISHA YADAV**

**T**he mosquito borne diseases are largely preventable through the various vector control strategies. The National Vector Borne Disease Control Programme covers various control strategies for six important vector borne diseases namely malaria, dengue, chikungunya, lymphatic filariasis, yellow fever and Japanese encephalitis. Let's take a close look at the prevention and control of some of the most important of mosquito borne diseases that have assumed threatening proportions:

**SWINE FLU:** The growing number of swine flu cases so early in the season has had doctors worried. There has been a spurt in swine flu cases reported across India. In Gujarat, the H1N1 virus has killed 242 people, next only to Maharashtra where official statistics compiled by the Union Health Ministry indicate that 400 people have died. The Kerala government said 420 people died and over 22 lakh persons were affected by various kinds of fever in the state since January.

Swine flu, the viral illness that became a pandemic in 2009, has made a comeback this year across the country with close to 12,500 cases being reported.

As many as 600 people have died of swine flu so far this year, a more than two-fold rise in such deaths compared to last year, the government informed the Rajya Sabha, recently.

Swine flu is a respiratory disease caused by influenza viruses that infect the respiratory tract of pigs and result in a barking cough, decreased appetite, nasal secretions, and listless behavior; the virus can be transmitted to humans. Symptoms of swine flu in humans are similar to most influenza infections: fever (100 F or greater), cough, nasal secretions, fatigue, and headache.

**WHAT IS SWINE INFLUENZA?**



Swine influenza (swine flu) is a respiratory disease of pigs caused by type A influenza virus that regularly causes outbreaks of influenza in pigs. Swine flu viruses do not usually infect humans, but rare human infections have occurred.

Swine flu viruses can cause high levels of illness in pig herds, but cause few deaths in pigs. Swine influenza viruses can circulate among swine throughout the year, but most outbreaks occur during the late fall and winter months similar to outbreaks in humans.

#### HOW MANY SWINE FLU VIRUSES ARE THERE?

Like influenza viruses in humans and other animals, swine flu viruses change constantly. Pigs can be infected by avian influenza and human influenza viruses as well as swine influenza viruses. When influenza viruses from different species infect pigs, the viruses can reassert (i.e. swap genes) and new viruses that are a mix of swine, human and/or avian influenza viruses can emerge. Over the years, different variations of swine flu viruses have emerged. At this time, there are three main subtypes that have been isolated in pigs: H1N1, H1N2, and H3N2.

Swine flu viruses are thought to spread among pigs mostly through close contact and possibly from contaminated objects moving between infected and uninfected pigs. Infected swine herds, including those vaccinated against swine flu, may have sporadic disease, or may show only mild or no symptoms of infection.

#### WHAT ARE SIGNS OF SWINE FLU IN PIGS?

Signs of swine flu in pigs can include fever, coughing (barking), discharge from the nose or eyes, sneezing, breathing difficulties, eye redness or inflammation, and going off feed. Some pigs infected with influenza, however, may show no

# DENGUE FEVER

Symptoms and treatment  
#CukupSetakatSamson

## DENGUE FEVER ?

Dengue fever is a debilitating mosquito-borne disease caused by dengue viruses. Each year an estimated 100 million cases of dengue fever occur worldwide.

## SIGNS & SYMPTOMS

The symptoms usually start 5 to 6 days after being bitten by infected mosquitoes. They include:

- ✗ High fever
- ✗ Severe headaches
- ✗ Pain behind the eyes
- ✗ Severe joint and muscle pain
- ✗ Nausea
- ✗ Vomiting
- ✗ Skin rash

## DENGUE HEMORRHAGIC FEVER

A more severe version of dengue fever is called dengue hemorrhagic fever which can involve significant bleeding and a drop in pressure that can cause shock and death. This condition is sometimes known as dengue shock syndrome.

Symptoms of dengue hemorrhagic fever include:

- ✗ Bruising
- ✗ Bleeding under the skin, nose or gums
- ✗ The symptoms may progress to massive bleeding, shock and death





signs of illness at all.

### HOW COMMON IS SWINE FLU AMONG PIGS?

H1N1 and H3N2 swine flu viruses are endemic among pig populations and something that the industry deals with routinely. Outbreaks among pigs normally occur in colder weather months (late fall and winter), but can occur year round. While H1N1 swine viruses have been known to circulate among pig populations since at least 1930, H3N2 influenza viruses did not begin circulating among pigs until about 1998. The H3N2 viruses initially were introduced into the pig population from humans. However, since then the H3N2 viruses circulating in pigs have changed. The H3N2 viruses circulating in pigs now are very different from the seasonal H3N2 viruses that circulate in humans.

### IS THERE A VACCINE FOR SWINE FLU?

Just as there are influenza vaccines for people, there are specific swine influenza vaccines available for pigs. **CHIKUNGUNYA:** It is an illness caused by the transmission of chikungunya virus through the bites of the infected *Aedes aegypti* mosquitoes, which is also known as the Asian Tiger. These are the same mosquitoes that cause dengue fever as well. Some common symptoms of chikungunya are severe pain in the joints and fever. Other symptoms include fatigue, rashes, headaches and muscle pain. The chikungunya virus was found in 2013 for the first time. There are yet no vaccines or medicines to prevent the occurrence of this disease or an antiviral treatment to treat the chikungunya infection. However, this disease is generally not fatal and runs for a limited period of time only.

Chikungunya is a debilitating, non-fatal, viral illness that is spread by the bite of infected mosquitoes. It resembles dengue fever in presentation.



Humans are the major source or reservoir of chikungunya virus for mosquitoes. Therefore, the mosquito usually transmits the disease by biting an infected person and then biting someone else. An infected person cannot spread the infection directly to other persons i.e. it is not a contagious disease.

### VECTOR OF CHIKUNGUNYA

Chikungunya is spread by the bite of *Aedes* mosquito, primarily *Aedes aegypti*.

### SIGNS AND SYMPTOMS OF CHIKUNGUNYA

Chikungunya usually starts suddenly with fever, chills, headache, nausea, vomiting, joint pain, and rash. In Swahili, "chikungunya" means "that which contorts or bends up". This refers to the contorted or stooped posture of patients who are afflicted with the severe joint pain (arthritis) which is the most common feature of the disease. In children, usually there are no symptoms of the disease.

In chikungunya, the patient usually recovers. However, convalescence can be prolonged and persistent joint pain may require analgesics and long-term anti-inflammatory therapy.

### FOLLOWING ARE SOME OF THE

### WAYS TO PREVENT THE SPREAD OF THIS DISEASE

#### 1. CLEAN OUT THE STANDING WATER

Standing water is the main cause for the spread of this disease as it provides a perfect place for the chikungunya mosquito to breed. Even though this mosquito is an aggressive daytime biter, make no mistake for it's greedy for human blood. Make sure to keep your surroundings neat and clean. Do not let the water be kept at a certain place for a long period of time so it becomes a breeding place for the chikungunya mosquito. Regularly clean your coolers and change its water, change the water of your flowerpots and clean any other place the water is stagnant at.

#### 2. KEEP YOUR SKIN COVERED

If you are a traveler, the best thing you can do to protect yourself is to cover your skin in order to prevent the mosquito bites. Remember to cover your limbs specifically. Wear clothes that cover maximum parts of your body. Another precaution that you can take is to wear a bug spray.

#### 3. CLEAN YOUR SURROUNDINGS

The best way to minimize the risk of chikungunya is to keep your surroundings clean. Stay in a properly air-conditioned place, do not litter around the place and stay away from



## NADDA DECLARES WAR ON VECTOR BORNE DISEASES

**J P Nadda, Union Minister for Health and Family Welfare** held a high level meeting to review the activities for prevention and control of vector borne diseases in Delhi, recently.

Satyendra Jain, Health Minister, Government of Delhi, Mayors of Delhi, C K Mishra, Union Health Secretary, Dr Soumya Swaminathan, Secretary, Department of Health Research (DHR), Dr Jagdish Prasad, DGHS, Medical Supdts of the Central Government hospitals in Delhi, senior officials from Union Health Ministry, Government of Delhi, ICMR, NCDC and NVBDCP were also present during the meeting.

Nadda stressed on the critical importance of prevention of vector-borne diseases and stated that all stakeholders including the Government of Delhi, Municipal Corporations, RWAs, NGOs and the people have an important role to play in the prevention of breeding of the vectors that cause these diseases. He stated that a strong awareness campaign is very effective for educating people to keep their home and surrounding areas free of water logging.

He urged the Health Minister of Delhi to launch a house-to-house IEC campaign for creating widespread awareness. The Mayors of Delhi informed that such a campaign has already

started and various forms of media are being used to reach out to people. Nadda stated that when people are equipped with proper information, they are capable of preventing such diseases and also seeking timely medical intervention.

The Union Health Minister suggested for a workshop to be organised by the Delhi Government for all concerned agencies and stakeholders to sensitise them on the protocols for prevention and management of vector-borne diseases that normally see a spike during the monsoon season. He assured the support of the Union Health Ministry in all efforts of the State government to build their capacity. He added that master trainers that had received training last year and this year should be engaged to build the capacity of other health workers too.

Nadda highlighted the importance of maintaining adequate quantity of testing kits, drugs etc., at the government hospitals and chemists. He requested the Delhi Government to issue an advisory to all chemists to ensure adequate stock of necessary drugs. He also suggested for hospitals to ensure that adequate number of isolation wards are available and to ensure that protocols for ventilator management are followed.

the places that you think might be a reservoir of any kind of mosquitos. Pregnant women, children and older people are mostly the infected ones. So, help them and keep their surroundings clean and tidy as well.

#### 4. REDUCE THE RISK OF MOSQUITO BITES

As we have already discussed, chikungunya spreads through mosquito bites. Hence, preventing mosquito bites is the best way to prevent chikungunya. It is recommended to use mosquito repellents to prevent mosquito bites. One should wear mosquito repellents at all times, regardless of being indoors or outdoors. But keep in mind that mosquito repellents don't kill them.

If one is infected with the chikungunya virus, there is no particular treatment for it, other than taking proper rest, diet and medications. You need to survive through the disease. For ladies who are pregnant, it is really difficult to manage tasks by themselves so a family member should be around to help them.

Moreover, the doctors should have clean hands and tools while performing any kind of treatment. For the kids, it should be ensure that they don't play in the swampy and dirty water or any unhygienic area in general. And for those who are old, they should take care of themselves as well as their surroundings.

There are several ways you can save yourself from getting bitten, also do remember to apply the anti-repellent creams behind your ears and around your ankles and toes. Mosquitos can attack at any places, you need to keep safe.

Another good tip is to spray the aerosol in all the covers of your environment, may it be your school, office or home as well as under all openings you can find. These tips will keep you safe and minimise the risk of chikungunya.

#### TREATMENT OF CHIKUNGUNYA

There is no specific treatment for chikungunya. Supportive therapy that helps ease symptoms involves administration of medicines like the paracetamol and taking plenty of

rest. Infected persons should be isolated from mosquitoes in order to avoid transmission of infection to other people.

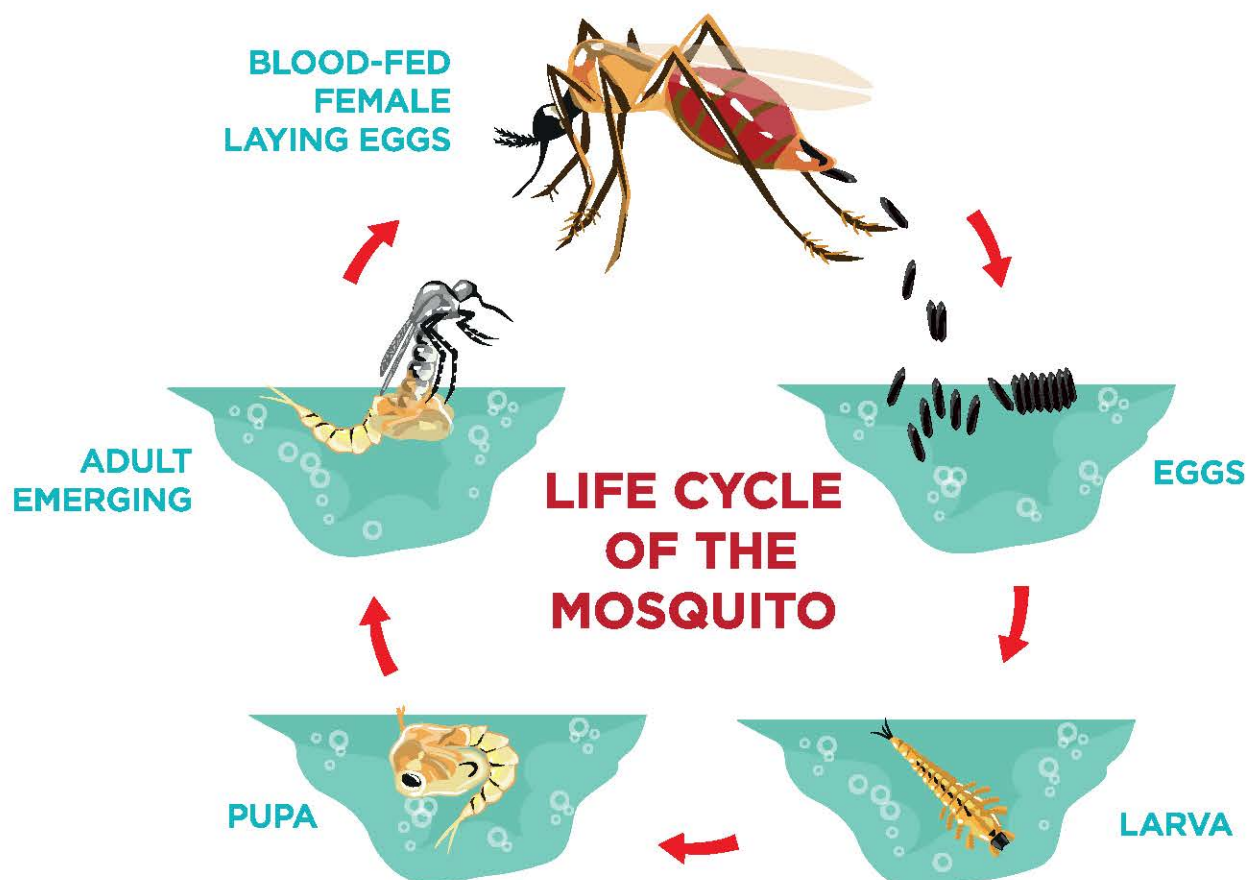
The government has put Oseltamivir, marketed as Tamiflu, in schedule H1 to enable it to be sold by all licensed chemists under prescription. The drug was earlier in schedule X, wherein only certain selected pharmacists were authorised to stock it.

#### MALARIA

Malaria is a potentially life threatening parasitic disease caused by parasites known as Plasmodium vivax (P.vivax), Plasmodium falciparum (P.falciparum), Plasmodium malariae (P.malariae) and Plasmodium ovale (P.ovale). Recently, a fifth parasite Plasmodium knowlesi (P. knowlesi) has been found to be existing in India. However, two types of parasites, Plasmodium vivax, P. falciparum, are commonly reported from India. Infection with P.falciparum is the most deadly form of malaria.

Malaria is transmitted by the bite





of infective *Anopheles* mosquito. Man develops disease after 10 to 14 days of being bitten by an infective mosquito. Inside the human host, the parasite undergoes a series of changes as part of its complex lifecycle in liver cells (pre-erythrocytic schizogony) and red blood cells (erythrocytic schizogony).

**SYMPTOMS OF MALARIA**

The symptoms of malaria typically include fever, headache, vomiting and other flu-like symptoms. As the parasite infects and destroys red blood cells, this results in easy fatigability due to anaemia, fits/convulsions and loss of consciousness. In case of cerebral malaria, the malarial parasites are carried by blood to the brain and other vital organs. Malaria in pregnancy poses a substantial risk to the mother, foetus as well as the newborn infant.

**VECTORS OF MALARIA**

There are many vectors of malaria but the main vector of malaria is

*Anopheles culicifacies*. The vector of malaria can be identified by the presence of spotted wings and resting position at an angle except *Anopheles culicifacies*.

**HABITS OF THE ANOPHELES MOSQUITO**

**FEEDING HABITS:** *Anopheles culicifacies* is a zoophilic species (affinity towards animals) and when high densities build up, then they feed on man.

**RESTING HABITS:** The vector rests during daytime in human dwellings and cattle sheds.

**BREEDING PLACES:** It breeds in rainwater pools and puddles, borrow pits, river bed pools, irrigation channels, seepages, rice fields, wells, pond margins, sluggish streams with sandy margins. Extensive breeding of the mosquito is generally encountered following monsoon rains.

**BITING TIME:** Biting time of each vector species is determined by its generic character, but can be readily

influenced by environmental conditions. Most of the vectors, including *Anopheles culicifacies*, start biting soon after dusk. Therefore, biting starts much earlier in winter than in summer but peak time varies from species to species.

**TREATMENT OF MALARIA**

Chloroquine is the drug of choice for uncomplicated malaria. Drug Distribution Centres (DDCs) and Fever Treatment Depots (FTDs) have been established in the rural areas for providing easy access of anti-malarial drugs to the community.

Alternative drugs that are recommended as per the drug policy of malaria and to be used in chloroquine resistant cases include Artesunate, Artemether and Arteether.

**DENGUE**

Dengue is a viral disease which is transmitted by the infective bite of *Aedes aegypti* mosquito also known as tiger mosquito. Man develops disease after 5-6 days of being bitten



by an infective mosquito.

**IT OCCURS IN TWO FORMS:** Dengue Fever and Dengue Haemorrhagic Fever (DHF). Dengue fever is a severe, flu-like illness. Dengue Haemorrhagic Fever (DHF) is a more severe form of disease, which may cause death due to bleeding leading to low blood pressure and low blood volume. Person suspected of having dengue fever or DHF must visit a doctor immediately.

### SIGNS AND SYMPTOMS OF DENGUE

The signs and symptoms of Dengue includes abrupt onset of high fever, severe frontal headache, pain behind the eyes which worsens with eye movement, muscle and joint pains, loss of sense of taste and appetite, measles-like rash (due to low platelet count) over chest and upper limbs and nausea and vomiting.

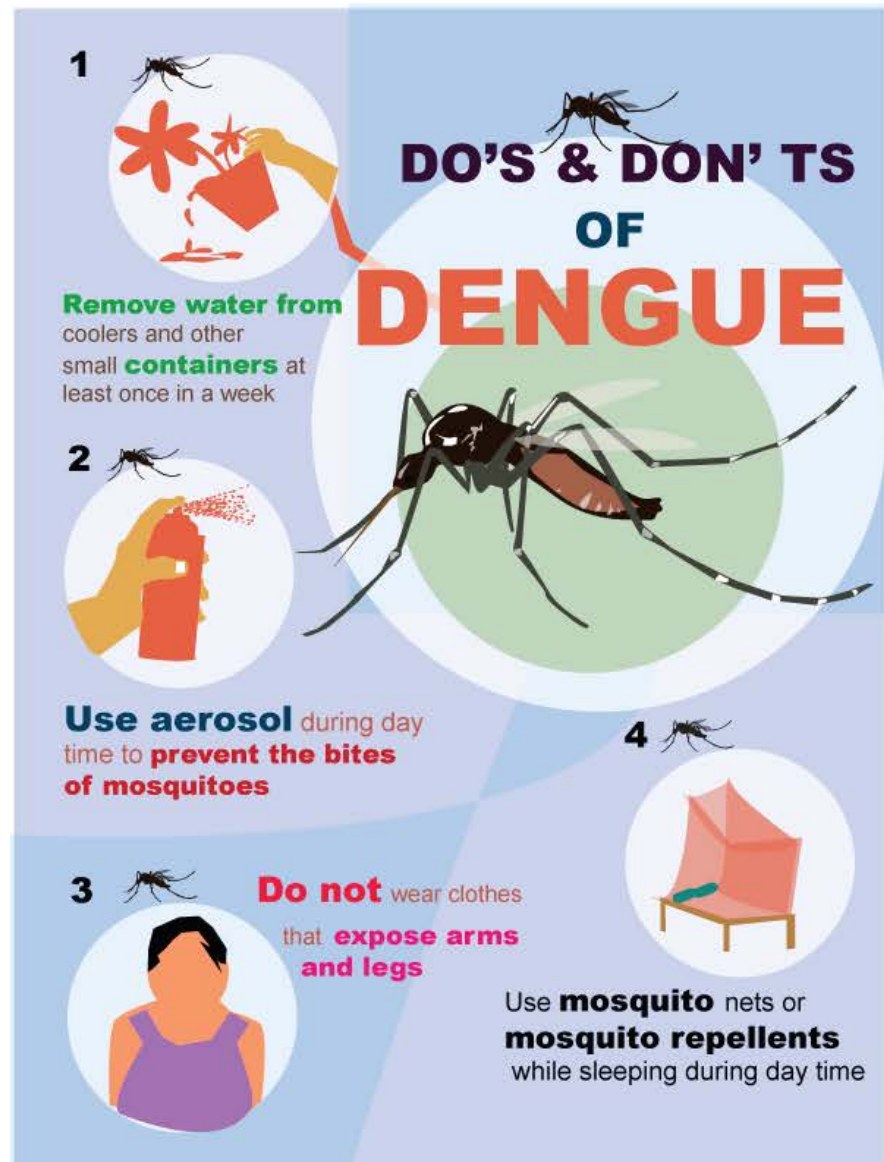
### VECTOR OF DENGUE

The vector of dengue is *Aedes aegypti* mosquito. It is a small, black mosquito with white stripes and is approximately 5 mm in size. It takes about 7 to 8 days to develop the virus in its body and transmit the disease.

**Habits of the Aedes Mosquito**  
**A) FEEDING HABIT:** Aedes mosquito is a day biter and mainly feeds on human beings in domestic and peridomestic situations. It bites repeatedly.

**B) RESTING HABIT:** Aedes mosquito rests in the domestic and peridomestic situations especially in the dark corners of the houses, on hanging objects like clothes, umbrella, etc. or under the furniture.

**C) BREEDING HABITS:** Aedes aegypti mosquito breeds in any type of manmade containers or storage containers having even a small quantity of water. The eggs of Aedes aegypti can live without water for more than one year. The favoured breeding places of the mosquito are desert coolers, drums, jars, pots, buckets, flower vases, plant saucers,




tanks, cisterns, bottles, tins, tyres, roof gutters, refrigerator drip pans, cement blocks, cemetery urns, bamboo stumps, coconut shells, tree holes and places where rainwater collects or is stored.

### TREATMENT OF DENGUE

Intake of plenty of oral fluids and rest is advised for the patient. Symptomatic treatment is given in form of antipyretics and anti-inflammatory drugs (such as paracetamol). However, it is advisable that self-medication should not be done and one should always consult the doctor immediately.

### VECTOR CONTROL STRATEGIES

The vector control strategies are largely the same for the mosquito borne diseases. The various control strategies for mosquitoes include environmental control, chemical control, biological control, personal protective prophylaxis and community participation. Early case Detection and Prompt Treatment (EDPT): EDPT is the main strategy necessary for all the cases of mosquito borne diseases to prevent their transmission.

**CHEMICAL CONTROL:** Use of Indoor Residual Spray (IRS) with insecticides is recommended under the National Vector Borne Disease Control Programme (NVBDCP). 





## Health Secretary seeks greater co-operation of states to make National Health Mission Successful

**C**hairing the review of the National Health Mission (NHM), CK Mishra, Health Secretary, emphasised upon the need for streamlining the facilities at the peripheries. He said it was essential to avoid crowding of tertiary care facilities which impacts the quality of healthcare.

The national review meeting was attended by State Health Secretaries and NHM Mission Directors from all states/UTs. Issues on the agenda included reduction of MMR, IMR; improving immunization and uptake of family planning measures in selected states /UTs; roll out of recent initiatives such as strengthening sub centres as Health and Wellness Centres, screening for NCDs, progress in TB elimination, status of preparedness for swine flu, addressing HR challenges, DBT payments, digital payments, rare diseases etc.


The Health Secretary asked the states/UTs to take a critical look at problem areas at all layers and resolve them through innovative approaches and new

ideas. He stated that NHM provides unparalleled flexibilities to address healthcare challenges specific to state context and needs. While there has been considerable improvement as reflected in accelerated decline of MMR, U5MR, TFR and reversing the incidence of diseases such as TB, HIV, AIDS and Malaria, areas such as NCD prevention and control requires better response, he stated. The disease burden on account of NCDs is increasing resulting insubstantial economic loss for families and the nation as a whole, he said. He emphasised on strengthening health systems, particularly making SNCUs, FRUs and NBCCs functional with requisite HR and equipment backed by a trained team for provisioning of quality services.

States were urged to focus on labour room protocols for intra partum care, carry out 100% Maternal Death Audit for understanding cause of maternal death and monitoring of inborn and out born deaths of sick newborns separately. Mishra stressed that Mission Indradhanush is not a programme but a campaign towards increasing

immunisation coverage. The states must focus on strengthening routine immunization. There is gap in initiation of early breast feeding which needs to be actively bridged through interventions/programmes such as Mothers' Absolute Affection-MAA. Complementary feeding and its quality are also issues that states need to address, he said.

Mishra urged the states to utilise the NHM flexibilities to devise new strategies and sharpen existing strategies for the last mile approach. He exhorted states to start measuring service delivery and monitoring performance based on a set of deliverables with clear allocation of responsibilities and roles for incentivising and fixing accountability. He urged states to co-opt the private sector as elimination of TB is not possible otherwise.

States/UTs actively participated by highlighting problem areas, challenges and providing suggestions thereby serving not only as a forum for inputs for the Health Ministry but also for cross learning across states/UTs. 





## DMA's Foundation Day celebrated on a grand scale

**D**elhi Medical Association (DMA) recently organised its 103rd Foundation Day at Hotel Lalit, New Delhi. On this occasion it hosted an academic gala 2017 on Diabesity that was witnessed by eminent doctors and speakers.

Satyendra Jain, Health Minister, Delhi Government was chief guest of this foundation day celebration. Dr Vinay Aggarwal, Chairman, Organising Committee said, "I want to recognise the hard work put in by the entire team lead by Dr Vijay Malhotra, President, Delhi medical Association, ably assisted by Dr Satish Tyagi, Secretary, DMA and Dr Punit Dhawan, and also the expertise of the scientific committee lead by Dr Pravin Bhatia and Dr Vivek Bindal, Dr Monga, Dr Pravin Gulati and others who worked very hard for this mega event. The support of DMA staff was exemplary."



On this occasion DMA honoured senior legends of medical profession such as Dr J K Jain, Dr Y P Munjal, Dr I P Dhalla, Dr

Girish Tyagi and Dr Rajeev Sood with DMA LIFE TIME ACHIEVEMENT AWARD, while Dr Narottam Puri, Ashok Chandra, IAS and Chairman, Trust Sir Ganga Ram Hospital and Ashok Khurana were each recognised as DMA HEALTHCARE PERSONSITY OF THE DECADE for their outstanding contribution in the medical field.

Dr K K Aggarwal, National President, IMA, Dr Ravi Wankhedkar, National President (Elect) IMA, Dr Arun Gupta, President, DMC, and Dr R N Tandon, Hony. Secretary General, IMA graced the event with their august presence. Noted comedian and film actor Ehsaan Qureshi and his team contributed some lighter moments as they performed entertainment programmes. Dr Vijay Malhotra, President, DMA, said, "We could manage this massive event in very short time successfully which was evident by the impressive attendance by eminent personalities." 





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**A**ccording to Ayurveda, the heart is one of the three main marmas (vital organs). There are many types of srotas (channels) responsible for the circulation of various materials like dhatus (tissues), energy, wastes and prana (life air).

Prana vaha srotas, which are responsible for the flow of prana in the body, are the main channels. The heart is the root of prana vaha srotas. All the main blood vessels originate from the heart. The heart is also the seat of consciousness or soul. It is also related to ojas (vital fluid), which sustains the consciousness or soul and keeps the person alive. Modern science too emphasizes the importance of





heart. The heart is the basis of life and we should take proper care of it. Heart is the seat of emotions like love. So, to establish love, harmony and peace, it is important that one has a healthy heart.

### TAKING CARE OF YOUR HEART

According to Ayurveda, ama is the main cause for heart diseases. Ama is the toxic material that is produced by undigested food. Therefore, one must make sure that one eats only the amount and type of foods one can digest properly.

Avoid over-eating and eating frequently. Eat a light breakfast and dinner. Lunch should be the main meal. Milk products, fried foods, cold foods and acidic foods should be taken in small quantities. White flour products, and foods that contain chemical preservatives and additives should be avoided. Animal products, especially red meat, are not good as they take a long time to be digested, and create a lot of toxins in the stomach.

Seasonal fruits and fresh vegetables (steamed or cooked), wholemeal bread or chapatti, salad, sprouts, vegetable



soup, buttermilk, cottage cheese (paneer), a little quantity of fresh milk and ghee (clarified butter) make up an ideal list of food items to choose from. Anything sweet should be taken in moderation. Honey and jaggery are healthier than purified sugar.

Amla (Indian gooseberry) is very beneficial for the heart. It can be taken fresh, preserved or in powder form.


A very common cause of heart diseases is mental stress. Regular practice of yoga and pranayama

(breathing exercises) reduces stress levels. Also, meditation has been scientifically proven to prevent as well as cure heart diseases.

A gentle head massage with or without oil several times a week is very beneficial. A full-body self-massage with oil once a week is also good.

Too much tea, coffee, alcohol and smoking is not good for the heart and should be given up. They weaken the liver and digestive power, and so form ama. Drinking water kept overnight in a copper pot strengthens the heart.

A herb that has been scientifically proven to prevent and cure heart diseases is Arjuna (*Terminalia arjuna*). It can be taken in powder form or the bark of the tree can be boiled to make a tea.

Rudraksha, which is a fruit from a tree found mainly in the Himalayas, also has a beneficial effect on the heart. These seeds can be strung together and worn in the form of a necklace, or the seeds may be soaked in water overnight and the water should be taken early in morning. Obesity is a very common reason for heart disorders. If you have put on some extra pounds, you must reduce it by physical exercise and diet control. 





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CIN.U74899DL1968PTC004914

GNIDA Allotment Letter No. PROP/BR5/2010/1420 dated 19.03.2010; Lease deed registration with GNIDA Dated 19.05.2010; Building plan Approval no. PLG/(BP).BP- 2420/4H/OPA-5068 dated 06/06/2011  
Eros Sampoornam is a large group housing project conceived to be executed in Four phases by Ajay Enterprises Pvt. Ltd. 'AEPL'. Presently apartments in Phase I and II of Eros Sampoornam are under sale and some of the features as mentioned above will be available at a later date after overall completion of all the phases. All dates and commitments are subject to Force Majeure and are tentative. Availability of connectivity by Delhi Metro is subject to its construction by the Delhi Metro Rail Corporation and the same is not in control of 'AEPL'. All payments are to be made in favour of 'Ajay Enterprises Pvt. Ltd.-A/c Eros Sampoornam' and no third party is entitled to collect payments in its name on behalf of Ajay Enterprises Pvt. Ltd. All bank loans are subject to individual eligibility and 'AEPL' does not confirm availability of bank loan to all applicants. Please visit the company office and refer to Application form and draft agreement for detailed terms and conditions. All buyers are requested to do due diligence before making any payment as this advertisement is merely indicative in nature and does not carry complete details.

\* Terms & Conditions apply. Please refer price list for details. # Surroundings are artistic impression.

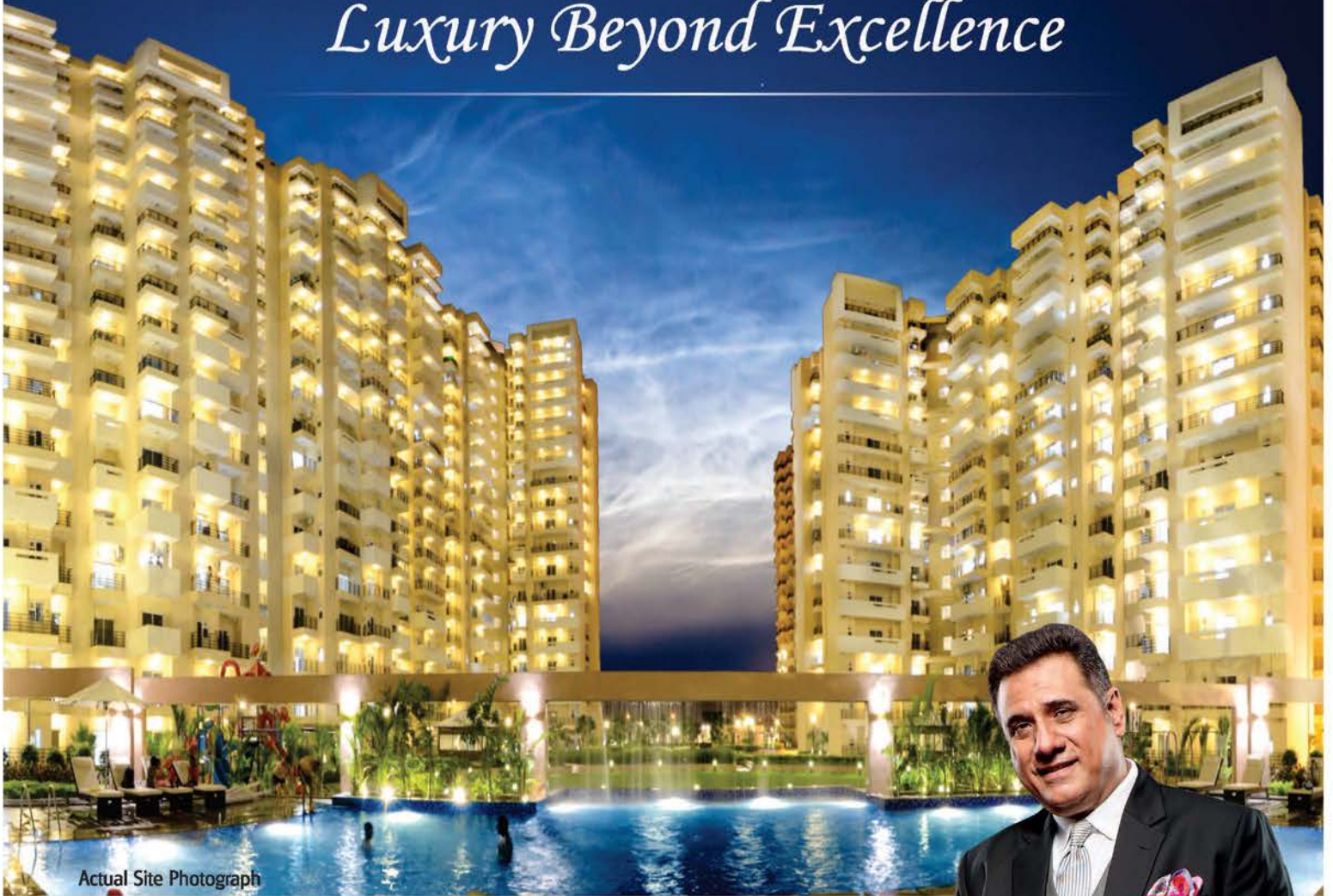
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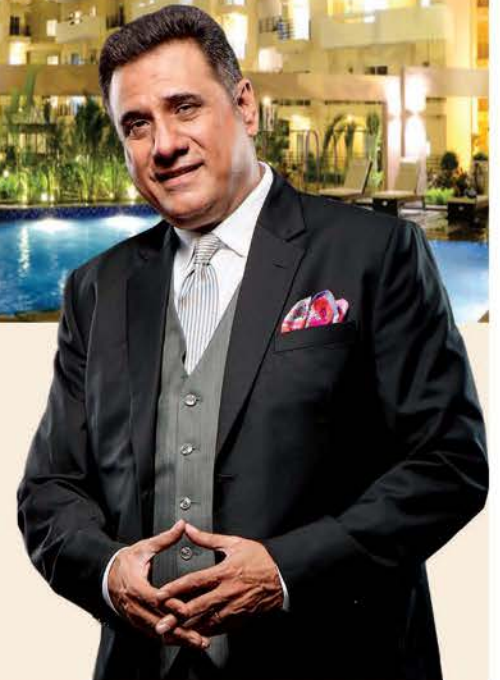
Actual Site Photograph

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