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AIIMS Leads in Health Care Revolution

Dr Mahesh Chandra Mishra, Director, All India Institute of Medical Sciences (AIIMS)



Surrogacy under Scanner

The Bombay High Court's interim order, staying the directive of the Union government banning surrogacy for foreign couples, has ignited a debate over the regulation of commercial surrogacy in India

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COVER STORY



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Towards excellence in healthcare

Dear Readers,
Thanks for your continued support. As always, we bring to you a number of articles on various issues of health based on intensive reporting, research and analysis in this November, 2015 issue of Double Helical, your favourite national health magazine. Your keen participation in our endeavour has encouraged us to bring about qualitative improvement in both content and presentation of more and more authentic and in-depth reports.

In this current issue we bring to you an exclusive interview with Dr Mahesh Chandra Mishra, Director, All India Institute of Medical Sciences, New Delhi. As you know, established in 1956 by an Act of Indian Parliament with the objective of developing a strong curricular foundation for undergraduate and postgraduate healthcare education in India based on the then Union Health Minister Rajkumari Amrit Kaur's vision, the AIIMS continuously strives to achieve the highest standards of health care education, research and service. It is recognized in India and abroad as a medical institution that best combines excellent medical education with cutting-edge research and high quality healthcare.

In this interview, the Director, AIIMS, assures us of the premier Institution's relentless drive to be the guiding light in quality-oriented healthcare practices in the country.

In our cover story we are focusing on the present trends of surrogacy. Though India is emerging as a major destination for surrogacy because of its relatively low cost, there are still a number of complex legal and ethical issues involved.

The Bombay High Court's recent interim order, staying the order of the Union government banning surrogacy for foreign couples, has ignited a debate on regulation of commercial surrogacy in India.

Although, the High Court clarified that its order was restricted to cases in the midst of

treatment, it asked the clinics to furnish details of such cases to the authorities. The court barred the clinics from taking up fresh cases of surrogacy for foreign couples.

The doctors' fraternity has strongly opposed the surrogacy Bill. According to them, the Bill denies fertility treatment to the common man as it seeks to raise the cost of treatment and restricts the facilities. The Central government has clarified that the ban will not affect surrogacy cases already underway and children born out of surrogacy before November 4.

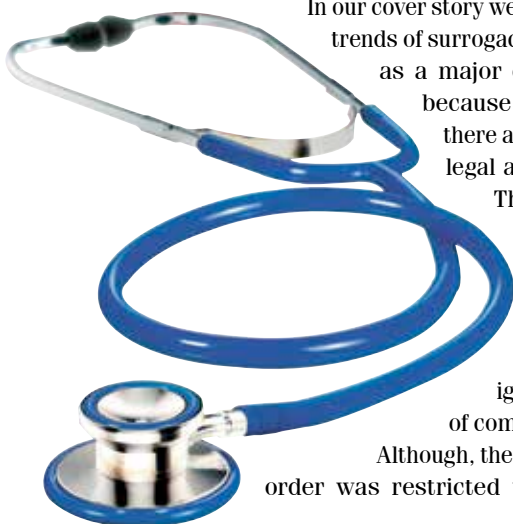
We hope you enjoyed a Happy Diwali this festival season. Keeping in view the increasing dangers of noise and air pollution, the current issue of your magazine highlights how the ever-increasing traffic in the National Capital Region has become a cause for concern for all.

Air pollution leads to respiratory problems like asthma and even lung cancer. A new study reveals that the toxic air has carcinogens. Air pollution claims at least two million lives worldwide every year. It aggravates heart problems too. A report finds that changes in the level of air pollutants, specifically ozone and black smoke, a major source of PM 2.5 (particulate matter, in the 2.5 micron range or smaller), led to an increase in the rate of deaths from all causes, primarily due to an increase of 5 percent in cardiovascular and respiratory episodes. Incidentally, the study also reveals that climate change has only a minimal effect on air pollution. They do not significantly increase the death rates.

In a special report, our medical team brings to you the latest trends in arthroscopic surgery for joint damages and injuries. The report titled 'Rescuing Joints' highlights how active adult patients involved in sports or strenuous jobs as also older patients can undergo arthroscopy, the new, minimally invasive surgical procedure to examine and repair damage to joints, most commonly the anterior cruciate ligament (ACL) injury.

In addition, there are a number of articles that will update you with the latest information on diseases, treatment and facilities. We hope you will certainly find this issue quite useful and interesting. Happy reading!

Amresh K Tiwary
Editor-in-Chief



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AIIMS Leads in Health Care Revolution

The All India Institute of Medical Sciences (AIIMS), New Delhi, has become synonymous with quality health care and excellence in medical education and research. In an interview with **Double Helical**, **Dr. Mahesh Chandra Mishra, Director, AIIMS** speaks about the premier Institution's relentless drive to achieve quality-oriented health care practices in the country. Dr Mishra is a well-known and leading surgeon, credited with developing the AIIMS' Trauma centre into a model for emergency services in the country. He joined AIIMS in the 1980s and became the head of the surgery department 13 years later in 1993. Edited excerpts from his interview:

BY AMRESH K TIWARY

Qus: As director of AIIMS New Delhi, what do you think is the remarkable achievement of the country's premier medical institution in the field of Medical science and health care?

Ans: Established in 1956 by an Act of the Indian Parliament with the objective of developing a strong curricular foundation for undergraduate and postgraduate



Dr Mahesh Chandra Mishra,
Director, All India Institute of
Medical Sciences (AIIMS)

healthcare education in India based on Rajkumari Amrit Kaur's vision, AIIMS continuously seeks to achieve a high standard of healthcare education, research and service. It is recognized in India and globally as a medical institution that best combines excellent medical education with cutting-edge research and quality healthcare.

Qus: What is the plan of AIIMS to shape the future of Medical Science as it seeks to educate the next generation of leaders in medicine and science?

Ans: With increasing potential to work hard and deliver quality treatment to patients, AIIMS continues to shape the medical profession as it seeks to educate the next generation of leaders in medicine

and science. Hence, it did not come as a surprise when AIIMS topped *India Today's* best medical schools league table for the eleventh year in a row. It earned a top score of 100 in all parameters under consideration: reputation, academic quality, student care, infrastructure, and placement opportunities. With its 7 centres and 39 teaching departments, and a manpower of over 10,000 including 826 faculty positions, AIIMS, Delhi produces a large number of specialists (MD/MS), super-specialists (DM/MCh), PhD scholars and allied health and basic sciences experts, including nurses and paramedical professionals. In the year 2013–2014, we enrolled 724 scholars under various courses.

Under our training schemes, AIIMS provided postgraduate training to 675 short-term trainees, 20 long-term trainees, 70 WHO fellows (foreign national) under WHO fellowship programme and observer-ship to 63 foreign nationals (26 postgraduate and 37 undergraduates).

Qus: As a leader in health care, how does AIIMS New Delhi continue to play a significant role in nurturing and mentoring other AIIMS centres at Rishikesh, Bhubaneswar, Bhopal, Raipur, Jodhpur and Patna?

Ans: We continually review and monitor how medicine and science are taught to nurture a passion for scholarship and innovation, as medical knowledge is swiftly increasing and the nation's healthcare delivery system is undergoing rapid change, and biomedical science and technology are also advancing at a fast pace.

Qus: Can you tell us about AIIMS' expansion plan for specializations in areas such as surgery, orthopaedics and radiotherapy?

Ans- AIIMS is making extensive use of technical aids such as animations and videos across various specializations like surgery, orthopaedics and radiotherapy. The Anatomy department has established an e-Learning facility which introduced 'Blended Learning' methods that supplement the traditional face-to-face learning methods with eLearning. The



With 7 centres and 39 teaching departments, and a manpower of over 10,000 including 826 faculty positions, AIIMS Delhi produces a large number of MD, MS, super-specialists (DM/MCh), PhD scholars and allied health and basic sciences experts, including nurses and paramedical professionals.

Department of Anaesthesia acquired a state-of-the-art high-fidelity Human Patient Simulation system to provide training to postgraduates for routine events as well as crisis situations in real time scenarios. The department also established the Anaesthesia Skills Laboratory for training and continuing education of undergraduates, interns, junior and senior residents. The Division of Neonatology, Department of Paediatrics introduced new courses and enrolled nearly 2,000 students and doctors in different courses in the Essential Newborn Care and Sick Newborn Care courses with skill learning at participating institutions. Apart from students & the country, courses are offered to students from the Maldives, Sri Lanka, Bangladesh, Nepal, Pakistan, and Mauritius.

The Division of Neonatology also updated a teaching-learning package for newborn care for online learning on an interactive platform to educate health professionals at distant places with skill learning at partner institutions. New Apps on smartphone for management of normal newborn as point of care tool for healthcare providers working in small hospitals were also developed. The Department of Neurology has initiated a regular continuing medical education programme on multiple sclerosis.

AIIMS offers Continuing Medical Education to thousands of physicians and healthcare professionals to help improve their skills, increase knowledge

and improve performance. The Institute organized 188 workshops, symposia, conferences and training programmes in collaboration with various national and international agencies. The Jai Prakash Narayan Apex Trauma Centre (JPNATC) is making significant contribution towards capacity building in the country in both basic life support and advanced trauma life support to improve trauma care all across India. AIIMS Ultrasound Trauma Life Support (AUTLS) course has been designed in-house for point of care ultrasound scan for the assessment of ABCD in Trauma Evaluation and Management.

Qus: Tell us about AIIMS's research and clinical care strategy?

Ans: The research community at AIIMS has contributed significantly to scholarship through its leadership in innovations and publications. Over 508 research projects were conducted in the year and the institute attracted extramural research grants of more than Rs. 71 crore in frontier and cutting edge biomedical areas. During the last year the faculty and the scientists of the institute successfully completed 211 research projects and published over 1800 research papers in national and international journals and over 250 monographs, books and chapters in books.

The British Medical Journal (BMJ) has announced BMJ Innovations - a new

quarterly online journal—in collaboration with AIIMS, with the aim of promoting innovative research which creates new, cost-effective medical devices, services and platforms that improve patient care to act as a platform to catalyze and seed more innovations. Fellows of the Stanford India Biodesign (SIB) Centre—a joint initiative of Stanford University, Delhi's AIIMS and IIT Delhi funded by the Department of Biotechnology developed a low-cost splint made of hard cardboard that is easy to use on either right or left leg and does not have to be removed for X-rays, MRIs or CT scans. The splint was clinically tested at the AIIMS trauma centre and was licensed to HLL Lifecare Limited, a public sector undertaking, which will be supplying it to ambulance services and primary care centres.

AIIMS has taken key initiatives to encourage integration and collaboration across the world to accelerate scientific breakthroughs. Efforts at integrating modern science methods with wisdom of Indian systems of medicine led to the identification of Ayurvedic drugs which can potentially prevent the onset of Alzheimer's disease and restrict its spread in affected patients. Essential to the enterprise of discovery and learning at AIIMS is the constant drive to develop effective new methods for educating the next generation of physicians and scientists.

With regard to clinical care, several surveys by the reputed journals have named AIIMS the best hospital in India, as well as the best in fields such as Cardiology, Neurology, Gastroenterology, Gynaecology, Ophthalmology, Orthopaedics, Trauma Care ahead of several specialized institutions. The hospital has been able to maintain high standard of quality while treating a large number of patients, many of whom live in extreme poverty.

The AIIMS main hospital and its centres—the Cardiothoracic and Neurosciences Centre (CN Centre), the Jai Prakash Narain Apex Trauma Centre (JPNATC), the Dr B.R. Ambedkar Institute—Rotary Cancer Hospital (BRAIRCH), the Dr Rajendra Prasad Centre for Ophthalmic Sciences (RAPCOS), the Centre for Dental

Education and Research (CDER), the National Drug Dependence Treatment Centre (NDDTC) —have a total bed strength of 2428, including day care beds. During the year 2013–2014, the institute attended to about 28.8 lakh outpatients and 2.1 lakh inpatients and performed close to 1.5 lakh surgical procedures at optimal patient care service parameters with average bed occupancy of about 85%, and average hospital stay of about 5 days. The AIIMS hospital reported a net death rate of below 2%. While AIIMS advances the delivery of health care in India, it is also taking a leadership role in service throughout the developing world. An increasing number of foreigners are coming for treatment to AIIMS, mostly from South and South East Asia.


This trend was particularly salient in the departments of neurosurgery, orthopaedics, oncology and surgery. AIIMS is in the process of expanding AIIMS Trauma Centre, surgical block, mother and child block and OPD Block. The expansion will happen in phases and when completed, will almost double the hospital's capacity. The surgical block will also have a national endoscopy centre, a high dependency unit and kidney transplant facilities. In addition, the convergence block, critical care units, and a new Dharamshala were inaugurated during the year. A free generic pharmacy store was opened at AIIMS for outpatients to cater to the needs of the weaker sections of the society. In a relief to patients facing cardiac emergencies, AIIMS has decided to perform procedures like angiography, balloon angioplasty, opening of blocked heart valves and insertion of pacemakers free of cost for patients in general wards at AIIMS.

Q: What kind of revolution is going on over the last year in bringing innovative and patient-oriented services?

AIIMS offered postgraduate training to 675 short-term trainees, 20 long-term trainees, 70 WHO fellows and observership to 63 foreign nationals.

Ans: At AIIMS New Delhi, a quiet revolution has been going on over the last year in bringing innovative and patient-oriented services to the huge number of patients who look up to AIIMS as the final word in affordable and quality healthcare. In an effort to streamline the rush for out-patient consultations, AIIMS started a computerized appointment system that allows patients to schedule appointments up to a week in advance. The AIIMS Trauma Centre (JPNATC) became the first centre in the country to make a successful shift from preparing manual Medico-Legal Cases (MLCs) to electronic MLCs. It has also begun using tablets to store outpatient information. The Department of Otorhinolaryngology started transoral robotic surgery for performing advanced head and neck cancer resections. Taking benefits of advanced technology in health care to remote and rural areas of the country, the AIIMS faculty has been conducting medical camps at Leh and Kargil, Jammu and Kashmir for the benefit of the population belonging to these remote areas of the country.

AIIMS faculty also organized and performed an unbelievable feat by performing total knee replacement operation for poor patients from Ladakh. The Gurgaon-Chandu-Badli road serving AIIMS-2 at Badsa village in Jhajjar is being widened and upgraded from the existing two lanes to four lanes to improve access to the campus.

In addition, the Union Cabinet approved the proposal for setting up of National Cancer Institute (NCI) at Jhajjar (Haryana) under AIIMS at a cost of Rs. 2,035 crore. NCI is the largest tertiary health care facility (both public and private) in the country since Independence. The proposed institute will have 710 beds for different facilities such as surgical oncology, radiation oncology, medical oncology, anaesthesia and palliative care, nuclear medicine and proton therapy. It will have a tissue repository which is the first of its kind in India. The institute aims to plan, conduct and coordinate research on cancers which are more specific to India like tobacco related cancers, cancer of the uterine cervix, gall bladder cancer and liver cancers. 

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Securing the Vision

We now have drugs which can be directly injected into eyes to stop the fall in the vision and help in improving the eyesight as well

BY DR RAJEEV JAIN



Dr Rajeev Jain

Fall in vision is a common occurrence. Ageing is one of the leading causes of fall in vision. As one grows old, many of us have difficulty in reading even bold words and find difficulty in driving as well. Apart from age-related causes like cataract and macular degeneration, there are other medical conditions like diabetic retinopathy, bleeding in the eye, swelling in the retina and blocked blood vessels of the retina, all the conditions where vision is compromised. For an ophthalmologist, such conditions always offer many challenges.

Earlier, retina surgeons used to offer limited treatment and then hoped for

the best. Not so any more. Now we have much more reliable treatment options in the form of drugs which can be directly injected into eyes. These drugs include Avastin, Lucentis, Ozurdex etc. Once injected, these have high success in stopping the fall in the vision.

In some cases these even help in improving the vision as well. These have indeed proved to be a boon and have brought sea change in the treatment.

How do these injections work?

Through these injections the drugs are injected into eyes and then these drugs block the growth of abnormal blood vessels. How it works is like this: there

is a chemical by the name of vascular endothelial growth factor (VEGF) which is required for abnormal growth of blood vessels .Avastin® Avastin, Lucentis thwarts the production of VEGF thereby reducing the growth of blood vessels in the eye that can leak and cause vision loss.

In which conditions are these injections most effective

These injections are very useful in treating age related macular degeneration. About ninety percent of age-related macular degeneration can be treated by this. It is highly effective in treating macular edema caused by diabetic retinopathy.

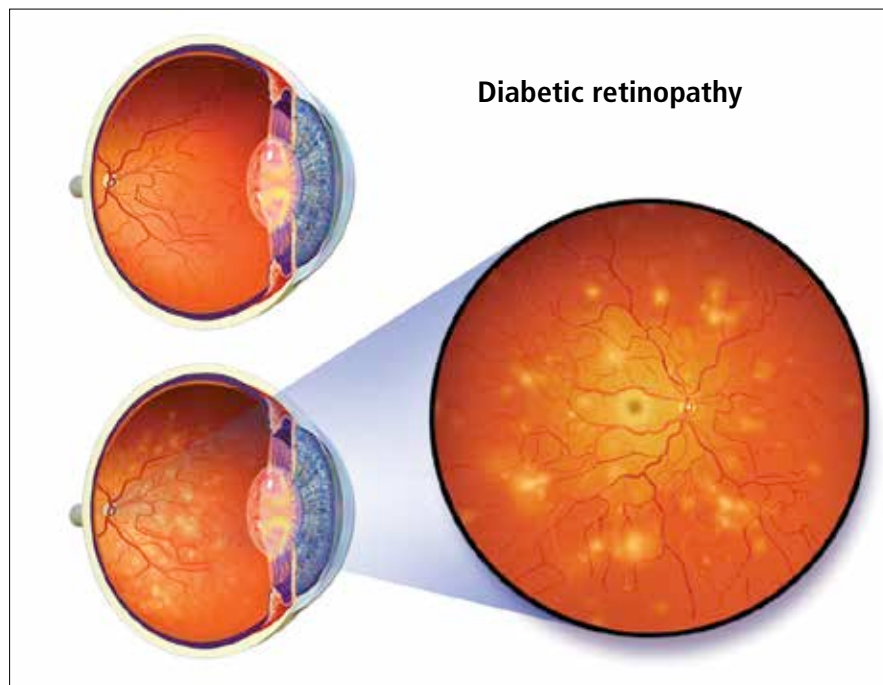
How are these injections given?

First of all, this has to be done by eye specialists only. Before the procedure is performed, medication drops are put to numb the eyes and to make the



procedure least uncomfortable. To minimize the risk of infection, eyes are


cleaned with special iodine solution. Then a tiny needle is inserted into the white part of the eye (sclera) and the medicine is released. Few precautions are required before undergoing this procedure. First, no make up to be worn on the day of procedure; secondly, person undergoing the procedure should not himself drive back home after the procedure. All in all it is a very safe procedure with minimum risk of infection.



Diabetic retinopathy

Risks associated with this treatment

There are many risks related to eye infections. It may cause redness, itchy, pain, light sensitivity and other eye problems. If case such symptoms are noticed, one is advised to meet the treating eye doctor immediately.

But all said and done, benefits far outweigh the risks and if the treating eye doctor recommends it, then don't have second thoughts. Earlier you go for it, the better it is, as in early stages of diseases it is more effective as compared to those in the advanced stages. 

There is a chemical by the name of vascular endothelial growth factor (VEGF) which is required for abnormal growth of blood vessels .Avastin® Avastin, Lucentis thwarts the production of VEGF, thereby reducing the growth of blood vessels in the eye that can leak and cause vision loss

(The author is Eye Surgeon at the Save Sight Centre, Delhi)



Freedom from Pain

Percutaneous Disc Neucleoplasty, a minimally invasive surgery, offers a ray of hope for those suffering from painful spinal disc protrusion

BY DR SUDEEP JAIN



Given the lifestyle most of us are leading these days, back pain has become one of the most common pains which people suffer from. There are several reasons for it, primary among these are wrong posture, poor dietary habits, little or no physical workout. The result is the onset of back pain in mid-20s itself. Generally, in the initial stages, pain is felt intermittently and because of this, it largely remains unattended. After some months, the pain gets quite severe and reaches a stage where one has to go and get oneself examined by a doctor.

Now the doctor does a primary examination and orders a test - generally, an MRI as MRI is more detailed as compared to X-ray. If there is any damage to the disc, MRI will reveal it. If MRI reveals damage in the disc, as a preliminary treatment, the doctor suggests pain-killers and physiotherapy. Normally, majority of patients get relief at this stage itself, those who don't get relief from this are given non interventional treatment and almost 99% percent of the patients are cured by this stage. But the one percent who have not benefited by these measures, also deserve to be free of pain. And for them too, treatment is available.

For those suffering from spinal disc protrusion, Percutaneous Disc Nucleoplasty offers one of the best possible treatment.

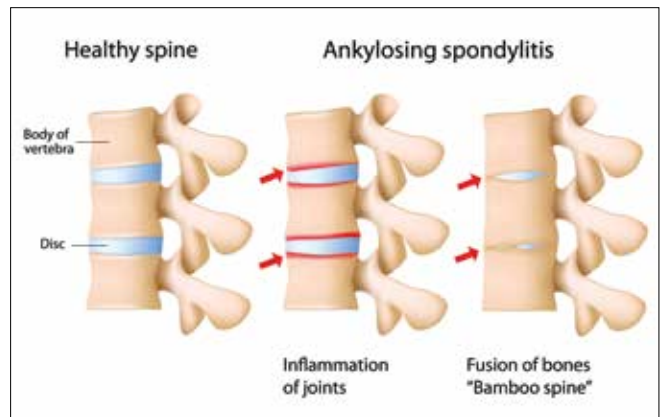
Percutaneous Disc Nucleoplasty is a minimally invasive non open surgery which reduces the volume of a bulging or herniated disc. This is used for treating smaller disc herniations or disc bulges that have not yet broken through the solid fibre ring of the disc and are therefore are not accessible via an open surgical procedure (surgical removal of the disc material). Percutaneous is a term that literally means "through the skin". Percutaneous surgery involves procedures that are performed through tiny incisions or punctures in the skin.


In this method, by using an injection needle, the disc protrusion is reduced by treating the liquid core of the spine. This needle (cannula) allows a radiofrequency instrument to enter the core of the disc by which the disc material is removed from the disc, thus relieving pressure on the outer wall and reducing the symptoms caused by the disc bulge.

Nucleoplasty can also be done by thermal coblation. In this, the instrument ablates (removes) disc material with a proprietary technology called Coblation® which removes the disc material at a temperature lower than that of a laser. The principle is based on a minimal shrinkage of the gelatinous disc nucleus. With the resulting shrinkage, the bulging disc retracts, the compressed nerve is released and the leg pain and back pain subside. This procedure is also known as **Intradiscal Electro Thermal Therapy (IDET)**.

There are advantages over traditional, open surgery. Percutaneous Disc Nucleoplasty is out-patient procedure and patient can go back home immediately after the therapy. Patient needs no admission in hospital. The patient does not require anaesthesia, is safe with no side effects. The recovery is quick, outcomes are generally favourable with the patient being able to get back into normal life span on an immediate basis. Further, there is no blood loss, can be done in any age

Percutaneous Disc Nucleoplasty reduces the volume of a bulging or herniated disc. This is used for treating smaller disc herniations or disc bulges that have not yet broken through the solid fibre ring of the disc and are therefore are not accessible via an open surgical procedure (surgical removal of the disc material)



group with being safe for those in the elderly age group. So, those suffering from hard-to-treat herniated disc prolapse should also not lose hope as they can turn to Percutaneous Disc Nucleoplasty. 

((The author is Director, Spine Solutions India)

Rejuvenating the Body



The treatment of diabetes recommended in Ayurveda is aimed at revitalising the body to not only balance sugar levels, but also foster a positive change in the patient's life

BY DR PARTAP CHAUHAN



The global burden of diabetes has become a huge cause of worry amongst health administrators the world over. Even though the actual causes are complex, there is good evidence that a large number of cases of diabetes and its complications can be prevented by a healthy diet, regular physical activity, maintaining a normal body weight, and avoiding tobacco.

Ironically, the unfortunate reality is not many diabetics actually know this simple

fact! In most countries, especially the developing ones, diabetes patients are accustomed to believing that insulin injections and regular medicines are their only reprieves - things that will keep them going for a lifetime. And, this is far from the truth!

According to Ayurveda, sugar levels can be kept under control with the help of proper medication and a strict diet-lifestyle plan. Because diabetes is a chronic metabolic disorder that arises when the pancreas does not produce

enough insulin, or when the body cannot effectively use the insulin it produces, it can only be treated if the body is rejuvenated in its entirety.

Decipher the Warning Signs

Education is of the utmost importance in the prevention of diabetes. Here's a list of symptoms that you should look out for in your body to make sure you are not suffering from any diabetes-related complication.

- Frequent urination
- Excessive thirst
- Increased hunger
- Weight loss
- Tiredness
- Lack of interest and concentration
- A tingling sensation or numbness in the hands or feet.

Other signs include blurred vision, frequent infections and slow-healing wounds

Don't ignore basic warning signs as they could be indicative of graver problems. In case you are unsure, consult your doctor immediately.

Remember, you are at the risk of Diabetes if you:

- are obese or overweight
- are physically inactive
- have been previously diagnosed with glucose intolerance
- have unhealthy dietary habits and meal times
- are above the age of 40



Always remember not to sleep during the daytime, as it increases Kledaka Kapha. A sub-dosha of Kapha, Kledaka Kapha governs the protective mucous lining of the digestive system, thereby facilitating proper digestion. In an increased state, it can lead to impairment of digestion, which can cause additional problems in diabetes patients



- are a patient of high blood pressure and high cholesterol
- have a family history of diabetes
- have a history of gestational diabetes
- are from a particular ethnicity (higher rates of diabetes have been reported in Asians, Hispanics, and African Americans)

The Ayurvedic View

In Ayurveda, diabetes is known as Madhumeha (Madhu means 'honey' and Meha means 'urine'). Medhumeha is categorized as Vataj Meha (a problem caused by aggravation of Vata). Vata symbolizes wind and dryness. Deterioration of the body is a characteristic that indicates impairment of Vata. Maximum deterioration of dhatus (body tissues)



occurs in this type of disease and this is the reason why all vital organs are affected by diabetes.

The other prime cause of diabetes is impaired digestion. Impaired digestion leads to accumulation of specific digestive impurities (known as ama) which accumulate in the pancreatic cells and impair the production of insulin.

The treatment of diabetes recommended in Ayurveda – as against modern medicine – is aimed at rejuvenating the body to not only balance sugar levels, but also foster a positive change in the patient’s life. Ayurvedic medicines work on the root cause of the disease, strengthening the patient’s immunity, enhancing digestion and helping him lead an overall healthy life. Along with medication, dietary and lifestyle changes are also recommended to rejuvenate the body’s cells and tissues, allowing them to produce insulin properly.

Daily Routine for a Diabetic Wake up Time

Wake up by 6 am in the morning, as you also need ample time to exercise. Have a glass of lukewarm water mixed with two teaspoonful of fresh lemon juice every day.

Exercise

Exercise forms an important part of treatment for diabetic patients. A morning walk is the best form of exercise. Yoga and meditation can also be beneficial, especially to relieve stress and bring clarity to the mind. If your health permits, opt for exercises such as jogging, swimming, cycling, etc.

Breakfast

In the morning, take two slices of whole meal bread with butter and fresh milk (boiled and taken warm). Seasonal fresh fruits can be taken occasionally, with or without milk.

At Work

If you are an office-goer, make sure you carry filling snacks with you all the time, as diabetics are advised not to keep their stomachs empty. Instead of snacking on cheese, chips or crackers, enjoy a handful of nuts or seeds. Go for variety with sunflower, pumpkin seeds, almonds, cashews, and walnuts.

Lunch

For lunch, opt for steamed or lightly cooked green vegetables such as cauliflower, cabbage, tomatoes, spinach, turnip, asparagus and mushrooms. Vegetable soup or boiled vegetables can also be taken. In addition, two or three whole wheat



bread (chapatis), sprouts, salad, boiled rice, lentils (daal) etc. can be taken according to appetite. A glass of butter milk (salty lassi) is a nice drink to end the lunch. Roasted cumin seeds, black salt, grated ginger and green coriander leaves can be added to the butter milk.

Daytime Sleep

If you are a non-working diabetic, always remember not to sleep during the daytime, as it increases Kledaka

Kapha. A sub-dosha of Kapha, Kledaka Kapha governs the protective mucous lining of the digestive system, thereby facilitating proper digestion. In an increased state, it can lead to impairment of digestion, which can cause additional problems in diabetes patients.

Evening Snacks

Have a glass of fresh fruit or vegetable juice. You can also take Ayurvedic tea with roasted chickpeas.

Dinner

Always remember that your dinner should be light and not have too many items. Boiled vegetables, sprouts, cottage cheese (paneer) or a bowl of

salad made from fresh raw vegetables of the season. Also, make it a point to eat at least two hours before you go to bed.

Bedtime

Go to sleep before 10 pm. Have a glass of fresh boiled warm milk before going off to bed. 🇮🇳

(The author is Eye Surgeon at the Save Sight Centre, Delhi)

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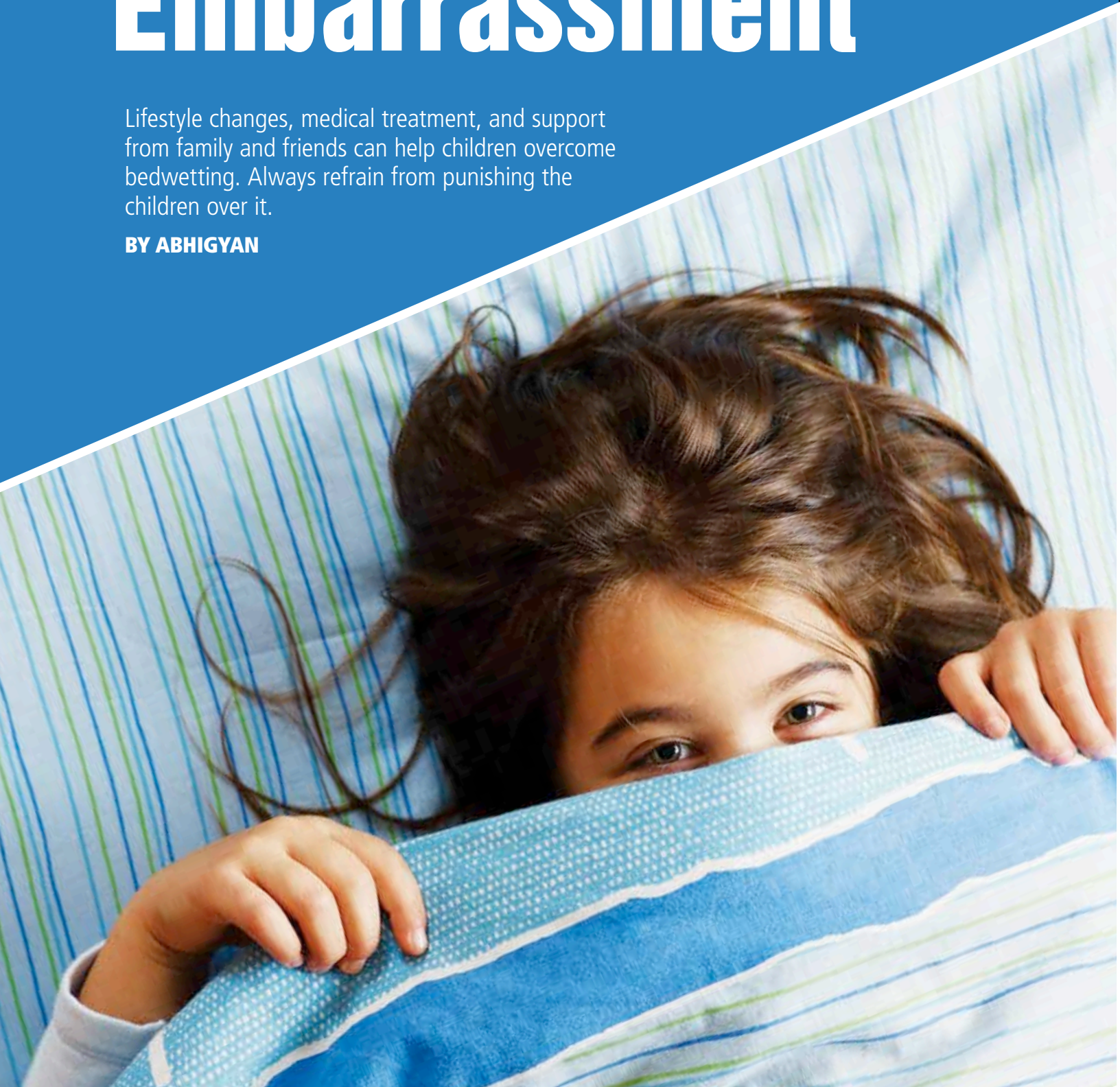
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Overcoming the Embarrassment

Lifestyle changes, medical treatment, and support from family and friends can help children overcome bedwetting. Always refrain from punishing the children over it.

BY ABHIGYAN



Bedwetting is an issue that millions of families face every night. It refers to the unintentional passage of urine during sleep. Enuresis is the medical term for wetting, whether in the clothing during the day or in bed at night. Another name for enuresis is urinary incontinence.

It is extremely common among young kids but can last into the teen years. Bedwetting is the loss of bladder control during the night. The medical term for bedwetting is nocturnal (night time) enuresis. Bedwetting can be an embarrassing issue, but in many cases, it is perfectly normal.

Bed-wetting is not confined to children as Dr S P Yadav, Senior Urologist and Chairman of Pushpanjali Hospital, Gurgaon puts it, "Bedwetting is a normal developmental stage for some children, but it can be a symptom of underlying illness or disease in adults. About 2 percent of adults suffer from bedwetting. Physical and psychological conditions can lead to bedwetting in some people."

Common causes of bedwetting among children and adults include small bladder size, urinary tract infection, stress, fear, or insecurity, neurological disorders, diabetes, prostate gland enlargement, sleep apnea (abnormal pauses in breathing during sleep) and constipation. The hormonal imbalances can also cause bedwetting in some people. Human body makes a hormone called antidiuretic hormone (ADH). The ADH tells your body to slow down the production of urine overnight. The lower volume of urine helps normal bladder hold urine overnight. People whose bodies don't make sufficient levels of ADH may experience nocturnal enuresis because their bladders can't hold higher volumes of urine.



"Medical causes of bedwetting are nearly always tackled by simply talking to a child and her parents, performing an exam, and testing the urine. Being alert to urinary symptoms can ensure that if there is a problem, your child will get the treatment he needs. Most urinary problems are easily fixed if identified early."

Dr S P Yadav, Senior Urologist and Chairman of Pushpanjali Hospital, Gurgaon

Diabetes is another disorder that can cause bedwetting. The bodies of people with diabetes don't process glucose (sugar) properly and may produce larger amounts of urine. The increase in urine production can cause children and adults who normally stay dry overnight to wet the bed.

Gender and genetics are among the risk factors for bedwetting. Both boys and girls may experience episodes of nocturnal enuresis during early childhood. Boys are more likely to wet the bed when they get older.

Family history plays a role, too. You're more likely to wet the bed if a parent, sibling, or other family member has had

the same issue.

Bedwetting is also more common among children diagnosed with attention deficit hyperactivity disorder (ADHD). Researchers don't yet fully understand the relationship between bedwetting and ADHD.

Certain lifestyle changes may help end bedwetting. Setting limits on fluid intake plays a large part in controlling bedwetting. Try not to drink water or other liquids within a few hours of bedtime to reduce the risk of having an accident. Drink the majority of your daily fluid requirements before dinner time. This will ensure that your bladder is relatively empty before bedtime.

You should also cut out caffeinated or alcoholic drinks in the evening. Caffeine and alcohol are bladder irritants and diuretics. That means they'll cause you to urinate more.

Devise a voiding schedule to help you stay dry overnight. A voiding schedule simply means that you urinate on a regular timetable, like every 1 to 2 hours. Use the bathroom right before you go to bed to empty your bladder fully before sleep.

Dr. Gautam Banga, Urologist, Andrologist and Genito-Urinary Reconstructive Surgeon, SCI International Hospital says, "Bedwetting can sometimes occur during a stressful event in a young person's life. Conflict at home or school may cause your child to have nightly accidents. The birth of a sibling, moving to a new home, or another change in routine can be stressful to children and may trigger bedwetting incidents."

Dr Anup Mohta, Director, Chacha Nehru Bal Chikitsalaya, East Delhi says, "Understanding and compassion can help your child feel better about their situation, which can put an end to bedwetting in many cases. Refrain from



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punishing bedwetting incidents. Praise your child when they stay dry. This will help them feel good about not wetting the bed.”

Delayed bladder maturation simply put, the brain and bladder gradually learn to communicate with each other during sleep, and this takes longer to happen in some kids. Low anti-diuretic hormone (ADH) tells the kidneys to make less urine. Studies show that some kids who wet the bed release less of this hormone while asleep. More urine can mean more bedwetting.

Deep sleepers families have been telling for years that their children who



“Understanding and compassion can help your child feel better about their situation, which can put an end to bedwetting in many cases. Refrain from punishing bedwetting incidents. Praise your children when they stay dry. This will help them feel good about not wetting the bed.”

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Chikitsalaya, East Delhi

wet the bed sleep more deeply than their kids that don’t. Some of these children sleep so deeply, their brain doesn’t get the signal that their bladder is full.

Dr Anup Mohta says, “Although a child’s true bladder size may be normal, during sleep, it sends the signal earlier that it’s full. Full bowels press on the bladder, and can cause uncontrolled bladder contractions, during waking or sleep. “This is the one that’s hiding in the background. Once kids are toilet trained, parents often don’t know how often a child is going out of the poop loop.

Dr S P Yadav says, “Medical causes of bedwetting are nearly always tackled by simply talking to a child and her parents, performing an exam, and testing the

urine. Being alert to urinary symptoms can ensure that if there is a problem, your child will get the treatment he needs. Most urinary problems are easily fixed if identified early.”

Dr. Gautam Banga says, “Sometimes your child suddenly needs to urinate more frequently (every five minutes, say) but produces only a small amount of urine each time. Frequent urination is accompanied by pain, fever, or foul smell. The girls get more infections. This is because the opening of the urethra, the tube leading from the bladder to the outside, is short and close to the anus. Bacteria can easily enter the bladder. There are some precautions you can take to minimize the risk of a urinary infection. Wipe your daughter from front to back, and teach her to do it this way.”

Avoid bubble bath, which can enter and irritate the bladder and prepare the way for an infection. Make sure girls drink water or other liquids frequently. Girls should have to urinate every two to four hours during the day, and their urine should be very pale (almost clear) if they are drinking enough fluid.

“Alert your pediatrician if your child who seldom or never wets at night begins to do it often. This could be a sign of urinary infection, or it could signal diabetes, kidney disease or constipation. Similarly, when a child who has been dry during the day begins to have daytime wetting, there is almost always a physical reason. Any change requires some detective work and maybe a check-up”, says Dr G K Agarwal, Sr. Pediatrician, Sri Balaji Action Medical Institute, New Delhi

Watch your child’s urine stream, especially if you have a boy. A nice, strong flow that arcs well away from the body is normal in boys. A weak, dribbling stream, or the constant release of small amounts of urine that leave underwear or diapers perpetually damp, can signal an abnormality of the urinary tract. If a child has to strain to urinate or has a hard time starting, let your healthcare provider know; there may be a problem with the urinary tract.

If your child’s urine is pink or cola-colored or is very dark or smells

unusual, bring it to your healthcare provider's attention right away. Kidney or liver problems may be the cause, and this needs immediate investigation. Early treatment may avoid kidney damage.

While most urinary problems are easily fixed, it is important to be able to recognize problems so they can quickly be addressed.

It's important to know that bed-wetting is not a behavioral problem, nor should it lead to a blame game between parents and children. It's always important, as soon as the concern arises, to talk to the pediatrician to either be reassured or investigate it. It's worse to sit on it and either worry about it or pressure your child without getting good advice about how to deal with the bed-wetting.

There are two types of bedwetting - primary and secondary. Primary bedwetting is due to a delay in the maturing of the nervous system. It is an inability to recognize messages sent by the bladder to the sleeping brain. There are a number of interventions, including medical and behavioral options.

Secondary bedwetting is wetting after being dry for at least six months. It is due to urine infections, diabetes, and other medical conditions.

According to Dr. Gautam Banga, the real reason for what causes bedwetting or why it stops is still a mystery. Most of the time, bed-wetting is just the delay in the developmental acquisition of nighttime bladder control and it's not clear why some children take longer to maintain dry nights. It may also be due to hereditary issues. If one parent wet the bed, the probability the child will be a bed-wetter is 40 percent. If both parents were bed-wetters, the probability goes up to 80 percent.

The most overlooked factor that could cause bed-wetting is constipation. Constipation is a very big problem in kids. It's not serious, but it's very common and causes stomachaches and problems in the urinary tract. The rectum is located behind the bladder, so if the rectum is full, it can push on the bladder and lead to something urologists



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call uncontrolled bladder contractions, which can promote daytime wetting or contractions at night – or bed-wetting.

Dr. Gautam Banga says, “The size of the child's bladder could also contribute to the problem. If it's smaller than average, the child may urinate more frequently during the day and have less room to hold urine overnight. In other kids, the brain produces a hormone at night that reduces the amount of urine the kidneys make, causing more urine to be produced overnight. What's more, some children have difficulty waking at night even if they experience the urge to go, causing a delay in the brain's communication to the body to get up and go to the toilet.”

If a child suffers from primary bed-wetting, he or she likely doesn't have an underlying condition. However, children

who struggle with both daytime and nighttime incontinence should be screened for urinary tract infections, diabetes, sickle cell disease, sleep apnea and neurological disorders.

One of the biggest myths about primary bed-wetting is that it's triggered by psychological problems. While some kids may start wetting the bed following an emotional incident – such as their parents' divorce, out-of-state relocation or another trauma – such behavior is an example of secondary bed-wetting. Typically, new bed-wetting brought on by stress resolves itself once the emotional event has passed.

Most children outgrow bed-wetting on their own, but the longer it continues, the heavier is the emotional and social burden for both parents and children. First, never punish your child. It's nobody's fault. Nobody wets the bed on purpose. 

Stay Sexually Agile



Mid-life crisis when you and your partner turn 50 or beyond brings with its agonizing times for the couple. Don't lose heart, it is possible to revitalize your love life, the way it used to be: romantic, loving, and full of enjoyable sex

BY TEAM DOUBLE HELICAL

Have you ever thought, sex after 50 can be the best sex of your life?

It is the time of life when men often suffer from problems like premature ejaculation, erectile dysfunction, and delayed ejaculation. Women too have to face low sex drive, lack of desire, and problems with orgasms. Hundreds of men and women begin to experience

the first signs of a more mature life: getting tired more easily; the surprise when a man's erection did not spring to attention when his partner kissed him; the bewilderment when an erection disappeared during intercourse or oral sex, a form of intimacy that would once have had a man groaning with pleasure; the distressing realization that it might be time to reach for a bottle of lube

because things somehow are not as juicy as they need to be for pleasurable lovemaking; the sudden realization that your partner is actually avoiding sex with you, or even turning you down when you suggest it.

A woman might notice her clitoris and labia are not swelling up in the way that they used to during sex; she might notice that intercourse is uncomfortable because her vagina

seems to be much more sensitive to thrusting and may even tear slightly during intercourse.

A man might notice that his erection doesn't stand up as high as it did, or that his ejaculation has much less force. Or he might suddenly find that he can't get another erection for several hours or even days after an ejaculation. And that can be something that shakes him to the core, especially if he has always regarded his sexuality as a crucial part of who he is.

According to a report, women are slightly better off, because there is a lot of information available which helps them prepare for the major life-change of the menopause, as well as online support groups which help them deal with the emotional and practical consequences of this period.

If you are a woman, and your male partner is refusing to talk about sex, how on earth would you even know what to do? You want the loving, sexual connection you once had. But every time you raise the subject of sex he brushes you off and avoids the subject.

Well, there are things that you can do to show him that his sexuality is still powerful and attractive, to restore his confidence. You can tell him, through some simple actions, that you still want those blessed moments of intimacy with him. He'll respond to you with love.

If you are a man and your partner has lost interest in sex, how on earth do you ever get her to want to make love again? Or suppose your partner has gone through the menopause and now every time you try to make love, she complains intercourse is painful, or her vagina doesn't lubricate, or she always fails to have an orgasm.

Would you know what to do or say to her, not just to reassure her, but to actually turn your sex life into something that's passionate and exciting? Would you know how to help her become fully sexual once again, so you can enjoy the pleasures of intercourse, just as you always have?

The sexologists believe that most



“If you are facing some of the challenges that can come with sex after 50 years of age, don't despair! Almost every problem that affects lovers at this time in their lives can be solved. Low sexual desire in men and women can sometimes stop a couple having sex altogether, but there are plenty of ways to keep romance alive and your sex life on the boil. Indeed, you can have the most passionate and enjoyable sex of your life after 50”

Dr Ranjan Suri from Tata Nagar, Jharkhand, an experienced sex therapist

people don't know the answers to these questions. They believe the majority of people need a way to deal with middle-aged sexuality, a formula

that restores intimacy and love, a set of techniques and tools that reverses the physical changes taking place (or provides a way of working around them - for both partners).

In particular, if your sex drive is dropping and your motivation to have sex is lower, it's all too easy to avoid having sex altogether. But once you start avoiding sex that becomes an established pattern. Why? Because it's much easier to avoid sex than take the risk of losing your erection or experiencing vaginal dryness or having painful intercourse or not being able to ejaculate or reach orgasm.

If you are a woman going through the menopause, you may be very confused about hormone replacement therapy or low sex drive. You might need to solve the problem of lack of lubrication, or the thinning of the vaginal wall that results in uncomfortable sex. You might want to know how to cope with changes in the way you feel about your body as you see it maturing.

There are probably many questions that you want to ask about how to carry on being sexual, being orgasmic. If you're feeling adventurous, you might want to know how best to explore new sexual techniques with

your partner. Or you might just want to know how to carry on as before.

As a woman, you might want to know how to support your man as he goes through changes in his sexual desire and libido, as he experiences a lessening of his staying power and his masculine strength, as he finds his erections and ejaculations changing, and as these things impact on his mood, self-image, and confidence.

As a man, you might be desperate to know how to reassure your partner that she's still attractive to you, and

you've spent your life up till now, or how you're going to spend the years ahead of you.

You might be experiencing real discomfort at the threat of losing your sexuality, particularly if your sex drive is lower or your erections are less reliable, or your ejaculations are not as powerful. And of course, there is a lot more to the male midlife experience of sex and love than simple physical changes.

Midlife produces issues about purpose and power, about your role as

challenged by the changes you experience as you pass 50 years of age and enter the years beyond.

Sometimes Viagra is a solution for erectile issues. Sometimes hormone replacement therapy is needed to overcome depression or a lack of sex drive, or to counteract the changes in your body. You might also want to know how to keep a loving relationship with your partner going, how to improve it, and how to reach a place where you enjoy better sex than ever before. Forget your pre conceptions;



how much you still want sex. Or you might be struggling to understand why you don't want sex any more. All of these things are possible; all these challenges can be overcome. How can I say this with such confidence?

If you are a man around 50, you may be scared about losing potency, or frightened by the signs that your sexual power is lessening. You might be experiencing challenges around your role in life, about exactly how

a man, about how you see yourself as your sexuality evolves. Whereas you once expected instant erections as rigid as a pole, you might now need a very different kind of stimulation to become erect, just as you might need a different approach to intercourse to satisfy your partner's needs.

If you have seen your sexual capacity as an expression of your love for your partner, or as an expression of your masculinity, then you'll certainly be

forget what you have been told in the past. Sex is great, for both sexes, at 50 and far beyond.

Dr Ranjan Suri from Tata Nagar, Jharkhand, an experienced sex therapist, has turned 57 lives with a beautifully very sexy beautiful lady who has recently turned 59. Dr Ranjan shares about his sexual habit after fifty from experience.

Dr Ranjan says that first and foremost, if you are facing some of the

challenges that can come with sex after 50 years of age, don't despair! Almost every problem that affects lovers at this time in their lives can be solved.

According to Dr Ranjan, low sexual desire in men and women can sometimes stop a couple having sex altogether, but there are plenty of ways to keep romance alive and your sex life on the boil. Indeed, you can have the most passionate and enjoyable sex of your life after 50. You just need to know how dealing effectively with the symptoms of the female menopause, including low sex drive, hot flashes, natural changes in your body is response to sexual stimulation, unpredictable mood swings...and the rest, including the dilemma around hormone replacement therapy, problems with vaginal lubrication, and painful intercourse. beating the symptoms of the male andropause - (that's the word for all the changes in a man's body around the age of 45 to 55) such as loss of sex drive and sexual desire.

Some symptoms like changes in your body's response to sexual stimulation, especially less reliable erections and weaker ejaculations, and perhaps not even being able to get an erection, physical changes which might include penile and testicular shrinkage, aches and pains, muscle wasting, and more ... all can be dealt with very effectively if you know how.

Male mid-life crisis is a stage of life sometimes treated like a joke, which in fact is anything but funny, involving as it does a lack of motivation, depression, loss of confidence, lack of purpose, feelings of hopelessness, despair, a sense of grief at aging, irritability, anger, and more.

Difficulties with sexual intercourse - whether these are caused by physical issues which make sex difficult, like vaginal dryness and loss of erection, or by relationship difficulties that stop it happening, or even a puzzling dwindling away of intercourse for no obvious reason, you can find out here how to revitalize your sex life and

enjoy some of the best sex you have ever had.

Erectile dysfunction or erection problems can range from once in a while failure to complete loss of erection, no matter what form they take, these problems can be devastating to a man's confidence. And yet, given the right treatment approach, all these issues can be resolved, your confidence restored - together with your erection - and your enjoyment of sex renewed.

The common body issues of midlife are related to how do you cope with all the changes that midlife can bring - drooping, sagging, losing elasticity. Women and men want to stay on good

The common body issues of midlife are related to how do you cope with all the changes that midlife can bring - drooping, sagging, losing elasticity. Women and men want to stay on good terms with their bodies so they can enjoy sex at least as much as before... perhaps even more than before

terms with their bodies so they can enjoy sex at least as much as before... perhaps even more than before.


For women, the menopause is a crucial time, signaling the loss of fertility and the end of the possibility of getting pregnant. For some women, this heralds a new dawn of sexual freedom (no worries now about contraception) and sparks an era of new desire and passionate sex. For others, it seems like the loss of an essential part of themselves. For men, too, there can be a sense of losing the male power and vitality which has fuelled so much of their adult life. For everyone, it's a time of change. Yet in

the natural order of things, women and men grow into a mature sexuality at this time of life that's just as rewarding as anything you ever experienced before.

Says Dr Ranjan, "I have never heard a man speak of sex after 50 as being less satisfying than sex earlier in his life. Sure, men may have less sex, less often, but it tends to last longer and even if they ejaculate less powerfully, the satisfaction seems to be as great. I believe all women, too, can enjoy sex just as much after 50 as before. Both men and women can enjoy intense, passionate sex after 50 here"

Relationship difficulties - many couples find that when their sex drive falls, or the children leave home, there doesn't seem to be much keeping their relationship together. Yet really good sex definitely acts as the glue that keeps a couple together, no matter how old they are. It promotes affection, intimacy, bonding and mutual love. A couple can remain lovers, in every sense of that word - spiritually, physically, emotionally, and practically - with some simple, easy techniques that can transform your relationship. This is essential information if you feel that you're drifting away - possibly through a lack of sex - from your lover, partner or spouse.

Is growing into your mature sexuality more than the sum of all the things above? Yes, probably...it's also about evolving emotionally, accepting that things aren't what they were, they are different, probably better. You should know powerful techniques to help you move to a place of psychological power, no matter how you may think about life after 50 at the moment.

Explains Dr Ranjan, "The fact is, your sexual organs really do stay younger longer, the more you use them. And to prevent hardening of the arteries, as well as hardening of the attitudes, there is nothing like regular sex! You need to know all the sexual tips, tricks and techniques to ensure that your sexual desire remains high and your orgasms are powerful - no matter how old you are." 



Surrogacy under Scanner

The Bombay High Court's interim order, staying the directive of the Union government banning surrogacy for foreign couples, has ignited a debate over the regulation of commercial surrogacy in India

BY AMRESH K TIWARY

Though India is emerging as a major destination for surrogacy because of its relatively low cost, there are still a number of complex legal and ethical issues involved. Recently, the Bombay High Court in its interim order stayed the directive of the Union government and the Indian Council for Medical Research banning surrogacy for foreign couples who are in the final stages of the process. The High Court clarified that its order was restricted to cases in the midst of treatment. It asked the clinics to furnish details of such cases to the authorities. The Court also barred them from taking up fresh cases of surrogacy for foreign couples.

The doctors' fraternity has opposed the Surrogacy Bill. According to **A K Agarwal, President, Delhi Medical Council and Professor of Excellency, Maulana Azad Institute of Medical Science, New Delhi**, the bill is against the law of the land as it denies fertility treatment to the common man, and seeks to raise the cost of treatment severely and restrict the facilities.

Incidentally, the Centre, in an online statement, announced that the ban will not affect surrogacy cases already underway and or exit of children born

out of surrogacy before November 4. It added that overseas citizen of India cardholders, too, cannot seek surrogacy in India.

The High Court, rejecting the Centre's contention that there was no urgency in the matter, said before introducing a sudden change in policy, prior notice should have been given. The preparatory steps to commission surrogacy consume time, energy and cost, apart from pain and suffering by the individuals. Once such process is set in motion, it becomes very difficult to abandon or postpone it at the crucial stage," said the judge. Under these circumstances where the court fails to interfere in the matter, the same shall result in travesty of justice.

The court has pointed out that by the government's own admission, commercial surrogacy had not been banned and recognition of clinics not suspended. "It is therefore expected that the Government will take into consideration the repercussion of suddenly banning surrogacy prevailing for 10 years, without notice," the High Court said. "Change in the policy with prior notice would be more desirable and in absence of it, the doctrine of legitimate expectation would operate to save the time, energy and cost and the physical and mental sufferings and pain undergone by the parties. Such



"The bill is against the law of the land and as it denies fertility treatment to the common man, and seeks to raise the cost of treatment severely and restrict the facilities. Incidentally, the Centre, in an online statement, announced that the ban will not affect surrogacy cases already underway and or exit of children born out of surrogacy before November 4. It added that overseas citizen of India cardholders, cannot seek surrogacy in India"

A K Agarwal, President, Delhi Medical Council and Professor of Excellency, Maulana Azad Institute of Medical Science, New Delhi



parties cannot be deprived of the ultimate benefits which they have sought to avail of in accordance with the policy of the Government of India.

According to **Dr. Shivani Sachdev Gour, Founder and Director, Surrogacy Centre India**, the Surrogacy Bill is unreasonable and is against the Law of the Land and by raising costs of treatment severely and



“Fertility tourism has a very positive financial impact for India and we should regulate it rather than ban it. Surrogacy is a very special arrangement for childless couples who are unable to enjoy the joy of parenthood. Only the surrogate gives them this joy and in return gets the financial independence for her family so it is a win-win situation for both.”

Gaurav Malhotra, MD and CEO of Bourn Hall International

restricting facilities will deny fertility treatment to the common man. A farmer’s wife who approached for treatment said that as the costs are rising and success rates go down (with only frozen eggs permissible success rates are expected to drop dramatically), she will have no option but to commit suicide as she will not be able to afford the treatment. It is crucial that the Government re looks at the proposed Bill as family is the primary unit of the society and each and every household is affected by this. With rising pollution, pesticides and toxins, infertility is rising and is becoming a huge problem.

The Law and Medical Council states that doctors should not discriminate

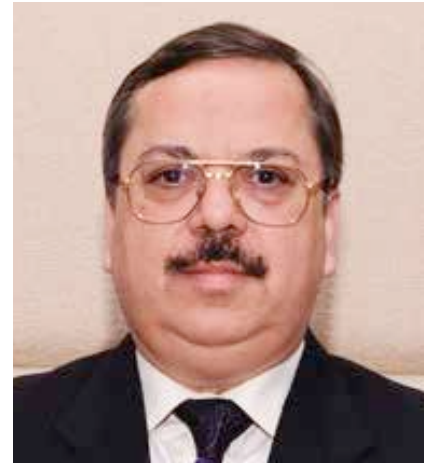
against patients and that a person is innocent unless proven guilty. Here in this Bill we have to discriminate on the basis of the colour of the skin of the patient so white-skinned foreigners cannot be given treatment and even in India only the rich can afford treatment. Also doctors are treated as criminals and presumed guilty even for a clerical error on the extensive paperwork required. Two clerical errors mean seven years in jail and Rs. 15 lakh fine and permanent cancellation of medical registration. Can any human being work under such conditions? The biggest sufferers will be the childless couples.

Gaurav Malhotra, MD and CEO of Bourn Hall International, says, “Fertility tourism has a very positive financial impact for India and we should regulate it rather than ban it. Surrogacy is a very special arrangement for childless couples who are unable to enjoy the joy of parenthood. Only the surrogate gives them this joy and in return gets the financial independence for her family so it is a win-win situation for both.”

Dr. (Brig)R.K. Sharma , H.O.D, I.V.F, Primus Super Speciality Hospital, said, “This is right decision of High court because some patients might be already on surrogacy treatment or would have got their embryos frozen for transfer to an appropriate surrogate. Denying them surrogacy in this last phase of management may be a breach of contract between doctor & patients. So, such patients should be allowed to continue treatment & new registration can be stopped as per directive of Govt of India.”

India is increasingly becoming an attractive destination for prospective parents looking at surrogacy. The cost of the entire surrogacy procedure is significantly lower in India. Technology and expertise is easily available and is up to world class standards, coupled with the availability of women offering their wombs as surrogates and lesser legal hassles.

A woman’s body undergoes



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hormonal change as she is prepared for intrauterine insemination or intra-cervical insemination or, less commonly, intra-cytoplasmic sperm injection or in-vitro fertilisation. She is also put through many other risks. For instance, under the chaotic conditions that prevail in this trade, the testing of the donor for various diseases is mostly absent. Also, there is wide ignorance of the fact that the chances of conception through artificial insemination are at best 35 percent and that too for women under 30.

“There are two main types of surrogacy, gestational surrogacy and traditional surrogacy. In gestational surrogacy, the pregnancy results from the transfer of an embryo created by in vitro fertilization (IVF), in a manner that the resulting child is genetically unrelated to the surrogate. In traditional surrogacy, the surrogate is impregnated naturally or artificially, but the resulting child is genetically related to the surrogate. In the United States, gestational surrogacy is more common than traditional surrogacy and is considered less legally complex. That’s because both intended parents have genetic ties to the baby.” -

Dr Sowjanya Aggarwal, Director, Minimal Invasive Gynaecological Surgery & Reproductive Medicine, Max Superspeciality Hospital, Vaishali (Ghaziabad)



A K Agarwal, says, “To rein in the industry, the Union Health Minister promises to soon introduce a bill in the Parliament that will regulate commercial surrogacy in India. A survey done in 2011 by SOS Children’s village and National Family Health Survey revealed that there was 20 million children without parents and a home in India. Another said that there are just 5,000 adoptions every year in India”.

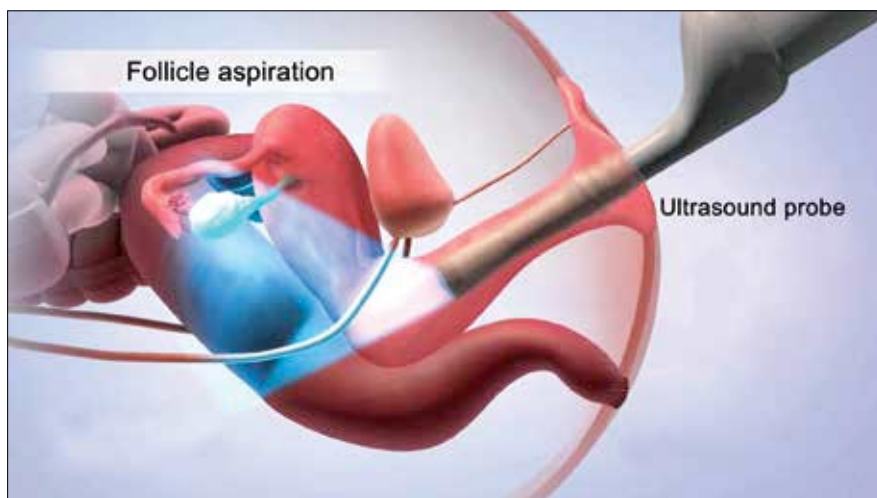
Opting for a surrogate mother by childless couples is still not very common in India. But it is one more option people have for having a baby through new reproductive technologies. Surrogate mother can be

defined as a woman who bears a child for another person, often for a pay, either through artificial insemination or by carrying until birth another woman’s surgically implanted fertilized egg. A surrogacy arrangement or surrogacy agreement is the carrying of a pregnancy for intended parents.

According to **Dr Sowjanya Aggarwal**, Director, Minimal Invasive Gynaecological Surgery & Reproductive Medicine, Max Superspeciality Hospital, Vaishali (Ghaziabad), “There are two main types of surrogacy, gestational surrogacy and traditional surrogacy. In gestational surrogacy, the pregnancy results from the transfer of an embryo created by in

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As a result, gestational surrogacy has become more common than traditional surrogate. About 750 babies are born each year using gestational surrogacy. Significantly, India is emerging as a major destination for surrogacy. Indian surrogates have been increasingly popular with intended parents in industrialised nations because of the relatively low cost. Indian clinics are at the same time becoming more competitive, not just in the pricing, but in the hiring and retention of Indian women as surrogates. The private clinics charge patients for the complete package, including fertilisation, the surrogate’s fee, and delivery of the baby at a hospital. Still even after including the costs of flight tickets, medical procedures and hotels, it comes to roughly a third of the price compared with procedures in the UK.



Types of Surrogacy

According to **Dr. Vinay Aggarwal, Former President, Indian Medical Association and Fonder Chairman,** "Prospective parents may seek a surrogacy arrangement when medical issues make pregnancy either impossible or it is considered far too risky for the mother's health. Monetary compensation may or may not be involved in these arrangements. If the surrogate receives compensation beyond reimbursement of medical and other reasonable expenses, the arrangement is considered commercial surrogacy; otherwise, it is referred to as altruistic. The legality and costs of surrogacy vary widely between jurisdictions, sometimes resulting in interstate or international surrogacy arrangements."

Who uses Surrogates?

Dr Vinay Aggarwal, says, "A woman might decide to use a surrogate for several reasons. She may have medical problems with her uterus. She may have had a hysterectomy that removed her uterus. There may be conditions that make pregnancy impossible or medically risky, such as severe disease. Other women choose surrogacy after trying unsuccessfully to get pregnant with a variety of assisted-reproduction techniques (ART), such as IVF"

Surrogates have also made parenthood an option for people who might not be able to adopt a child. Reasons could include their age, marital status and sexual orientation. For example, when gay men use a traditional surrogate, one of them uses their sperm to fertilise the surrogate's egg through artificial insemination. The surrogate then carries the baby and gives birth. A gay couple might also choose an egg donor, fertilise that donated egg, and have the resulting embryo implanted in a gestational surrogate to carry until birth.

Finding a Surrogate

There are several ways to find a

surrogate mother like friends or family. Some people ask a friend or relative to be a surrogate for them. Doing so is somewhat controversial. But given the high cost of surrogacy and the complex legal issues it raises about parental rights, a tried-and-tested family relationship can be simpler to manage. The American Society for Reproductive Medicine accepts certain family ties as acceptable for surrogates. It generally discourages surrogacy, though, if the child would carry the same genes as a child born of incest between first-degree relatives.

A surrogacy agency

Most people turn to a surrogate agency to arrange a gestational surrogate. The agencies act as go-betweens. An agency helps would-be parents find a suitable surrogate, makes arrangements, and collects any fees passed between parents and the surrogate, such as reimbursement for her medical expenses.

There is an upcoming Assisted Reproductive Technology Bill, aiming to regulate the surrogacy business. However, it is expected to increase the confidence in clinics by sorting out dubious practitioners, and in this way stimulates the practice.

The legal aspects of surrogacy in any particular jurisdiction tend to hinge on a few central questions like - Are surrogacy agreements enforceable, void or prohibited? Does it make a difference whether the surrogate mother is paid (commercial) or simply reimbursed for expenses? What, if any, difference does it make whether the surrogacy is traditional or gestational? Is there an alternative to post-birth adoption for the recognition of the intended parents as the legal parents, either before or after the birth?

Although laws differ widely from one jurisdiction to another, some generalisations are possible. The historical legal assumption has been that the woman giving birth to a child is that child's legal mother, and the only way for another woman to be

recognised as the mother is through adoption (usually requiring the birth mother's formal abandonment of parental rights).

Even in jurisdictions that do not recognise surrogacy arrangements, if the genetic parents and the birth mother proceed without any intervention from the government and have no changes of heart along the way, they are likely to be able to achieve the effects of surrogacy by having the surrogate mother give birth and then give the child up for private adoption to the intended parents.

If the jurisdiction specifically prohibits surrogacy, however, and finds out about the arrangement, there may be financial and legal consequences for the parties involved. One jurisdiction prevented the genetic mother's adoption of the child even though that left the child with no legal mother.

Some jurisdictions specifically prohibit only commercial and not altruistic surrogacy. Even jurisdictions that do not prohibit surrogacy may rule that surrogacy contracts (commercial, altruistic, or both) are void. If the contract is either prohibited or void, then there is no recourse if party to the agreement has a change of heart: If a surrogate changes her mind and decides to keep the child, the intended mother has no claim to the child even if it is her genetic offspring, and the couple cannot get back any money they may have paid or reimbursed to the surrogate; if the intended parents change their mind and do not want the child after all, the surrogate cannot get any reimbursement for expenses, or any promised payment, and she will be left with legal custody of the child.

Jurisdictions that permit surrogacy sometimes offer a way for the intended mother, especially if she is also the genetic mother, to be recognised as the legal mother without going through the process of abandonment and adoption.

Often this is via a birth order in which a court rules on the legal



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Dr. Vinay Aggarwal, Former President, Indian Medical Association and Fonder Chairman

parentage of a child. These orders usually require the consent of all parties involved, sometimes including even the husband of a married gestational surrogate. Most jurisdictions provide for only a post-birth order, often out of an unwillingness to force the surrogate mother to give up parental rights if she changes her mind after the birth.

A few jurisdictions do provide for pre-birth orders, generally in only those cases where the surrogate mother is not genetically related to the expected child. Some jurisdictions impose other requirements in order to issue birth orders, for example, that the intended parents be heterosexual and married to one another. Jurisdictions that provide for pre-birth orders are also more likely to provide for some kind of enforcement of surrogacy contracts.

Ethical issues


Ethical issues that have been raised with regards to surrogacy include: To what extent should society be concerned about exploitation, commercialisation, and/or coercion when women are paid to be pregnant and deliver babies, especially in cases where there are large wealth and power differentials between intended parents and surrogates? To what

extent is it right for society to permit women to make contracts about the use of their bodies? To what extent is it a woman's human right to make contracts regarding the use of her body? Is contracting for surrogacy more like contracting for employment/labour, or more like contracting for prostitution, or more like contracting for slavery? Which, if any, of these kinds of contracts should be enforceable? Should the state be able to force a woman to carry out "specific performance" of her contract if that requires her to give birth to an embryo she would like to abort, or to abort an embryo she would like to carry to term? What does motherhood mean? What is the relationship between genetic motherhood, gestational motherhood, and social motherhood? Is it possible to socially or legally conceive of multiple modes of motherhood and/or the recognition of multiple mothers? Should a child born via surrogacy have the right to know the identity of any/all of the people involved in that child's conception and delivery?

As per law, surrogacy arrangement will continue to be governed by contract amongst parties, which will contain all the terms requiring consent of surrogate mother to bear child, agreement of her husband and other

family members for the same, medical procedures of artificial insemination, reimbursement of all reasonable expenses for carrying child to full term, willingness to hand over the child born to the commissioning parent(s), etc. But such an arrangement should not be for commercial purposes.

A surrogacy arrangement should provide for financial support for surrogate child in the event of death of the commissioning couple or individual before delivery of the child, or divorce between the intended parents and subsequent willingness of none to take delivery of the child.

A surrogacy contract should necessarily take care of life insurance cover for surrogate mother. One of the intended parents should be a donor as well, because the bond of love and affection with a child primarily emanates from biological relationship. Also, the chances of various kinds of child-abuse, which have been noticed in cases of adoptions, will be reduced. In case the intended parent is single, he or she should be a donor to be able to have a surrogate child. Otherwise, adoption is the way to have a child which is resorted to if biological (natural) parents and adoptive parents are different. 



Protect your Heart in Winter

Heart patients need to take extra care in the winter. It is all the more so because medical case records show a marked increase in the incidence of cardiac failures during this time of the year

BY DR VINAY KUMAR BAHL



Cold weather, stress, lack of exercise, lack of vitamin D and changes in lifestyle, all play a role in increasing a person's overall risk of heart problems during the winter. In frigid weather, our heart works hard to maintain the body temperature as the body temperature also falls due to the drop in outside temperature which results in the tightening of the arteries thereby restricting the blood flow and reducing the oxygen supply to the

heart and the brain. A combination of these factors can trigger cardiac complaints, especially in the elderly and heart patients.

Even as the winter starts many people get the feeling that they are going to face problems. Heart patients especially fear a lot as the winter brings with it a lot of problems for them. Hypothermia, cardiovascular diseases and heart attack are some of the major fears.

Hypothermia: Most people don't

know the potential dangers of being outdoors in cold weather. Winter sports enthusiasts who don't take certain precautions can suffer accidental hypothermia. Hypothermia is a condition in which the body temperature falls, and it can be fatal. It happens when your body is unable to produce enough energy to keep the internal body temperature at the requisite level.

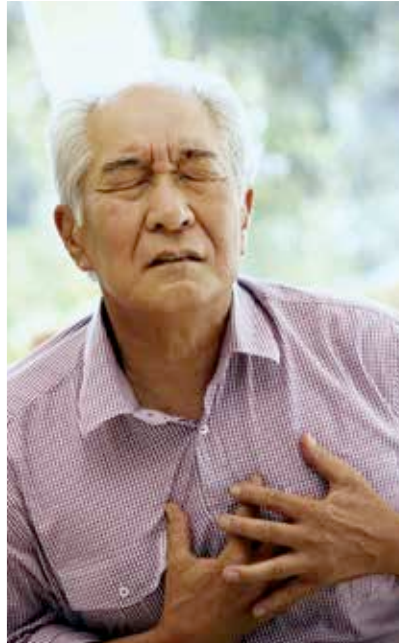
Children and the elderly are at special risk because they may have limited ability to communicate or impaired mobility. The elderly people may also have lower subcutaneous fat and a diminished ability to sense temperature fall and consequently they can suffer hypothermia without knowing they're in danger.

The symptoms of hypothermia are drop in body temperature, shivering, lack of co-ordination, slowed reactions, confusion and poor decision-making, clumsiness, slurred speech or mumbling, drowsiness or very low energy. Fatigue, cough, sneezing can put additional pressure on the patient during winter.

Cardiovascular diseases: They are conditions which may lead to heart attack. It is also a problem faced in winter. Somewhere it affects the structure and proper functioning of the heart.

The risk of angina is marked by pain or any type of discomfort in the chest. It increases with a rise in obesity and cholesterol caused by a change in lifestyle and eating habits, and exposure during winter.

The symptoms of angina also include shortness of breath, chest pain, numbness, weakness or coldness in the legs or arms if the blood vessels in those parts of your body are narrowed and pain in the neck, jaw, throat, upper abdomen or back.



Heart attack:

There is a rise in the incidence of heart attacks in the winter. The chill of the winter leads to a greater risk, especially in those quite advanced in age.


Pressure, tightness, pain, or a squeezing or aching sensation in your chest or arms that may spread to your neck, jaw or back, nausea, indigestion, heartburn or abdominal pain, shortness of breath, cold sweat, fatigue, lightheadedness or sudden dizziness are some of the symptoms of an impending heart attack.

Children and the elderly are at special risk because they may have limited ability to communicate or impaired mobility. The elderly people may also have lower subcutaneous fat and a diminished ability to sense temperature fall and consequently they can suffer hypothermia

Precautions

Wear several layers of loose-fitting clothing, mittens, a cap and a face cover when going outdoors to prevent body heat from escaping from your head, face and neck. Be extra cautious in the wind. A strong wind, even in only moderately cold weather, can cause a wind chill far below freezing.

At the first sign of possible frostbite – redness or pain in any skin area – get out of the cold and protect any exposed skin. Stay as dry as possible.

Be careful about your diet. Eat a healthy, balanced diet. Avoid red meat and fatty foods and alcohol. Avoid smoking. Try to keep your blood pressure at a healthy level. Take a brisk walk when it is sunny. Keep a check on your cholesterol level. 

(The author is Professor and Head of the Department of Cardiology, AIIMS, New Delhi)

Asthma care during Winter

Asthma is characterized by an abnormal behaviour of the bronchial pipes triggered by an allergic reaction that makes breathing difficult. The problem increases in the winter. Here are some tips to alleviate your suffering

BY DR. PANKAJ SAYAL



If you are experiencing severe symptoms of wheezing while breathing both in and out, coughing that won't stop, very rapid breathing, chest tightness or pressure, tightened neck and chest muscles called retractions, difficulty talking, feeling of anxiety or panic, pale, sweaty face and blue lips or fingernails or worsening of symptoms despite taking medication, you might be having

an attack of asthma.

Sometimes asthma symptoms include sighing, fatigue, and rapid breathing, not coughing or wheezing. You must take certain precautions like never forget your inhaler, stay calm, beware of indoor allergens, never breathe from your mouth.

For being extra safe this winter, pull a neck gaiter, scarf or turtleneck up over your mouth and nose to warm the

air you are inhaling. Avoid exercising outdoors when it's very cold outside. It is also advised to change the filters of your heating system every year before winter season starts.

Asthma is a persistent disease of the bronchial pipes (air shaft) that makes breathing difficult. It is usually connected to allergic reaction or other forms of hypersensitivity.

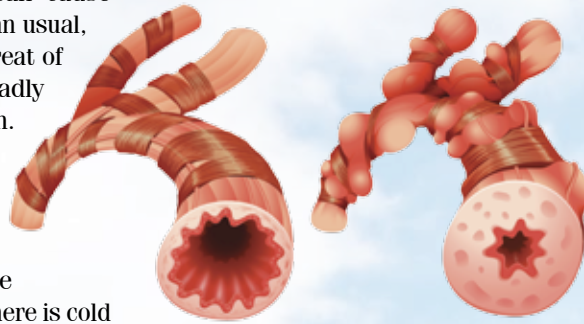
Asthma problems gradually increase

in winter. Cold weather can cause asthma to flare up more than usual, not to mention the extra threat of colds and flu, which can badly affect the respiratory system. The attacks happen more often in the winters because of mainly two reasons: the patients usually spend more time indoors in the winters and there is cold outside. Hence the challenges in the winters increase for the asthma people.

An asthma attack is characterized by an unexpected constricting symptom caused by the tightening of the muscles around your airways (bronchospasm). During an attack, the lining of the airways also becomes swollen or provoked and mucus more than normal is produced. All these factors create bronchospasm, inflammation, and mucus production.

There are many more reasons why winter is a problem for asthmatics. The cold air itself is a common trigger of breathlessness and the attacks, plus winter brings with it an increase in colds and respiratory infections like Swine flu etc. Being indoors can cause problems too as the air is often of poor quality during the winter because we prevent fresh air circulation by closing the doors and windows to keep out the chill.

Smog is another factor which can aggravate asthma for people living in and around Delhi.



Much of this is unavoidable so it's important that you and those around you know about your asthma in case you do have an attack.

Prevention

To avoid getting infections or catching cold one should always wash one's hands properly with soap and water. Because infections aggravate the asthmatic condition. Alcohol-based sanitizers works best for this.


One should not sit by a fire place as the smoke of the burning woods is like burning tobacco and it triggers asthma.

Exercise indoors. On days when it's bitterly cold outside and the wind chill makes it feel like it's below zero, go to the gym instead of exercising outside. The temperatures and the humidity in the gym are less likely to cause a



problem. If you still want to exercise in the fresh (albeit cold) air, choose a time of the day when it might be warmer, such as the mid-afternoon.

Replace filters. Your home heating system may blow dust throughout your house, especially when you first start it up for the winter. It's important to clean and replace the filters before turning on your system so as not to release the debris and trigger an asthma attack. Clean and check the filters periodically throughout the heating season to avoid issues with winter asthma. Also, try to keep the temperature and humidity levels in your home consistent.

Get a flu shot. The Centre for Disease Control and Prevention (CDC) recommends that most people aged 6 months and older get an annual flu shot to help protection against the flu virus. Having asthma won't make you more susceptible, but if you do get the flu, the results could be more serious, even if you keep your asthma symptoms under control. It's important that people with asthma get the injectable form of the flu vaccine made with inactivated [killed] flu virus. People with asthma shouldn't get the nasal spray (FluMist) vaccine because it contains live virus. 



(The author is Senior Consultant, Pulmonology, PSRI Hospital, New Delhi)

Rescuing Joints



Active adult patients involved in sports or strenuous jobs as also older patients can undergo arthroscopy, a new, minimally invasive surgical procedure to examine and repair damage to joints

BY DR SHITIZ BHARDWAJ

Famous tennis champion Sania Mirza had suddenly experienced jerk in her heavily strapped left knee when she was ready for the opening round of Wimbledon singles clash against France's Virgine Razzano some time ago. It was an instance of anterior cruciate ligament (ACL) injury which causes a lot of pain.

In such cases, arthroscopy surgery is emerging as the answer. This comparatively new surgical procedure is undergoing revolutionary

changes due to newer approaches for pain control, introduction of techniques that reduce the preoperative stress response and the use of minimally invasive surgical methods.

The latest in arthroscopy surgery is treatment of all ligament injuries including single and multiple ligament injury together. This is routinely performed on an outpatient basis.

A study suggests that when these newer approaches are used in arthroscopic repair of large and massive rotator cuff, tears led to a high percentage of recurrent defects. The minimum 12-month evaluation showed excellent pain relief and improvement in the ability to perform normal activities despite a high rate of recurrent defects.

With new developments, the postoperative complications can be reduced, length of hospital stay decreased, and the time for recovery shortened.

The anterior cruciate ligament (ACL) is one of the most commonly injured ligaments of the knee. The incidence of ACL injuries is currently estimated at approximately 200,000 annually, with 100,000 ACL reconstructions performed each year. In general, the incidence of ACL injury is higher in people who participate in high-risk sports, such as basketball, football, skiing, and soccer.

Approximately 50 percent of ACL injuries occur in combination with damage to the meniscus, articular cartilage, or other ligaments. Additionally, patients may have bruises of the bone beneath the cartilage surface. These may be seen on a magnetic resonance imaging (MRI) scan and may indicate injury to the overlying articular cartilage.

Immediately after the injury, patients usually experience pain and swelling and the knee feels unstable. Within a few hours after a new ACL injury, patients often have a large amount of knee swelling, a loss of full range of motion, pain or tenderness along the joint line and discomfort while walking.

The natural history of an ACL injury without surgical intervention varies from patient to patient and depends on the patient's activity level, degree of injury and instability symptoms.

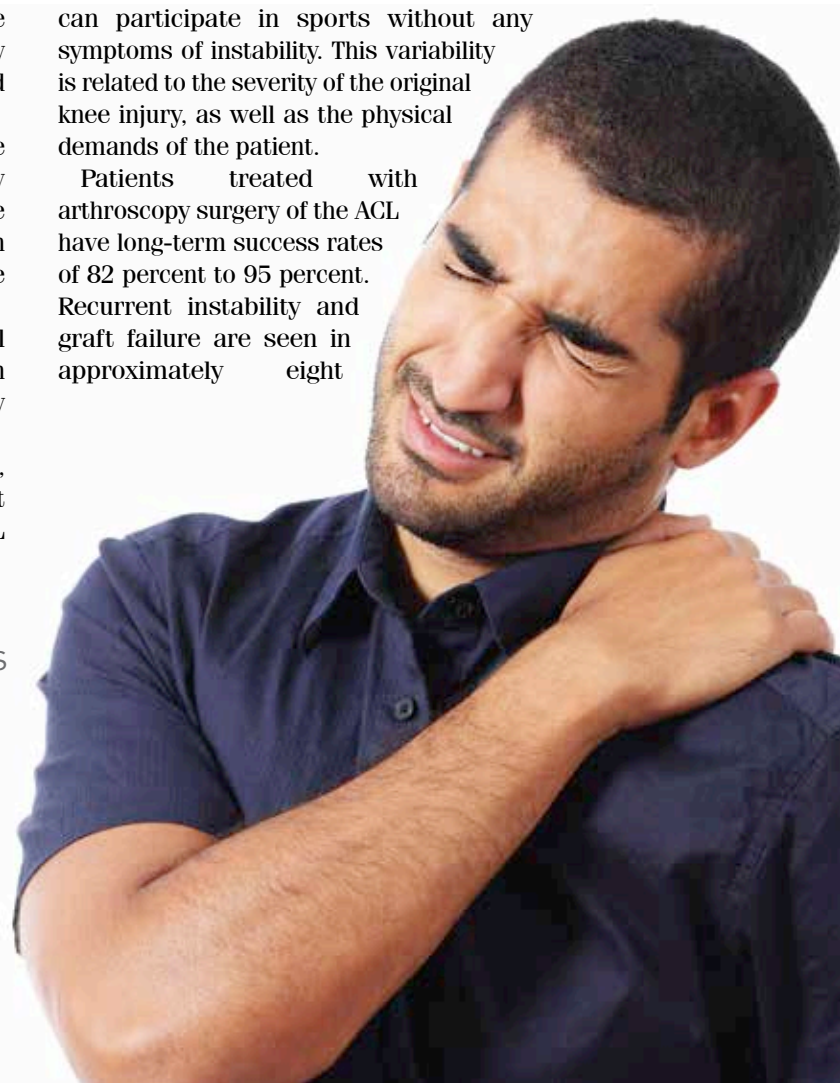
The prognosis for a partially torn ACL is often favorable, with the recovery and rehabilitation period of usually at least three months. However, some patients with partial ACL



tears may still have instability symptoms. Close clinical follow-up and a complete course of physical therapy helps identify those patients with unstable knees due to partial ACL tears.

Complete ACL ruptures have a much less favorable outcome. After a complete ACL tear, some patients are unable to participate in cutting or pivoting-type sports, while others have instability during even normal activities, such as walking. There are some rare individuals who can participate in sports without any symptoms of instability. This variability is related to the severity of the original knee injury, as well as the physical demands of the patient.

Patients treated with arthroscopy surgery of the ACL have long-term success rates of 82 percent to 95 percent. Recurrent instability and graft failure are seen in approximately eight



The anterior cruciate ligament (ACL) is one of the most commonly injured ligaments of the knee. The incidence of ACL injuries is currently estimated at approximately 200,000 annually, with 100,000 ACL reconstructions performed each year.



percent of patients. The goal of the ACL reconstruction surgery through arthroscopy is to prevent instability and restore the function of the torn ligament, creating a stable knee. This allows the patient to return to sports.

There are certain factors that the patient must consider when deciding for or against ACL surgery. Active adult patients involved in sports or jobs that require pivoting, turning or hard-cutting as well as heavy manual work are encouraged to consider surgical treatment. This includes older patients who have previously been excluded from consideration for ACL surgery. Activity, not age, should determine if surgical intervention should be considered.

In young children or adolescents with ACL tears, early ACL reconstruction creates a possible risk of growth plate injury, leading to bone growth problems. The surgeon can delay ACL surgery until the child is closer to skeletal maturity or the surgeon may modify the ACL surgery technique to decrease the risk of growth plate injury.

A patient with a torn ACL and significant functional instability has a high risk of developing secondary knee damage and should therefore consider ACL reconstruction. The fast track arthroscopy surgery combines various

techniques used in the care of patients undergoing elective operations. The methods used include epidural or regional anaesthesia, minimally invasive techniques, optimal pain control, and aggressive postoperative rehabilitation, including early enteral (oral) nutrition and ambulation.

The most important ACL injuries are common among athletes. Although the true natural history remains unclear, ACL injuries are functionally disabling; they predispose the knee to subsequent injuries and the early onset of osteoarthritis.

The multiple-ligament injured knee is a complex problem in orthopaedic surgery. Most dislocated knees involve tears of the anterior and posterior cruciate ligaments and at least one collateral ligament complex. Careful assessment of the extremity vascular status is essential because of the possibility of arterial and/or venous compromise. These complex injuries require a systematic approach to evaluation and treatment. Physical examination and imaging studies enable the surgeon to make a correct diagnosis and to formulate a treatment plan.

Arthroscopically assisted combined ligaments reconstruction is a reproducible procedure. Knee stability

is improved postoperatively when evaluated using knee ligament rating scales, arthrometer testing, and stress radiographic analysis.

Surgical timing depends on the ligaments injured, the vascular status of the extremity, reduction stability, and the overall health of the patient. We prefer to use allograft tissue for reconstruction in these cases because of the strength of these large grafts and the absence of donor site morbidity.

We focus on the prospective, randomized controlled trials and, when necessary, the highest level of evidence available. Surprisingly, considerable advances have been made during the past decade regarding the treatment of this devastating injury.

Chadha from Rohtak, 52, presented herself to the clinic to discuss pain in her right knee. This had been going on for many months, progressively worsening to the point of constant discomfort. She reported mild difficulty walking up and down stairs, as well as grinding, popping, and periodic swelling of the joint. A physical exam revealed crepitus, swelling




Patients treated with arthroscopy surgery of the ACL have long-term success rates of 82 percent to 95 percent. Recurrent instability and graft failure are seen in approximately eight percent of patients.

and pain. She was understandably frustrated, and requested imaging and a referral to orthopedics to discuss surgical options. The problems related to ligament injuries are affecting over 10% of individuals over age 50-60.

It is the result of mechanical, metabolic and inflammatory stress on joints, which leads to destruction of articular cartilage. It affects a broad range of patients, and risk factors are varied, from BMI (Body Mass Index) to age to gender and activity level. This can usually be diagnosed by physical exam, although clinicians also rely on imaging to assess disease severity. There is no way to reverse the damage caused by multiple ligament injuries and it is difficult to halt its progression. Nonetheless, symptoms can often be effectively managed in the primary care setting.

Typically, treatment begins with medications. In advanced cases surgery is available for those patients with severe disease who suffer from intractable pain despite optimal medical management and therapy, with some patients gaining substantial benefit from procedures such as total knee arthroplasty when indicated. Some patients, however, may proceed to surgery even before they have exhausted more conservative options.

While total knee arthroplasty is generally performed on patients with severe ligament injuries even those patients with mild to moderate osteoarthritis can also opt for a minimally invasive procedure, in which damaged articular cartilage is either debrided or removed. 

(The author is Senior Orthopedic Consultant and Chief of Orthopedic Unit, Sri Action Balaji Medical Institute, New Delhi)

Max Medicon 2015 organised in Delhi



The Max Super Speciality Hospitals of Patparganj and Vaishali jointly organized a two-day medical conference called 'Max Medicon 2015' here last week.

The annual conference was inaugurated by the Health Minister of the Government of Delhi, Satyendra Kumar Jain. On the final day of the conference the chief guest, Union Minister for Health and Family Welfare JP Nadda presented the Sevabhav awards. 'Max Health Line' the quarterly newsletter of the hospitals was also released on the occasion.

The conference was also attended by Rahul Khosla, chairman, Max Healthcare, Rajit Mehta, MD and CEO, Max Healthcare, and Dr Vinay Aggarwal, Organizing Chairman of Max Medicon.

Over 1,500 doctors took part in the medical deliberations at the various sessions of the conference hosted by the leading healthcare providers to showcase the latest advancements in the fields like oncology, transplant medicine, cardiac sciences, gynaecology, orthopedics, medicine and allied specialities.

The event also included parallel sessions on obstetrics and gynaecology along with 'safer healthcare issues' in clinical practice aimed to benefit practicing doctors, medical administrators and hospital/nursing home owners.

Discussions were held on issues like adolescent and geriatric health care attended by over 250 people comprising school teachers, students and senior citizens.

The event coincided with the announcement of the formation of Max Super Speciality Hospital, Vaishali, constituted from the erstwhile Pushpanjali Crosslay Hospital.


Speaking on the occasion, Dr Vinay Aggarwal said, "India's health care sector is growing by leaps and bounds. As leading healthcare providers of the region who aim to provide the best possible services to our patients, we believe organizing such conferences is



of vital importance. Max Medicon will allow the experts at Max Healthcare, across specialities, to communicate on a common platform on the achievements and advancements in their respective fields. Healthcare is taking a major turn as doctors and hospitals look for ways to improve health outcomes while meeting patients' expectations. While patient care continues to be our foremost priority, Max Healthcare is pushing boundaries to ensure patient safety at every step."

Neeraj Mishra, organising co-chairperson, said, "We, at Max Healthcare, have always striven to provide our patients with the best possible services and world class healthcare technology. Numerous topics and varied workshops conducted at this annual conference provide the attendees with a unique opportunity to share unique case studies and advancements across

specialities. Max Health care has been regularly organizing conferences, updates, continuing medical education programmes, workshops and post-doctoral training programmes which have emerged as a helping aid to the doctors."

With the population of Delhi and the National Capital Region as a whole growing rapidly, the demand for healthcare delivery has reached an all-time high in the last 3-4 years. One of the front-runners in healthcare delivery in Delhi-NCR, Max Super Speciality Hospitals especially cater for the population of East Delhi, Ghaziabad and western UP. As the burden of diseases like cancer, diabetes, hypertension, cardiac and renal ailments mounts, both these hospitals are striving continuously to provide patient-centric attention and care along with the highest standards of technology available across departments, it was explained. 



Saving Mankind

The policy and strategic framework for prevention, detection, referrals and treatment of Non-Communicable Diseases (NCDs) creates environment conducive to not only managing their burden but also propagating holistic health

BY DR SUNEELAGARG/ DR AKANKSHATOMAR

India is experiencing a rapid health transition with a rising burden of Non-Communicable Diseases (NCDs). According to the Global Status Report on NCDs 2014, these diseases contributed to 5.8 million deaths, accounting for 60 percent of all deaths in India. The World Health Organization (WHO)

estimates indicate that the probability of death between thirty and seventy years of age due to any of the four major NCDs, namely cancer, diabetes, cardio-vascular disease (CVD) and stroke in India is about 26 percent. The main preventable behavioural risk factors for NCDs are tobacco consumption, poor dietary habits like

low dietary fibres, high intake of saturated fat and trans-fat, harmful use of alcohol, sedentary life style and stress. Changing lifestyle due to rapid urbanisation and industrialisation is causing increase in these harmful behavioural risk factors leading to biological risk factors like obesity, hypertension, raised blood glucose and

impaired lipid profile.

Realising the rising burden of NCDs, the Government of India initiated a National Programme for Prevention and Control of Cancers, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) during 2010-11 after integrating the National Cancer Control Programme (NCCP) with NPDCS. The focus of NPCDCS is on promotion of healthy lifestyles, early diagnosis and management of diabetes, hypertension, cardiovascular diseases & common cancers e.g. cervix cancer, breast cancer & oral cancer.

The NPCDCS aims at integration of NCD interventions in the NRHM framework (now NHM) for optimization of scarce resources and for ensuring long term sustainability of interventions. It attempt to create a wider knowledge base in the community for effective prevention, detection, referrals and treatment strategies through convergence with the ongoing interventions of NHM, National Tobacco Control Programme (NTCP), and National Programme for Health Care of Elderly (NPHCE) and build a strong monitoring and evaluation system through the public health infrastructure.

Objectives of NPCDCS

- 1) Prevent and control common NCDs through behaviour and lifestyle changes,
- 2) Provide early diagnosis and management of common NCDs,
- 3) Build capacity at various levels of healthcare for prevention, diagnosis and treatment of common NCDs,
- 4) Train human resource within the public health setup viz doctors, paramedics and nursing staff to cope with the increasing burden of NCDs, and
- 5) Establish and develop capacity for palliative & rehabilitative care.

Prevention through behaviour change

Attempts are focussed towards creating general awareness about the NCD and



Dr Suneela Garg

associated behavioural risk factors and promoting healthy lifestyle habits like increased intake of healthy foods, increased physical activity, avoidance of tobacco and alcohol, stress management, warning signs of cancer, among the community by involving peripheral health functionaries and NGOs.

The various approaches such as mass media, community education and

Attempts are focussed towards creating general awareness about the NCD and associated behavioural risk factors and promoting healthy lifestyle habits like increased intake of healthy foods, increased physical activity, avoidance of tobacco and alcohol, stress management, warning signs of cancer, among the community by involving peripheral health functionaries and NGOs



Dr Akanksha Tomar

interpersonal communication are used for behaviour change focusing on some key messages to promote healthy lifestyle. Interpersonal communication through grassroots level workers and other community leaders/groups is being done. It will also help in social mobilization for diagnostic camps. Targeted intervention programmes focusing on the at-risk population are designed to bring awareness in schools and workplaces for prevention of NCDs. School-based interventions include evaluation of the existing school health programme components viz. physical education, nutrition and food services, health promotion for school personnel, health education and health services followed by activities to make health promotion a defined agenda in the school curriculum.

Early diagnosis

The strategy for early diagnosis of chronic NCDs consists of the screening of persons above the age of 30 years at the point of primary contact with any healthcare facility. It means that any contact of the individual with the healthcare facility is being taken as an opportunity to screen him/her for the presence of risk factor for NCDs. Opportunistic screening has in built components of mass awareness creation, self-screening and trained



Cancer



Diabetes

health care providers. The investigations which may not be carried out in the health facilities can be outsourced.

Treatment

“NCD clinic” are established at CHC and District Hospital where comprehensive examination of patients referred by lower health facility /health worker as well as of those reporting directly is conducted for ruling out complications or advanced stages of common NCDs. Screening, diagnosis and management and home based care are the key functions to be performed here.

Capacity building of human resource

Health personnel at various levels are trained for health promotion, prevention, early detection and management by a team of trainers at identified Training Institutes/Centres, as identified by the state in consultation with the Centre.

Supervision, monitoring and evaluation

Regular monitoring and review of the scheme is conducted at the district, state and Central level through

monitoring formats and periodic visits and review meetings. NCD cell at different levels is envisaged to supervise and monitor the programme and also other NCD programmes. The evaluation will be carried out concurrently and periodically, as & when required.

Package of Services

In the programme, it is envisaged to provide preventive, promotive, curative and supportiveservices (core and integrated services) for the mentioned NCDs.

The package of services depend on the level of health facility. The range of services being provided include health promotion, psycho-socialcounselling, management (out-and-in-patient) including diet counselling, lifestyle management, day care services, home based care andpalliative care as well as referral for specialized services as needed.For operationalization of NCD clinic at CHC level, hiring of one doctor, two nurses, one counsellor and one data entry operator on contractual basis is envisaged. At district level 1 specialist, 2 nurses, 1 physiotherapist, 2 counsellors, 1 data entry operator and 1 care coordinator are provided

on contractual basis. For cancer care, 1 medical oncologist, 1 cyto-pathologist, 1 cyto-pathologist technician and 2 nurses are hired on contractual basis.Financial and technical support isprovided for strengthening laboratory services at CHC and District Hospitals for investigations like blood sugar, lipid profile, ultrasound, X-ray and ECG. Linkages of District Hospitals to private laboratories and NGOs provide continuum of care and support for outreach services. The district is linked to tertiary cancer care health facilities for providing comprehensive care.

The NCDs are expensive to treat. National strategies focus on prevention and health promotion as key to reduce disease burden. Health education programme are some of the key interventions that need to be promoted at various levels of health facilities and through outreach sessions.

Institutional framework:

1. Framework for management: Opportunistic screening, health promotion and referral are done at sub centres. NCD clinic at CHCs provides early diagnosis and treatment by offering lab



Cardio-vascular disease



Stroke

investigations, home based care and referral to higher centres. NCD clinics, cardiac care unit and cancer care facility are located at district hospitals which provide all the above mentioned services under District NCD cells as well as day cancer chemotherapy facilities and training to the health personals at CHCs as per guidelines issued by national NCD cell. Tertiary cancer care centres are situated in medical colleges/RCC under state NCD cells. States are also bestowed with the task of community awareness, planning monitoring and supervision, training of human resources and financial management under the programme.

2. **Technical guidance:** To provide technical guidance, advice and review the progress of the programme for enhancing the quality of implementation of NPCDCS, two Technical Resource Groups (TRG) have been constituted, one for cancer component and other for Diabetes, Cardiovascular Diseases and Stroke with certain term of references (TORs).

3. **Financial management:** Financial management group (FMG) of Programme Management support units at state and district level, which is established under NRHM, is responsible for financial management. It is envisaged to merge the programme at State and District into the SHS and DHS respectively in order to ensure sustaining the current momentum and continued focus.


Management Structure:

National NCD Cell is the nodal body to roll out NPCDCS in the country. It functions under the guidance of Programme in-charge from the MoHFW and supported by the identified officers/officials from the DGHS. State NCD Cell is established preferably in the Directorate of Health services or any other space provided by the State Government. The Cell functions under the guidance of State programme Officer (SPO NCD), supported by the identified officers/officials from the Directorate /Director General of Health Services. District NCD Cell is established preferably in the Directorate of Health services or any other space provided by District

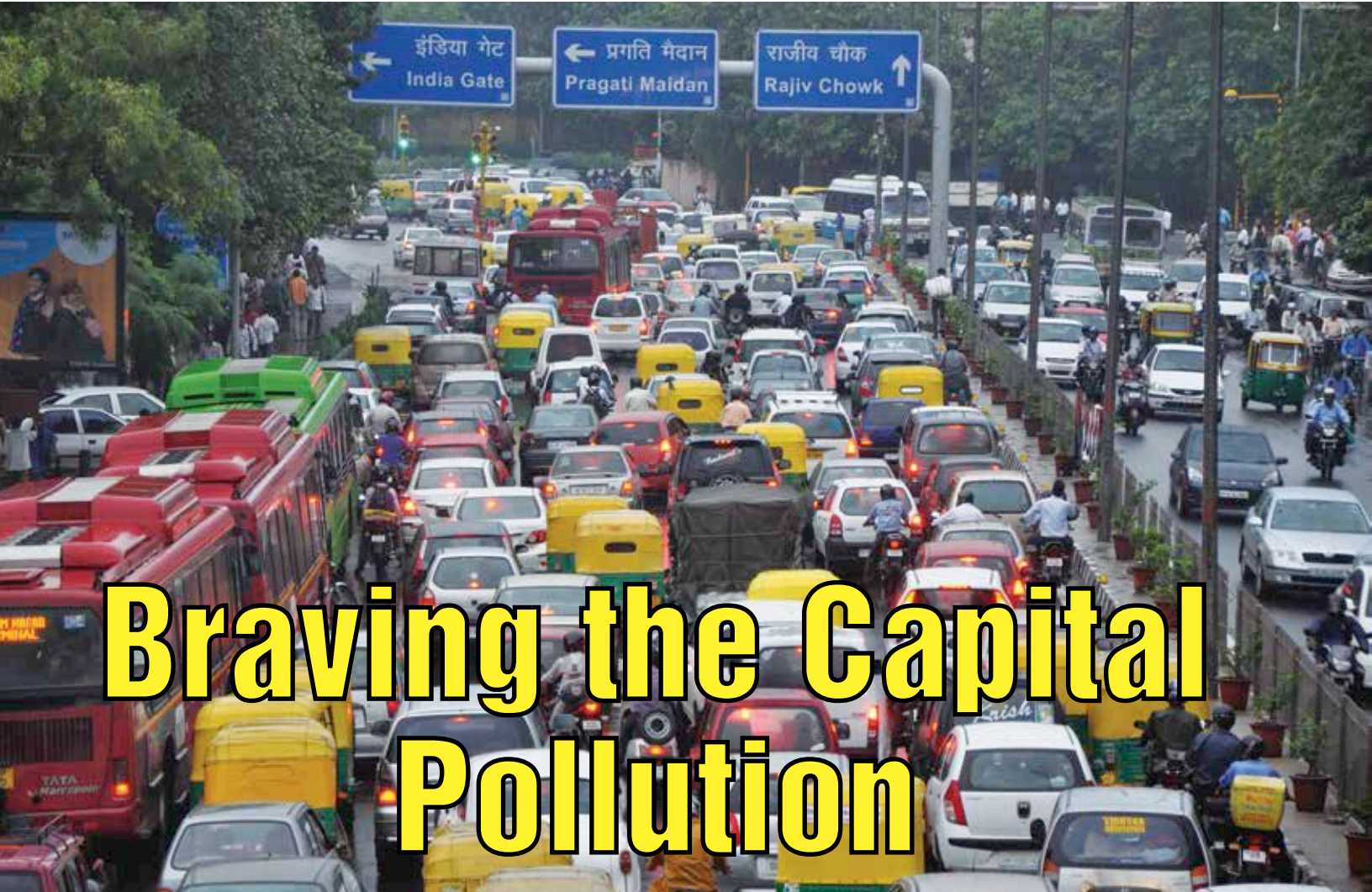
headquarters.

The NCD Cell is responsible for overall planning, implementation, monitoring and evaluation of the different activities and achievement of physical and financial targets planned under the programme in the District. The Cell functions under the guidance of District programme Officer (DPO NCD) and supported by the identified officers/officials from the District health system.

Conclusion

Thus, the preventive and integrated approach adopted under the programme creates environment conducive to not only managing the burden of NCDs but also propagating overall health promotion. Targeting the identified behavioural risk factors and creating general awareness about the diseases as well as providing efficient management starting from grassroots level of health delivery will certainly pay in the long run to curb the emerging evil of NCDs. 

(The author is Director Professor/
Resident, Dept. of Community
Medicine, Maulana Azad Medical
College, New Delhi)



Braving the Capital Pollution

Alarming pollution levels caused by increasing traffic in Delhi/NCR has become a cause for concern for all the people living in the Capital

BY DR ANIMESH ARYA



It was hugely hilarious to see a cartoon in the media recently that showed two ISIS jihadists talking about launching terror strikes in India. One jihadi says, “We will all die of pollution, even before we could launch a strike.” The media is replete with literally hundreds of cartoons and jokes on the capital’s dangerous levels of air pollution that

threaten to kill us all. Jokes apart, the jokes are no more funny, as the danger level might as well scare even the jihadists from venturing out this side of the Himalayas.

Alarming pollution levels may cause lot of illnesses like breathing problems like asthma including lung cancer. A new study reveals that breathing polluted air may greatly increase the

Air quality may also have an adverse effect on asthma, a disease that affects breathing as well as our daily life.



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risk of lung cancer because of carcinogens in urban air which are toxic to our health.

A new study on pollution says that air pollution claims at least two million lives worldwide every year. Nearly 470,000 deaths occur every year due to hole in the atmosphere's ozone layer caused by humans. Interestingly, climate change has only a minimal effect on air pollution and rising death rates, the authors concluded.

Air pollution can aggravate heart and lung problems. A report finds that changes in the level of air pollutants specifically, ozone and black smoke, a major source of PM2.5 (particulate matter, in the 2.5 micron range or smaller) led to an increase in the rate of deaths from all causes, primarily due to an increase of 5 percent in cardiovascular and respiratory aging.

The researchers also examined previous epidemiological studies to determine how concentrations of air pollution relate to death rates around the world. It has been learnt that although climate changes may worsen the effects of air pollution, they do not significantly increase death rates. Climate changes have resulted in 1,500 deaths due to ozone and 2,200 deaths resulting from fine particulate matter air pollution every year.

Air pollution – mainly from vehicles, industry, and power plants – raises the chances of lung cancer and heart diseases in people who have been exposed for a long time. There is an excess risk of both lung cancer and cardio pulmonary diseases.

The risk comes when gas pollution from auto exhaust and smokestacks combine with oxygen in the air to form very small particles that are breathed in by the humans. Smoking is also a main cause of lung cancer. But breathing heavily polluted air for long can raise the risk of lung cancer as much as passive smoking, he added. It had the largest effect on non-smokers who risked death from heart disease and lung cancer caused by air pollution. And, polluted air increased chances of death of all participants as



The Airnow app will let you check levels of pollutants by zip code. It now tracks more than 400 cities across the nation.

if they were all “moderately” overweight. Earlier studies suggested air pollution might be linked to disease and death, but some studies were too small or didn't follow people exposed to air pollution long enough for

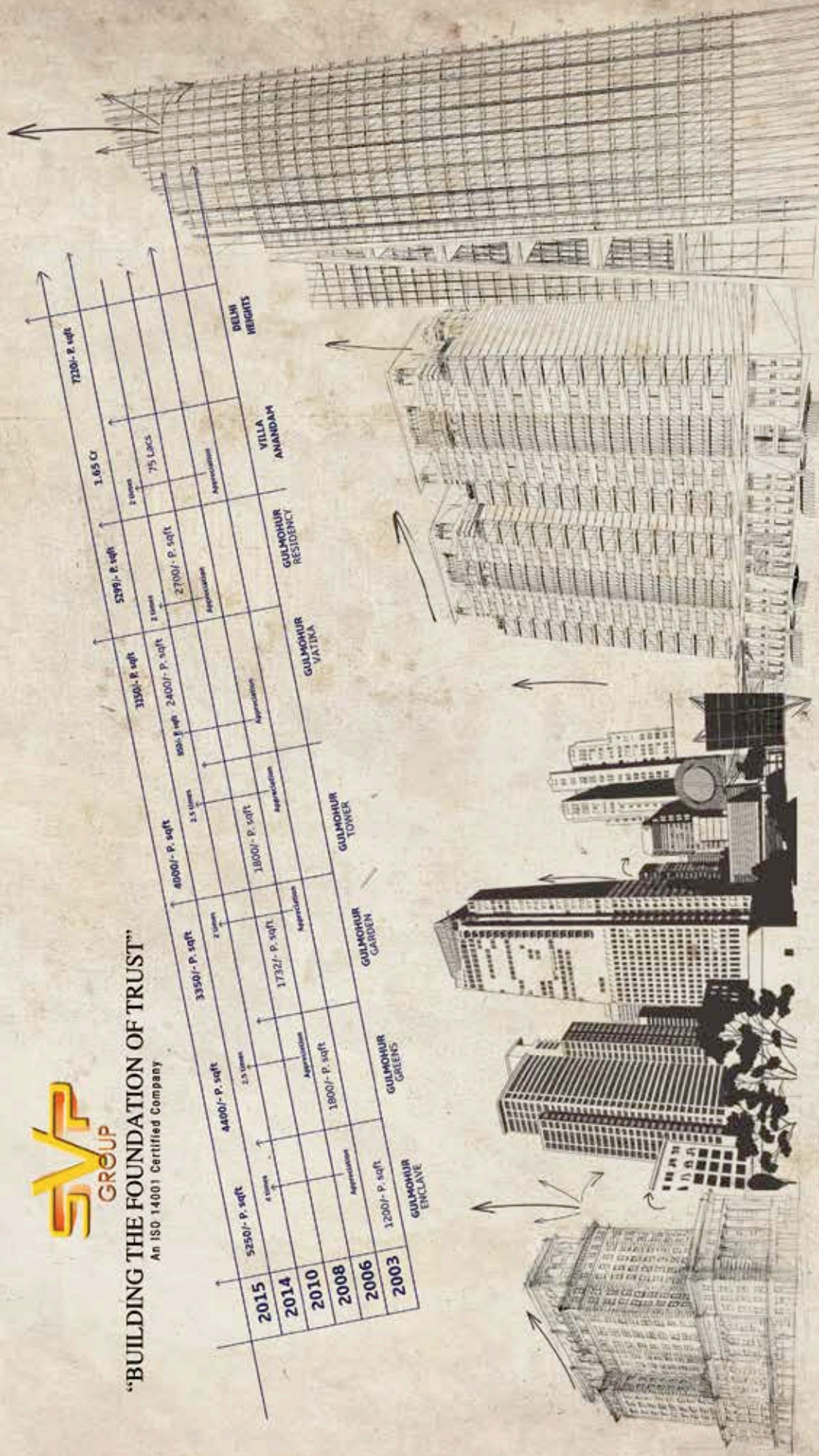
scientists to be sure of the connection.

Long-term exposure to the air pollution in some of India's biggest metropolitan areas significantly raises the risk of dying from lung cancer and is about as dangerous as living with a smoker, a study of a half-million people found. The study echoes previous research and provides the strongest evidence yet of the health dangers of the pollution levels found in many big cities and even some smaller ones. The risk is from what scientists call combustion-related fine particulate matter — soot emitted by



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cars and trucks, coal-fired power plants and factories. The researchers first took into account other risk factors for heart and lung disease such as cigarettes, diet, weight and occupation.

Lung cancer death rates were compared with average pollution levels, as measured in micrograms per cubic meter of air. The lung cancer risks were comparable to those faced by non-smokers who live with smokers and are exposed long-term to passive smoking. Such risks have been estimated at 16 percent to 24 percent higher than those faced by people living with non-smokers. Some major cities had air pollution levels of 25 to 30 micrograms per cubic meter, which would confer a more than 20 percent increased risk of lung cancer mortality. For most of the nation's major electric utilities, including operators of many coal-powered plants, industry challenges to the standards are ongoing.

The capital relies heavily on its transport infrastructure. The city has developed a highly efficient public transport system with the introduction of the Delhi Metro, which is undergoing a rapid expansion. There are 5.5 million registered vehicles in the city, which is one of the highest among all cities, most of which do not follow any pollution emission norm (within

There are 5.5 million registered vehicles in the city, which is one of the highest among all of the cities in the world, most of which do not follow any pollution emission norm (within municipal limits), while the Delhi NCR has 11.2 million vehicles.

municipal limits), while the Delhi NCR has 11.2 million vehicles. Delhi and NCR lose nearly 42 crore (420 million) man-hours every month while commuting between home and office through public transport, due to traffic congestion. Therefore, serious efforts, including a number of transport infrastructure projects, are under way to encourage the use of public transport in the city.

Air quality may also have an adverse effect on asthma, a disease that affects breathing as well as our daily life. Recent data show how air pollution affects asthma, and it is quite surprising. Small air particles from the polluted air get deep into the lungs. Even though the immune system responds, the particles weaken the lung's immune system. This allows infections to occur, which results in asthma.

The pollution does not cause asthma directly but instead causes dysfunction of the lungs that allows infections to

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damage the lungs, which in turn leads to asthma. Asthma rates are increasing in heavily populated urban areas like the inner city areas of Delhi and NCR suggesting that poor air quality's ability to trigger the onset of asthma is a concern that actually can and does affect a large number of people. Air quality also affects the number of sinus infections and respiratory illnesses that people suffer from. The climate change can affect air pollution in many ways, the researchers said. For example, rainfall can determine when pollutants


accumulate. Rising temperatures can increase the emissions of organic compounds from trees, which react in the atmosphere and form ozone and fine particulate matter. Very few studies have attempted to estimate the effects of past climate change on air quality and health. The effects of past climate change are likely to be a very small component of the overall effect of air pollution."

The heavy traffic in Delhi and NCR release a large quantity of nitrogen oxide from the vehicles. Even after old age, smoking habits, and occupation

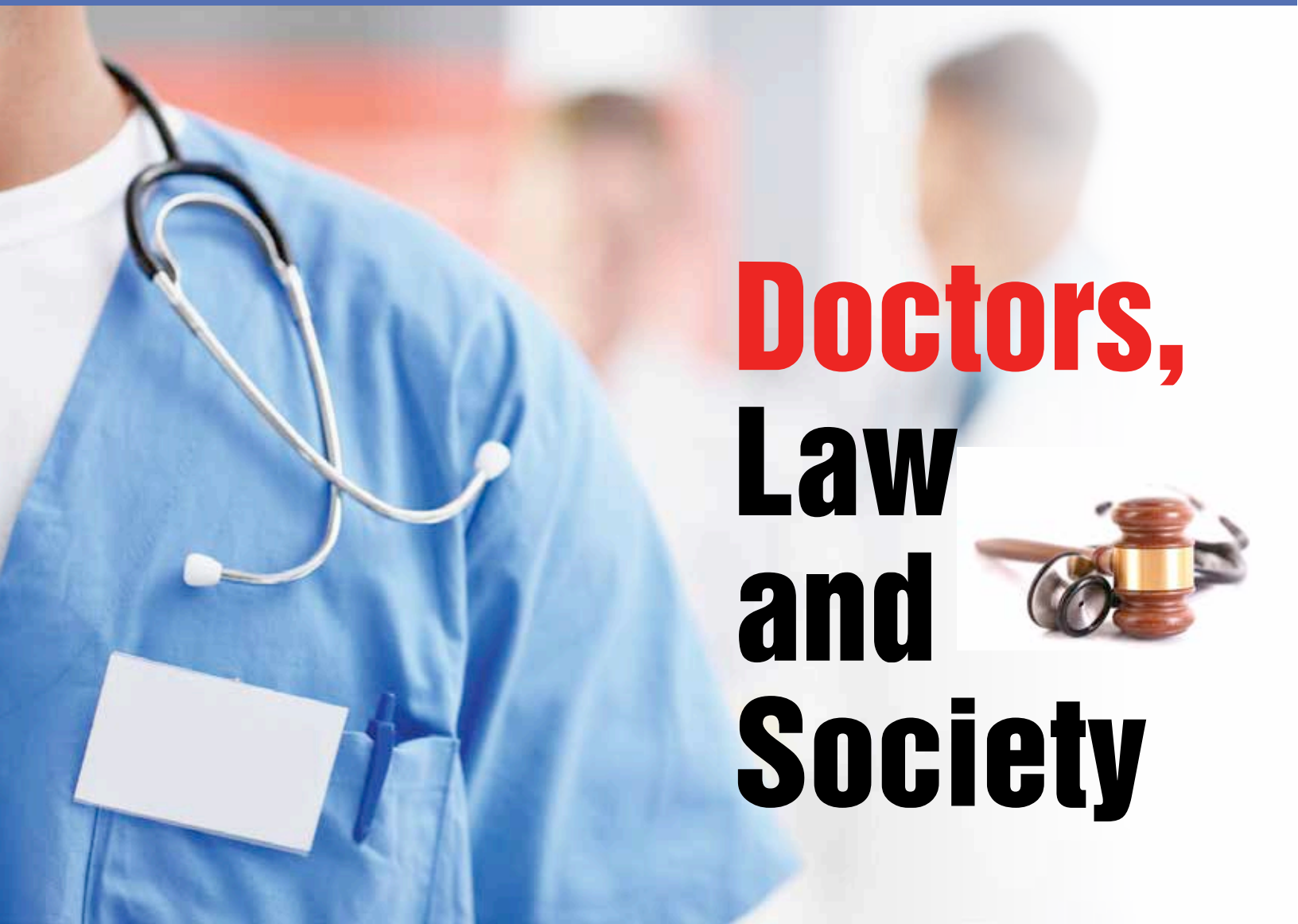
were factored in, exposure to high levels of nitrogen oxide from air pollution was a contributing factor to lung cancer.

However, a similar association was not seen between lung cancer and sulfur dioxide levels. Exposure to either nitrous oxide or sulfur dioxide alone would not cause lung cancer. However, high levels of these compounds likely indicate a mix of unknown particles and carcinogens that could indeed cause lung cancer.

We hear about air quality from many sources, from the weather report to vacuum cleaner commercials. The air we breathe can carry many tiny particles that will affect our health, especially if we suffer from allergies. Common pollutants in the air include dust, pollen, and smoke. Air in well-insulated houses can contain not only these contaminants but fumes and vapours from household chemicals like chlorine bleach and cleaners. Getting enough fresh air where you live may be as simple as opening a window or as complex as filtering and ensuring proper humidity in an apartment or office HVAC (heating, ventilating and air conditioning) system. Use of smoke removers and air filters (either electrostatic or HEPA) may improve indoor air quality.

The National Weather Service has developed a smartphone app that allows you to do just that. The Airnow app will let you check levels of pollutants by zip code. It now tracks more than 400 cities across the nation. The UV Index app offers ultraviolet (UV) radiation levels by entering your zip code as well. Having this information can be especially helpful to people who struggle with lung diseases, parents who want to be cautious about safety outdoors, and to seniors who may be more sensitive to air pollution. You might also motivate your kids to be more health conscious if you can impress them with this app. 

(The author is senior consultant, respiratory diseases, Sri Balaji Action Medical Institute, New Delhi)



Doctors, Law and Society



The doctor-patient relationship needs to be saved from mounting mistrust and doubt as evident in the growing litigation over the 'perceived' medical negligence

BY DR SATYA PRAKASH

I have seen those days when a doctor was respected and regarded as next to God. The patient and the relatives had full faith and confidence in the treating doctor and would accept the outcome of the treatment in good faith.

Now, the scenario has changed. Patients and their relatives generally tend to consider the doctor responsible for the poor or bad outcome of treatment and doctors too cannot avoid thinking their patients as potential litigants. The doctor-patient relationship

has been further spoilt by bringing doctors under the ambit of CPA (Consumer Protection Act) which was initially meant for consumer affairs.

We must not forget that outcome of the treatment not coming up to the expectation of the patient and his relatives does not constitute negligence. Opinion on a patient may differ and sometime may differ very widely. The patient comes to the doctor/hospital for treatment in good

incident, gives it a sensational twist and publishes it without verifying the truth about the incident.

Many a time, even if the patient gets well, relatives make a fuss & find faults so that they may not have to pay the due bills. Whereas if a seriously ill patient admitted and treated, dies, relatives do not want to pay at all and the doctor ends up spending from his own pocket.

Every profession is a noble

profession, whereas medical profession is the noblest out of all. Every section of the society owes a responsibility to help the needy and under-privileged. One fails to understand why all the philanthropy and free service is expected from doctors alone. Why are only doctors expected to render services free of cost whereas they have to pay more for everything like municipal taxes, license fee, disposal of medical



faith. He/she pays for the services rendered to him. If the patient gets well, all is well. If the disease doesn't get cured, the patient feels that the doctor probably has failed in his duty. Unfortunately, if the patient dies in spite of the best efforts by the doctor, the relatives try to find faults with the doctor. They even accuse that the doctor has killed the patient by negligence and try to file a case in some consumer court.

With this psyche, one can't expect patient doctor relation to grow on faith, trust and respect. In all such situations, with a "Sword of Damocles" always hanging on his head, how any doctor can would dare to take up a seriously ill patient with poor prognosis. At times, the media, unfortunately, out of smartness to be the first to report the

Patients and their relatives generally tend to consider the doctor responsible for the poor or bad outcome of treatment and doctors too cannot avoid thinking their patients as potential litigants. The doctor-patient relationship has been further spoilt by bringing doctors under the ambit of CPA (Consumer Protection Act) which was initially meant for consumer affairs

wastage, and double the sector rates of the land allotted for nursing homes? Just because they are doctors, they don't get any concession in bank loans and any other privileges. If a person dies in front of a hotel due to hunger after refusal of a free meal or a patient dies because a medical store refuses to give free medicines, will the owner of hotel or medical store be prosecuted? If not, why should a doctor be blamed?

The government and the society have given a status of "business" to doctors in matters related to consumer court. Moreover, one can't expect any person at midnight to supply ration or a suit length or even "Kafan" for the dead. It is only the doctor who can be awakened at all odd hours by the patient during the night. A doctor puts

the maximum length of time to get his degrees, settles late in life, puts in maximum hours of work even at the cost of his comfort, health and social life. Then why should such a hue and cry be made on demand of reasonable fee for his services by a doctor?

Following are certain problems to which there are no easy answers in law:

a) A patient in emergency is not accompanied by attendant or relations.

punished and fined with penalty by the law and the compensation money be paid to the doctor concerned. The law should be amended so that doctor may not think of quitting his/her profession, and rather survive with dignity, grace and excellence.

Lately, the compulsion from health ministry has come for medical graduates to serve in rural areas for two years, or lose their degree. Will it not be the violation of the fundamental

rights of a citizen to force and compel him to work at a place and under situation much against his will under threat of snatching his hard earned degree, without providing him extra incentives, protection to himself and his family, provision of proper education to his children in the village? Applied as such, it would amount to penalizing a person for being a DOCTOR.

The recent U.P. Medical Protection



b) if a patient's attendant shows inability to purchase life saving drugs or pay for any emergency surgical procedure or blood transfusion

c) If after treatment, a patient's relatives refuse to pay the bills.

If the apex court can order that a nursing home is under obligation to give first aid to an emergency case (which could amount to give life saving costly drugs, emergency operation, blood transfusion etc.) it should also give a ruling that the state would pay if the patient does not or cannot pay.

Increase in CPA cases is partly because some unscrupulous people file cases in the hope to extract money from the doctor, and secondly the plaintiff wants to avoid paying any court fee. Such people should be

Why are only doctors expected to render services free of cost whereas they have to pay more for everything like municipal taxes, license fee, disposal of medical wastage, and double the sector rates of the land allotted for nursing homes? Just because they are doctors, they don't get any concession in bank loans and any other privileges

Act, 2013 provides that any violence against the doctor or his attendants or damage to clinic, nursing home or hospital property is non-bailable criminal offence, punishable with 2-3 years' imprisonment with Rs. 50,000 fine and penalty of double amount for damaged property. This must be strictly implemented and such a law must prevail all over the country with utmost sincerity and honesty to protect this noble profession.

Let us pray to God to lead us to right path and truly justify the words of Hippocrates- "Wherever the art of medicine is lived, there lives the humanity". 🙏

(The author is MD (Med), F.C.G.P., F.C.C.P, F.I.A.M.S and a renowned Medical Practitioner)

Brainstorming on Hearing Care

A stakeholders meeting was organized by Society for Sound Hearing in Collaboration with Department of Community Medicine, MAMC and CBM at Maulana Azad Medical College recently. The objective of the meeting was to review and improvise the exiting IEC material related to ear and hearing care developed by Society for Sound Hearing and develop new material. This exercise was also carried out from the point of view strengthening the National Programme for Prevention and Control of Deafness.

The meeting was attended by 75 participants comprising ENT specialists, audiologists, public health experts, speech therapists and officials from Ministry of Health & Family Welfare.

Dharitri Panda, Joint Secretary, Ministry of Health and Family Welfare, New Delhi, was the chief guest for the event. The other dignitaries who were present were Dr T.S. Sidhu, National Advisor, National Programme for Prevention and Control of Deafness, and Dr Bulantrisna Djelantik, Founder Member and Director Society for Sound Hearing International.

The meeting began with Dr Ingle, Head of Department of Community Medicine, Maulana Azad Medical College delivering the welcome speech and explaining the critical importance of IEC material in reducing the burden of hearing loss in the country. He also mentioned how Department of Community Medicine has played a crucial role in developing IEC material on regular basis.

Dr Arun Agarwal, Director and Chair, SSHI explained the objectives of the stakeholders meeting. He elaborated upon that National Programme for Prevention and Control of Deafness in India is pioneer for the other South East Asian countries to develop such a programme in their countries. He also explained how Sound Hearing 2030 was initiated and till now has facilitated in formulation of strategy for ear and

hearing care in India, Indonesia, Sri Lanka and Bangladesh.

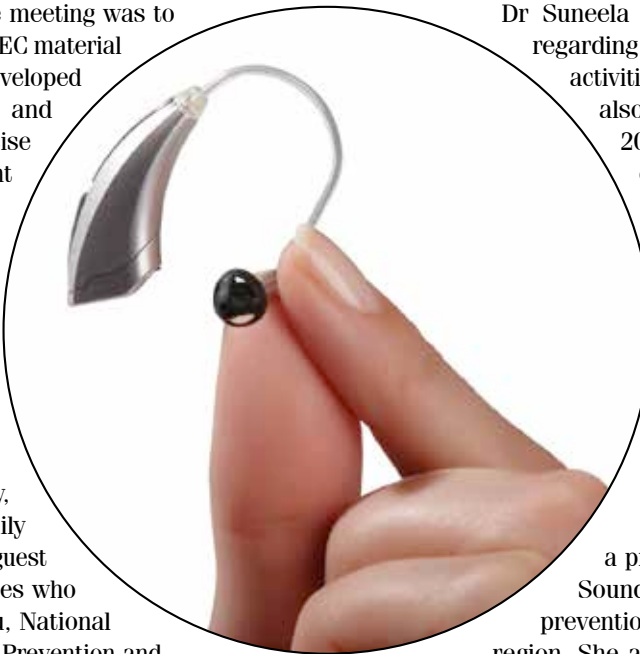
Dr Sidhu explained to the audience about the progress that has been made with regard to implementation of National Programme for Prevention & Control of Deafness.

Dr Suneela Garg delivered a presentation regarding Sound Hearing 2030 and the activities that are being carried out. She also explained that Sound Hearing 2030 has been complementing the efforts of National Programme for Prevention and Control of Deafness since the members in the core team of NPPCD and Sound Hearing 2030 are same. She also shared the vision of Sound Hearing 2030 to facilitate implementation of NPPCD in the years to come under the leadership of Ms Dharitri Panda, JS, MoHFW.

Dr Bulantrisna Djelantik delivered a presentation on role of Society for Sound Hearing International in prevention and control of deafness in the region. She also explained the progress that different countries have made with regard to implementation of ear and hearing care strategies.

Dharitri Panda appreciated the efforts of Sound Hearing 2030 in providing technical support to National Programme for Prevention & Control of Deafness. She also mentioned that both Sound Hearing 2030 and National Programme for Prevention & Control of Deafness should synergize their efforts for promoting ear and hearing care in the country. She also visited the temporal bone lab of Maulana Azad Medical College along with Dr Agarwal and Dr Garg. For monitoring of NPPCD, she also stressed upon involvement of members of Sound Hearing 2030.

Ms Panda also gave away prizes to the participants who had secured first, second and third positions in the poster competition held in recent past. Two posters were selected for First prize position ('Even Seconds can make a Big Difference')



Glimpses of the meeting




and 'Myth Buster'). Posters on 'Identification of Children with Hearing Loss and 'An Earful of Sound Advice' were selected for the second position. 'Sound your Hearing' and 'Noise Pollution' were selected for Third position. Two posters were selected for consolation prize viz. 'Neonatal Hearing Screening' and 'Technology for Empowerment of Deaf'.

In the post-tea session, the review of 15 new posters developed by Society for Sound Hearing was undertaken. These posters were presented in hard and soft copies to the experts who gave their suggestions on the posters based on the layout, content, design and title of the poster. The remarks of the evaluation committee which had previously reviewed these posters were also shared with the experts. The valuable

recommendations of the experts were noted by the Programme Officer Ms Deeksha Khurana for incorporation in the posters.

During the post-lunch session, the previously developed posters of Society for Sound Hearing were reviewed. The same methodology was adopted for review in each poster was discussed in detail by the expert group and suggestions were given for improvisation. The soft copies of all the posters were given to the expert group so that they could also give suggestions over the email.

The stakeholders meeting was extremely fruitful with lot of suggestions for improvising and developing new material related to ear care. The meeting ended with vote of thanks by Dr Suneela Garg to all the experts and attendees present. 

Women are not straight?

A study recently suggests that most women are never straight. Although lesbians are much more attracted to females, most women who say they are straight were aroused by videos of both naked men and naked women.

The study, led by Dr Gerulf Rieger from the department of psychology at the University of Essex, showed a series of videos of naked men and women to 235 women and recorded their responses. It found 82% of the women tested were aroused by both sexes, based on indicators such as whether their pupils dilated in response to sexual stimuli.

Of the women who identified as straight, 74% were strongly sexual aroused by videos of both attractive men and attractive women. In contrast, lesbians showed much stronger sexual responses to women than to men.



Dr Rieger said, “Even though the majority of women identify as straight, our research clearly demonstrates that when it comes to what turns them on, they are either bisexual or gay, but never straight”. He also said the study showed lesbians who may dress

in a more masculine manner may not have more masculine behaviour.

“Although some lesbians were more masculine in their sexual arousal, and others were more masculine in their behaviour, there was no indication that these were the same women.

“This shows us that how women appear in public does not mean that we know anything about their sexual role preferences”. A government survey previously found almost half of young people in the UK do not identify as 100% straight.

Untested ‘gene editing’ tech saves baby with cancer


A baby girl who was close to dying from cancer has been rescued by a cell therapy envisioned as a “one size fits all” treatment that had never been tested in people. The development is significant because it indicates that cell therapies, which represent an exciting new front in the battle against cancer, might not have to be customised for each patient, saving time and money.

It also represents one of the first times that a novel “genome editing” technique has been used to treat someone. The therapy was developed by Cellectis, a French biotechnology company.

Cancer doctors have been electrified by a new approach that involves genetically altering patients’ T cells, the soldiers of the immune system, so that they can better attack cancers.

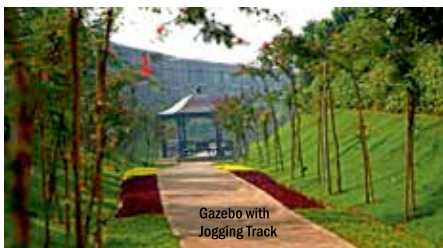
But the first versions of their experimental therapies require



extracting the T cells from the patient, shipping them to a manufacturing plant where they can be altered, then sending them back and putting them back into the patient. Cellectis’s therapy is meant to work for any patient with a particular type of leukemia. 

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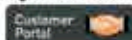
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