HEALTH
WAYS TO KEEP ALZHEIMER’S AT BAY

DESTINATION
MAKE A SOFT LANDING AT KEDARNATH

INTERVIEW
DR BINDESHWAR PATHAK IS A MAN ON A MISSION

HEAR & NOW
HEARING IMPAIRMENT: SYMPTOMS AND SOLUTIONS

BOURNE & SHEPHERD: A FLASHBACK SILVERS TAKE A SHOT AT LOVE
She has the will to win. Give her a fair chance.

Energizing billion lives is the bedrock of our business philosophy. While our business pursuits power the nation, our social welfare programmes empower the people. At the end of the day, a smile is what keeps us going...

www.ongcindia.com
When we travel, we learn not just about the world around us but the truths within us.

I recently returned from a trip to Cambodia with five of my sisters. It was a memorable vacation that enabled us to experience Khmer culture and tradition first-hand. From the ancient Angkor Wat and the great capital Angkor Thom to the Rolus temples east of Angkor, the incredible Bayon and temples in the jungle, the Monastery of the Sacred Sword and the Citadel of the Women, we were enthranced by the rich tapestry of faith and history. Equally enlightening were our forays to see the floating villages and night markets, which gave us valuable insight into Cambodian rural life and the resilience of the people amid often desperate poverty.

What amazed me most, however, were my own travelling companions: my beloved sisters, the eldest of whom is 78! This was a demanding trip but they proved that they were more than up for it (they walked miles without complaint); they made do with limited dietary options (they are all staunch vegetarians); and they greeted each step of our exhaustive itinerary with enthusiasm and glee.

My intrepid sisters reminded me once again how life is to be lived—age be damned!

It is a lesson with great resonance for us all. The words, ‘life begins at the end of your comfort zone’, couldn’t be truer. It’s only too easy for us all, especially silvers, to remain ensconced in our own cocoons, cut off from the world around us, succumbing to loneliness and alienation, letting time and tide pass us by.

Whether it’s taking a trip or embarking upon a new activity, it’s time to step out of your comfort zone. Let go of some of what you know to imbibe new learnings and stimulate your appetite for discovery. Find what’s hidden in plain sight. Test your endurance, extend your boundaries and break out of your straitjackets. Remember, there’s a whole world out there. And it is waiting to embrace you.

My intrepid sisters reminded me once again how life is to be lived—age be damned!

It is a lesson with great resonance for us all. The words, ‘life begins at the end of your comfort zone’, couldn’t be truer. It’s only too easy for us all, especially silvers, to remain ensconced in our own cocoons, cut off from the world around us, succumbing to loneliness and alienation, letting time and tide pass us by.

Whether it’s taking a trip or embarking upon a new activity, it’s time to step out of your comfort zone. Let go of some of what you know to imbibe new learnings and stimulate your appetite for discovery. Find what’s hidden in plain sight. Test your endurance, extend your boundaries and break out of your straitjackets. Remember, there’s a whole world out there. And it is waiting to embrace you.

A Harmony for Silvers Foundation Initiative

Harmony Celebrate Age—September 2016 Volume 13 Issue 4
Publisher Dharmendra Bhandari Editor Tina Ambani Deputy Editor Arati Rajan Menon Assistant Editors Sai Prabha Kamath, Rachna Virdi
Special Correspondent Srikesh Pillai Sub-Editor Natasha Rego Correspondent (Mumbai) Aakanksha Rajput Design Consultant Jit Ray
Studio Manager Haresh Patel Graphic Designer Dattaguru Redkar Production Manager Rohidas Adavkar
Additional Vice-President, Business Development Shrenik Mehta Managers, Business Development Gavin Dias, Vikaran Chauhan
Website Coordinator Arij Nair Marketing Coordinator Johnsi Nadar
Editorial & Marketing Offices: Reliance Centre, 1st floor, 19, Walchand Hirachand Marg, Ballard Estate, Mumbai-400001. Tel: 91-22-30327115 (Editorial), 3027102 (Marketing). Email: contact.mag@harmonyindia.org Printed and published by Dharmendra Bhandari on behalf of the owners, Harmony for Silvers Foundation. Published at Reliance Energy Centre, Santacruz (East), Mumbai 400055. Disclaimer: The material provided by Harmony is not a substitute for professional opinions. Readers are advised to seek appropriate advice from qualified and licensed professionals in the concerned field. © Harmony for Silvers Foundation. All rights reserved worldwide. Reproduction in any manner is prohibited. Harmony does not take responsibility for returning unsolicited publication material. www.harmonyindia.org
44

cover feature

Hearing impairment: New aids to amplify your quality of life
Cover photograph: iStock

features

34. **Health**: On World Alzheimer’s Day, a look at the causes and concerns of the disease

38. **Interview**: How Sulabh International’s Dr Bindeshwar Pathak revolutionised sanitation in the country

54. **Destination**: A chopper ride makes the trip to Kedarnath a breeze

66. **Photography**: Glimpses into the glory days of one of the oldest photo studios, Bourne & Shepherd

columns

22. **YOGA RX**: Shameem Akthar reveals the connection between yoga and Pilates

30. **MONEY MATTERS**: In a series on financial awareness, economist Priya Desai analyses the pros and cons of bonds

70. **KANWAR’S PEOPLE**: Veteran journalist Raj Kanwar on how BBC’s Mark Tully became the credible voice on India

WEB EXCLUSIVES www.harmonyindia.org

**THE STORYTELLER**
Writer Bimal Kumar Hazarika says being a civil servant brought out the creative best in him

**SOMETHING SPECIAL**
Dr Anil Kundra’s oasis for autistic individuals in Hyderabad was founded on a dream

FOR SUBSCRIPTION ASSISTANCE CONTACT: Harmonycare, Living Media India Ltd, A-61, Sector 57, Noida (Uttar Pradesh) - 201301.
*Toll-free: 1800 1800 100 Phones: New Delhi: (0120) 2479900 from Delhi and Faridabad; (0120) 2479900 from Rest of India
Fax: (0120) 4078008; Kolkata: 033-22827695 Fax: 22828949; Bengaluru: 080-22212448, 22213037, Fax: 2218335;
Mumbai: 022-66063355 Fax: 24444358; Chennai: 044-28478525 Fax: 24361942; Email: harmonycare@intoday.com

Total number of pages in this issue of Harmony-Celebrate Age, including covers: 84
Trusted by millions...

Presence in 28 Countries

Global Network of more than 2300 Offices

More than 220 General Insurance Products

Toll free: 1800-209-1415

www.newindia.co.in

 Leadership and beyond

दि न्यू इन्डिया एश्योर्न्स कंपनी लिमिटेड
The New India Assurance Co. Ltd

India's Premier Multinational General Insurance Company

Regd & Head Office: New India Assurance Bldg., 87, M.G. Road, Fort, Mumbai-400 001, INDIA

 Chall No. U/000995/MH/15/G0/000036
 IDA Ngr. No. 159

UNN No. NA/15/57/P12725
Recently, I was shocked to hear the news of a dear friend's father committing suicide. Apparently, his long-term illness and deteriorating health drove him to depression. Though he was undergoing treatment for his physical condition and his family took utmost care of him, his consistent ill health and trauma slowly veered him towards depression. He gave up on his debilitating condition and, in the spur of the moment, took the extreme step of suicide.

A sad incident, it shook me hard! And it made me wonder how we, so often, tend to focus on the importance of physical fitness for the elderly, without realising the importance of sound mental health. Mental health is as crucial as physical health. It commonly stems from issues such as loss of a loved one, loneliness and long-term sickness, as one reaches old age. While feeling the blues is natural during old age, there seems to be a very thin line between being unhappy and being depressed.

It is high time we focus on sound mental health for our silvers. Let us promise ourselves that we shall spend as much time as we can with the seniors in our family, so they’re not left to fend for themselves with issues of loneliness and isolation. Let us extend complete care and support to them and make them feel valued and loved. Our silvers are our most valuable assets—let’s preserve them.

Jaykant Ghelani
Mumbai
Roam free, stay safe. That’s the promise of Japanese company Yamanashi System Inn Nakagomi, which has launched GPS-enabled shoes for silvers. As website psfk.com tells us, a tiny GPS device is embedded in the heel of these shoes, sending family members/caregivers a message when the silver wanders outside a preset geo-fence perimeter. It also sends an alert when its batteries are about to expire. These shoes come as a boon for caregivers of Alzheimer’s patients, who often become disoriented and get lost when they are out alone.

Mission mobility: Toyota has launched the three-year Asuke Mobility Project in Japan’s Aichi Prefecture in partnership with Nagoya University to work on ways to ensure that silvers can remain mobile and healthy, even if they live in remote regions. The ¥ 360 million ($ 3.2 million) project will use a tablet-based reservation system to build a shared transport network—from booking electric cars, going for medical checkups and sharing a ride to go on group excursions.

Beijing tracker: By tracking the use of the multipurpose Beijing Connect card, the city’s authorities are building a database on its silvers and their activities. The information gathered will be used to develop services for them.
Where does government money intended for silver welfare go? An analysis by IndiaSpend.org, a data-driven, non-profit, public interest journalism platform, as reported in The Economic Times, reveals a skewed and disproportionate funding pattern where, over the past four years, five states with just 32 per cent of India’s silvers have received 71 per cent of the ₹34 crore provided by the Centre for maintenance of old-age homes.

The figures include the number of old-age homes assisted, funding granted and beneficiaries targeted under the Integrated Programme for Older Persons (IPOP) over four financial years (2012-13, 2013-14, 2014-15 and 2015-16, until 26 November 2015).

The number of old-age homes supported under the IPOP has declined.
Hip, hip Haryana

The Haryana health ministry has announced that all government hospitals in the state will have ‘senior citizen corners’ to ensure better services. Dedicated staff deployed in these corners will complete the registration formalities of silvers and guide them to the necessary department.

TO THE RESCUE

Police stations across Vijayawada will have designated staff to examine complaints of elder abuse. The names and contact numbers of these personnel will also be circulated to silvers, who will be able to contact them directly in case of an emergency.

Imagine the gains if wellness was wired into the very DNA of our towns and communities. That prospect is on its way to becoming a reality with the development of 10 new, ‘healthy towns’ in England. As London newspaper The Guardian tells us, these towns, spanning the country, will comprise over 76,000 homes and 170,000 residents, and will institute mechanisms to get people to exercise more, eat better and live longer independently. Some of these include easier access to public transport; safer cycling and pedestrian networks; ‘dementia-friendly streets’, with wider pavements, fewer trip hazards and LCD moving signs; emphasis on workplaces, schools and leisure facilities that encourage physical activity; fast-food free zones near schools; and digital healthcare hubs. The towns will be developed as shown in the map below:

Here are some key points from the report

ANDHRA PRADESH HAS THE MOST IPop beneficiaries nationwide (5,100), six times more than 700 from UTTAR PRADESH

With 7 million, BIHAR has the fifth largest population of silvers among Indian states but only received 0.70 per cent of national funding; RAJASTHAN, home to 5 million silvers, got 1.1 per cent.

KARNATAKA AND MADHYA PRADESH have 5.57 per cent and 5.60 per cent of silvers respectively, almost identical. But KARNATAKA, with 13.58 per cent of IPop funds, got 13 times as much funding as MADHYA PRADESH, which had just 1.25 per cent of IPop beneficiaries.

ODISHA, which is not even among the top 10 states in terms of silver population, got 12.53 per cent of the funds granted to old-age homes and ranks second in both beneficiaries targeted and old-age homes funded.

With 4 million silvers, GUJARAT ranks 11th but received no elderly care funding over the past four financial years; and KERALA, which ranks 11th, received no funding in 2012-13 and 2014-15.
August was an exceptionally busy month at Kokilaben Dhirubhai Ambani Hospital (KDAH), what with an awareness campaign, inauguration of state-of-the-art equipment and announcement of its expansion into rural India, all in its quest to make world-class healthcare accessible to the country.

For the past three years, KDAH has partnered with The Times of India for its organ donation awareness campaign. With seminars featuring experts in the fields of medicine, sociology and theology and extensive news coverage on the subject reaching the farthest corners of the country, the impact is clearly visible. People are opening up to modern ideas, and religious institutions are reinterpreting the sacred texts to find merit for such a noble act. Earlier in the month, a panel of religious leaders gathered at the Dr Nitu Mandke Convention Centre at KDAH to answer some tough questions on whether religion permits organ donation. It resulted in a beautiful discussion on the selfless, yet fulfilling, act of giving, and the importance of detachment of mind and soul from the body.

The first to speak, Swami Sukhabhodhananda, chairman of Prasanna Trust, Bengaluru, set the discussion in motion by addressing the fundamentals. “If we can open our hearts, the energy to give is most powerful,” he said. “When you give, give your organs with clarity, for a selfish person will always be a beggar of happiness, but never happy.” Taking over from him, Jaya Row, founder of Vedanta Vision, explained that holding on to our body is, in fact, quite a selfish act. “Your body is a container, occupied by the elements, that houses your personality. When you donate your organs, you are not really giving. You are just returning what was bestowed upon you for your lifetime.”

Father Stephen Fernandes, professor of moral theology, assured the Catholics that the conviction of resurrection does not depend on the intactness of the body.

Further, Irfan Engineer, director of Centre for Study of Society and...
Secularism, assured the Islamic community that organ donation has long been accepted on three conditions. “First, in the case of necessity—if it will save a life, all that is haram (sinful) will be rendered non-haram,” he explained. “Second, the motivation behind the transaction should not be for financial gain. Third, the donor should not cause harm to the self. The flesh and blood of the animal does not reach god. It is the spirit of sacrifice.”

Shulamith Malekar, daughter of Rabbi Ezekiel Malekar, urged, “Don’t take your organs to heaven, for heaven knows we need them here.” Explaining that the Jewish commandments teach us to love thy neighbour, she added, “There is no act of love more extreme than to donate one’s organs. The ultimate respect to the body in death is to give rise to life.”

“Organ donation is a highly sensitive, personal and emotional issue. Very few possess the courage of conviction, yet it is the greatest gift one can ever give,” expressed Tina Ambani, chairperson, KDAH, at a special event held on 5 August. At the ceremony, chief guest Uddhav Thackeray, leader of Maharashtra’s Shiv Sena party, addressed the bureaucratic issues faced when carrying out organ donation. “The government should step up efforts to boost organ donation in the city that has a swelling waiting list of end-stage organ failure patients,” he said. “Legal procedures often come in the way of saving lives. We need to cut out the red tape, particularly in the eventualities of an accident.”

Ambani and Thackeray, along with Sunil Nair, Mumbai editor of The Times of India, felicitated 36 families of organ donors at the ceremony. “I salute the selflessness of the families in extending the legacy of life,” said Ambani. “The path to immortality ultimately lies in the heart.”

Later in the month, the hospital was abuzz again as the newest addition to KDAH’s advanced healthcare technology was unveiled at its Centre for Cancer. On 13 August, the EDGETM radiosurgery system was inaugurated by Maharashtra Chief Minister Devendra Fadnavis along with his wife Amruta. KDAH chairperson Tina Ambani, Reliance Group chair-
man Anil Ambani and his mother Kokilaben Dhirubhai Ambani were present at the occasion. The revolutionary machine will now administer radiation targeted to cancer cells with greater accuracy. This will also reduce the patient’s exposure to radiation and the impending illnesses that follow.

At the event, Tina Ambani also announced the proposed establishment of 18 cancer care centres across rural Maharashtra in an effort to “contain, combat and conquer cancer”. The first three centres will be opened in Akola, Gondia and Solapur. Upon hearing this, Fadnavis said, “I am happy KDAH has announced the setting up of cancer care centres in remote places where they are most needed. The trauma of the disease combined with the cost of healthcare is a huge burden on people in rural areas. This new technology will surely take the fight against cancer to the next level.”
Age is no bar when it comes to finding love. Recently, over 280 silvers—widowed, divorced and single—participated in a matrimonial event organised by Ahmedabad-based Anubandh Foundation and sponsored by Vaishnav Samaj in Bengaluru. In a sign of changing times, many of them were accompanied by children who were keen to find the right companion for their lonely parents.

While eight couples got engaged at the venue, a dozen others decided to meet again and take things forward. Remarkably, caste considerations hardly played any part in finalising alliances; all that mattered was compatibility. Several others registered their details with the foundation to help them find a suitable partner. Senior advocate and former chairperson of Women’s Commission of India Pramila Nesargi was the chief guest at the event. Participants came from not just Bengaluru but other parts of Karnataka as well, including Mangaluru, Hubballi, Mysuru and Raichur. While the oldest male participant was 78 years old, the eldest female participant was 55.

Recognising the need for companionship in silver years—with many widowed and staying alone—Anubandh has been organising such events across the country. “We are trying to spread awareness about the need for silvers to find companionship and love,” says Nathubhai Patel, president of the organisation, which has arranged over 100 weddings in the last 10 years. This was the second such event in Bengaluru, the first one being held in 2014.

Citing studies that prove that having a loving partner boosts longevity, Patel explains, “All they require is someone to spend time with, and to care and share! In our society, silvers, particularly women, are forced to keep to themselves once they lose their partner. We tend to forget that even they have emotional and physical needs.” To encourage women to come forward, the foundation reimburses travel conveyance to outstation candidates attending their events. And pointing out that most silvers are plagued by loneliness, Gouri Shankar Tenginkai, secretary of the foundation, says the not-for-profit organisation provides a platform for them to “meet, interact and decide whom to choose as a partner”.

Meanwhile, an event is being organised in Delhi on 18 September in Mayur Vihar. Those interested in registering can contact Natubhai Patel on (0) 9825185876.
Cook up a storm! Are you a fan of Masterchef? Organise a 'healthy cooking' contest with friends at home or your local community centre. It’s a fantastic way to connect with people and share recipes and tips. What’s more, cooking is a proven stress-buster and a great way to keep yourself—especially your hands—agile and limber.

Then: Yoghurt cup
Now: Clothespin flower pot

Do you have lots of old yoghurt/shrikhand/ice-cream plastic cups lying around? Repurpose them as flower pots. You need two cups, one smaller than the other, a bunch of old wooden clothespins, and colours and glitter to decorate. First, get small flowers and plant them in some mud in the smaller cup. Now, take the larger cup and clip a clothespin on its mouth. If the fit isn’t perfect, cut the cup at its mouth to adjust to the size of the clothespin. Decorate your clothespins—you can paint them if they are not coloured and add glitter. Let the colours and/or glitter dry completely. Then, clip the clothespins around the cup, ensuring you do not leave any space between them. Now, all you need to do is put the smaller cup with the flowers inside the larger ones. Your flower pot is ready to face the sun.

More Recycling Ideas...
1. You can use the same arrangement to make a candle holder; instead of the flowers, keep a candle inside the transparent cup. If you have a deeper cup, you can make a pen stand.
2. Use plastic cups to keep small, everyday things like earrings and rings; just decorate them as you wish.
**app alert**

**PZIZZ**

**Available for:** Android 4.0 and up, iOS 7.1

**What it does:** Is getting a good night’s sleep always a problem? Is insomnia ruining your nights? Here’s a solution to your sleep deprivation. Pzizz is an app designed to give users a good power nap or a great night’s sleep. It uses a combination of soothing voice and binaural tones to help you relax and sleep. Binaural tones are a precise, harmonically layered blend of frequencies believed to have a positive influence on brain activity, enabling both focused concentration and deep relaxation.

**After installation:** Once the app is installed, the home page will show you ‘sleep’ or ‘power nap’ options. You can switch options as desired. Use the settings to choose how long you want the audio to play, whether you want the voices on or off (or even in 3D effect!), and adjust the volume. There’s also an alarm to wake you on time. An additional ‘suggestions’ feature offers you helpful hints. Initially, it’s best to use the default settings; once you get used to the app, you can tweak it to your preferences. Once your settings are in place, hit the play button—just remember to put your phone on airplane mode to ensure no one disturbs you.

---

**HELPAGE SOS**

**Available for:** Android 4.0 and up

**What it does:** NGO HelpAge India has recently launched a new app to provide emergency help, information and access to discounts in retail outlets. The best part about the app is that the user does not need to maintain a private profile in the app—hence, there is no fear of your personal information being misused. You can make an SOS call 24×7; your call will be attended directly by HelpAge India’s staff who will connect you to the local police, a hospital or other authorities as prudent.

**After installation:** The homepage features a pop up asking for permission for call access and location; once you agree, you get a call option on the right-hand corner to dial the HelpAge helpline. In the middle are two tabs; the left gives you information on critical elder issues like physical and emotional health, money and legal matters, while the right gives you info on retail outlets across India that provide discounts to silvers. This is very user-friendly app that does not confuse you with too many options and is designed in a way that most silvers will find easy to use.

---

Worried about imposters? Reliance Energy recently introduced an innovative feature in its app called ‘Know Your Reliance Employee’ to help users verify the identity of Reliance Energy employees who might visit their premises. The app displays details of the employee, which includes an official photograph. In case the identity provided on the app does not match that of the visitor, users can immediately call the helpline number through a ‘call us’ tab.

---

**Worried about imposters? Reliance Energy recently introduced an innovative feature in its app called ‘Know Your Reliance Employee’ to help users verify the identity of Reliance Energy employees who might visit their premises. The app displays details of the employee, which includes an official photograph. In case the identity provided on the app does not match that of the visitor, users can immediately call the helpline number through a ‘call us’ tab.**
Food for thought

How would you like to live forever, and get smarter doing it? We’re not there yet, but certain mice seem to be. And all it has taken is a **multi-ingredient dietary supplement (MDS)** that is a blend of vitamins C and D, folic acid, green tea extract and **omega-3 fatty acids**. Scientists from McMaster University in Hamilton, Canada, fed the MDS to transgenic growth hormone mice, which exhibit characteristics of accelerated ageing. They found that their maze performance was significantly better than their younger counterparts, and that they learnt new tasks at double the speed of normal mice. The supplement seemed to not only prevent cognitive decline but actually boost brain ability, hinting at its potential to slow the progression of diseases like Alzheimer’s and Parkinson’s. Researchers are now looking forward to testing the supplement on humans. We can’t wait!

---

**BETTER ON TIME**

Most things in life are all about timing and menopause is definitely one of them. Researchers now believe that **women who undergo menopause before the age of 46 or after 55 could have an increased risk of developing Type 2 diabetes**. More precisely, women in the first group are 25 per cent more likely to develop the disease while the latter are at a 12 per cent increased risk, according to a study at the Kaiser Permanente Centre for Health Research, Portland, Oregon. The researchers took samples of over 124,000 women enrolled with the Women’s Health Initiative, a large trial aimed at preventing diseases in post-menopausal women. They also found that women with the longest reproductive cycle were 23 per cent more likely to develop diabetes. The study shows that after menopause, oestrogen levels decline, putting a woman at a higher risk of body fat and appetite, decreased metabolism and higher blood-sugar levels.
SEEING THE FUTURE

It all started with a dream about a red eye, James Cameron said of The Terminator. Now you could soon get your own indestructible, glaucoma-proof eye, courtesy stem cells. Researchers from the University of Iowa, US, have used stem cells to restore drainage in fluid-clogged eyes in mice, decreasing the risk of glaucoma and glaucoma-induced blindness. Their research found that the influx of induced pluripotent stem cells regenerated a delicate path of tissue known as trabecular meshwork that serves as a drain for fluid build-up in the eye. The best part: this type of stem cell can be created using cells harvested from the patient’s own skin. Researchers found that the stem cells also prompted the body to make more of its own cells within the eye, which in turn multiplied the therapeutic effect. Scientists are now waiting to proceed to human trials.

THE EFFECTS OF STEM CELL TREATMENT

<table>
<thead>
<tr>
<th>SICK MICE</th>
<th>TREATED MICE</th>
<th>HUMANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAIN</td>
<td>21-24 DAYS</td>
<td>45-75 DAYS</td>
</tr>
<tr>
<td>MUSCLES</td>
<td>WEAKENED HIND LEG MUSCLES</td>
<td>GROWTH OF NEW BLOOD VESSELS</td>
</tr>
<tr>
<td>LIFESPAN</td>
<td>NO EFFECT</td>
<td>GROWTH OF NEW BLOOD VESSELS</td>
</tr>
</tbody>
</table>
Say hello to Emma, a robot that can deliver massage treatment as prescribed by a physiotherapist or Chinese physician. Equipped with an Expert Manipulative Massage Automation (EMMA), a robotic arm with a 3D-printed massage tip, the robotic massage therapist is currently being tested on individuals with sports injuries. Using precision and customising treatment according to your specific needs, Emma can also monitor and measure your progress with the help of Cloud technology. The robot has already treated 50 patients with conditions such as tennis elbow, stiff neck and shoulders, lower back pain and even muscle pulls, and is currently undergoing user trials at a medical institute. It has been developed by a Singapore-based start-up.

The eyes may be windows to the soul but they could be a doorway to the brain too! Researchers from University of Waterloo in Ontario, Canada, have developed a non-invasive eye scan that can identify Alzheimer’s disease before the onset of symptoms. The scan uses polarised light to detect deposits of amyloid proteins at the back of the retina, an Alzheimer’s biomarker, years before the person shows cognitive decline. The study was conducted in both human and animal models and is also significant because it is as sensitive as other more expensive diagnostic tools and can, therefore, be cost-effective. Early detection of the disease means potential patients can be proactive in taking steps to delay or prevent the onset of the illness.

WHERE THERE’S SMOKE...

E-Cigarettes are widely used as an alternative to smoking cigarettes and—believe it or not—even a fashion statement. Now here’s the real smoking gun: Researchers from Lawrence Berkeley National Laboratory in California, have found that vapours from e-cigarettes contain two carcinogenic chemicals, propylene oxide and glycidol. They also found that the vapour released about 31 harmful chemicals, whose amounts varied with the temperature at which the liquids were vaporised. However, advocates of e-cigarettes claim these amounts are ‘safe’ as the emissions are much lower compared to actual cigarettes. Safer still, just kick the habit.
**IN PASSING**

Eminent Assamese litterateur Mahim Bora passed away on 5 August at Nagaon district, Assam. He was 92.

Anil Arora, owner of The Bookworm in Delhi's Connaught Place, died on 9 August. He was 74.

Yesteryear Tamil actor Jyothilakshmi passed away on 9 August in Chennai following a brief illness. She was 63.

The oldest living tigress in the wild, Machli, died of old age on 18 August. She was the pride of Ranthambore National Park.

**BIRTHDAYS**

Actor Rishi Kapoor turns 64 on 4 September.

Activist and Gandhian Ela Ramesh Bhatt turns 83 on 7 September.

Singer Asha Bhosle turns 83 on 8 September.

Actor Shabana Azmi turns 66 on 18 September.

Filmmaker Mahesh Bhatt turns 68 on 20 September.

Singer Lata Mangeshkar turns 87 on 28 September.

**MILESTONES**

- Hindi scholar and writer Sunita Jain was awarded the prestigious 25th Vyas Samman 2015 on 17 August for her poetry collection Kshama. She received the award from West Bengal Governor K N Tripathi. The award, instituted by the K K Birla Foundation, carries a cash prize of ₹2.5 lakh.

- The Sursagar Society of Dilli Gharana recently announced that it will confer the annual Sangeet Mantand Ustad Chand Khan Lifetime Achievement Award on santoor maestro Pandit Shiv Kumar Sharma to recognise his contribution towards enriching the arts.

- N Ramachandran, President of the Indian Olympic Association (IOA), was awarded the Olympic Order on 21 August for his outstanding services to the Olympic movement. He was presented the award by Thomas Bach, President of the International Olympic Committee (IOC).
GRANDMA’S TALES

I have always enjoyed stories—from books, elders, fellow travellers, workers, friends and children. I love the communion, the shared understanding, the bonding that happens just magically. Storytelling brings out the innocence in us and keeps us childlike at heart.

My first tryst as a storyteller was as a mother. I raised my son and daughter on a robust diet of stories, some from books I had read and others from mythology. By a quirk of fate, I ended up getting a job as a librarian at Hyderabad Public School (HPS), where my children studied. I was thrilled when the principal told me, “I don’t want someone to only track and collect the books. I want you to transfer your love and enthusiasm for books and reading to the kids.”

I worked at HPS for 13 years. The library was located between the two wings of the boarding school. After class, the children would head for the library. They were lonely and homesick and talking about it made them feel better. I was fascinated by their descriptions of life in their villages and towns.

At this time, I chanced upon the autobiographical *The Tribal World of Verrier Elvin*, which radically changed the way I looked at my students, sensitising me to another culture, making me aware of a world I had never known. For the students, the library became an island of contentment.

In school, I told or read out stories during the library class. When Mother Teresa died, I told the kids about her work. When Nigerian environmental activist ‘Ken’ Beeson Saro-Wiwa died, I told them about his work with his people. I told the kids about the *Rainbow Warrior*, the Greenpeace ship that was sunk off the coast of Auckland, New Zealand. As a librarian, I asked very little of the kids—it gave them the freedom to talk to me and tell me things. I realised the truth of Wordsworth’s words: kids do come “trailing clouds of glory.” When I gave them stories, it was like food for their little souls!

During my tenure at HPS, I decided to train students to compere the annual concert. They would come in pairs and talk about the items. Every line had been picked up from stories I had told them or read to them. Many years later, a boy from Class XII stopped me on my way home, saluted me, recited the lines he had learnt for that show five years earlier, saluted again with a big grin and carried on!

In the late 1990s, my daughter Nayantara went to the US for higher studies. In Southern California, I met Jodie Hoelle, an amazing storyteller, with whom I attended storytelling sessions at a local school. We did this for nearly five weeks. She would tell a story and I would tell a correlated one, sometimes from India.

In 2010, my daughter came back and started ‘Our Sacred Space’, an open space for performing arts here in Secun-
derabad, where I live. I have been holding storytelling sessions there for the past four years even though the numbers in my audience have never gone beyond five or six.

What I really love about storytelling is the bond created through sharing. What's more, everyone has stories to share—in trains, at parties and at social gatherings. And when you tell a story to a child, you are enriching yourself as much as you are enriching the youngster.

—Nalini Nanda Kumar, Secunderabad

DREAM RUN

I chased the dream of becoming a long-distance runner all my life but I only caught up with it after I retired. I began running while schooling in Jabalpur. I began with the 100-m dash and gradually worked my way up even though I never won any medals. When I was 14 years old, I gave long-distance running a shot.

I graduated as a mechanical engineer and as work took up most of my time, I could not run. Before I knew it, I had turned 35 and was in need of a fitness check-up. My doctor had warned me that I was prone to diabetes and had to exercise every day. Through the Internet, I learnt about ‘race walking’ and incorporated it into my morning walks. My hunger for speed and distance pushed me to start running again. However, on the very first day, my legs felt leaden and I couldn't proceed. So I went back to race walking. But something was still missing in my life.

I retired as additional general manager from BHEL in 2005, after 37 years of service, and shifted to Chennai. Around this time, I came across an online forum called Chennai Runners. I religiously followed their conversations, which revolved around running injuries and treatment, running form, gadgets available in the market and running schedules. The runners used to narrate their experiences and I was very inspired even though I was not running at the time. Then, one day, I received a phone call from a classmate from school who had retired from the Army and participated in several marathons. I took it as a sign and thought, if he could do it, so could I!

I was 62 years old when I started running again. I built confidence by first jogging at home and graduated to jogging in the park and finally running on the road. My first big event was running my first half marathon, the East Coast Run, in 2009. I took roughly four hours to complete the 30-km distance. By the time I was 68, I had competed in the Auroville Marathon, Wipro Marathon in Chennai and Standard Chartered Marathon in Mumbai, several times.

Over time, my legs began to hurt and I also developed leg injuries owing to lack of muscle strength and flexibility. I was advised to stop running. But, after coming this far, I wasn’t about to give up. Relying on the Internet, I intensified my training at home and signed up for yoga classes to increase my flexibility. I’ve heard that cross-training—engaging in different types of sports at the same time—increases muscle strength. Maybe I will take up swimming next. Some of those who have followed my journey tell me I could qualify for the Boston Marathon but Mumbai is my Boston. I look forward to next year’s Standard Chartered Mumbai Marathon.

I am now 70 years old. I eat well, sleep well and feel great. My only challenge is the reaction of my family and friends, who have often asked me to stop running. They mean well and I truly appreciate their concern. But I love running and will not stop.

—Venugopalan Arunachalam, Chennai

A spirited runner, Arunachalam overcame hurdles to become a marathoner

Courtesy: Venugopalan Arunachalam
Not many people, except practitioners of either, know Pilates and yoga are very closely related. Equally few people know that Pilates is actually eponymous with its creator Joseph Pilates. Much of Pilates is actually yoga, with very evolved props and machines.

Joseph Pilates, a German, was interned in England during World War I. He was avidly into fitness, because he was born a sickly child and made himself strong through a well-rounded fitness regimen. During his internment, he taught his physical fitness routine to the others interned along with him. When the great flu swept through England in 1918, his trainees and he escaped its travails. This convinced him he was on the right track. He migrated to the US and set up fitness studios; he became popular largely because of his celebrity clients, many of whom were famous dancers.

The similarity between yoga and Pilates is striking, though there is a lot more attention on muscular awareness and isometric contractions in Pilates. It is dynamic and entirely focused on the physical aspect of healing, unlike yoga which engages the mind and the breath in various related practices like meditation and pranayama (breathing practices). In Pilates, the props help further prod the practitioner into poses and deepen them. Though some basic props are used in yoga too (blocks, belts), they are
not extensive. What’s more, Pilates poses have different names that are easy to remember unlike in yoga, which largely features Sanskrit names based on natural objects or creatures they resemble (makarasana/crocodile) or the action of the muscle or action involved (dwipada bhuja-pidasana/two-legged shoulder-pressing pose).

Those who practise yoga will find Pilates engaging and different because of the approach of the training. But they will also find an affinity. Indeed, it is not improbable to have many serious practitioners of either science borrowing from the other and incorporating a feature that expands their practice further.

---

**Adi Shankaracharya’s Atma Shatakam**

This is a compact delineation of the Vedantic mind, which forms the sub-stratum of all yoga. As much as yoga is of the body, its original intention was to use it to understand the spiritual connection that runs through the whole universe. In these verses, Adi Shankaracharya explains the entire philosophy of Advaita Vedanta (of non-dualism). He is said to have sung this in response to the master Gaudapada’s query as to who he was. To go to the beginning of the story, the teenaged Adi Shankaracharya, who leaves his widowed mother and home in search of self-realisation, wants to become the disciple of Gaudapada who asks him who he is. Shankaracharya, already evolved, explains that he is not the mind, the body, nor the senses, the organs or their systems. He is beyond all these obvious things to which we appear attached. He is that one which runs behind all these things, like a string through pearls. For those who are enraptured by the idea of Advaita—non-dualism—this is an enthralling set of verses.

Available in a song format, all over the Net, it is the most compact definition of the yogic mind, and the quest and purpose behind sadhana. To explain the cosmic principle, more commonly called Brahman, he uses the term Shivoham (I am Shiva principle/I am that one which is Bliss Eternal). The set of slokas are also referred to as Nirvanastakam. Given below is a rough translation. One can read or sing these verses to connect to the idea of cosmic connection and understand the yogic aspiration and mind.

---

I am not this mind, nor this body. Neither am I the intelligence, nor am I the ego.

I am not in the senses, nor in their actions. I am not the breath, nor in its five expressions. I am not in any of the five elements.

I am not in the emotions. I am not in the four stages of a human being.

I am not bound by the good or bad. Nor in scriptures or spiritual acts or places.

I am not the subject or object of pleasure.

I am that Eternal Bliss Consciousness.
The first day at school
The first time you rode the bicycle.
The first crush you had at thirteen
The first drama you got a part in
The first day at college
The first date you went on
The first kiss
The first time you proposed
The first job interview
The first board meeting you addressed
The first day after retirement

BUTTERFLIES never retire

The first click of the mouse.

www.harmonyindia.org
Your suggestions will transform Uttar Pradesh

Under the dynamic leadership of
Shri Akhilesh Yadav
Hon’ble Chief Minister, Uttar Pradesh

the state government has decided to carry forward new and innovative ideas of the general public in the spheres of Good Governance/Administrative Services. Besides, a decision has been taken to give a new dimension to development of the state with inclusion of these new ideas. You can be a partner in development of the state by giving your constructive and innovative proposals & suggestions in the sphere of Good Governance/Administrative Services.

You can send submit your proposals on the following topics:-

☑ For simplification of the process for services being provided by the Government/Administration.
☑ For providing better services to the citizens by using new technology (IT).
☑ For increasing productivity/capacity/efficacy.
☑ For augmenting participation and strengthening sectors like education, medical, health, drinking water, social welfare, minority welfare, agriculture and infrastructure.
☑ For conservation of environment, forest and wildlife.
☑ For achieving the goal of the Clean & Green Uttar Pradesh (Clean & Green UP).

For more details, kindly contact concerning District Magistrate/department/public undertaking or visit shasanadesh.up.nic.in
Way back in 1974, the Jain community was astounded by the release of two audio clips of the Bhaktamar Stotra and Atma Siddhi Shastra. The music was soulful and the voices mesmerising. Steeped in devotion and spirituality, these LP records were extremely well-received. The visionaries behind this musical rendition were Shri Pratapkumar Toliya and his wife Sumitra. There has been no looking back since! Their music, recording and publishing company, Vardhaman Bharati, went on to produce masterpieces in spiritual verses and classical music and they have been bestowed with myriad awards and accolades.

Living up to the dictum, ‘You are what you eat’, these Gujarati Jains based in Bengaluru view food not just as a means to satisfy the palate but to stir the soul and music within. Sumitra is a sprightly 78 and her husband is 86 years young! Their devotion to music appears to have kept them young at heart and their lifestyle reflects a strong Gandhian influence. As I chatted with them, I realised that the tapestry of their lives is interwoven with three powerful strands: a spiritual and noble upbringing amid seers, dedication to music; and their choice to lead a simple sattvic lifestyle.

To begin with, how did your journey with divine music begin?

Pratapkumar: Music is an experience of serenity and divinity. We have learnt Hindustani classical and Rabindra Sangeet and are deeply influenced by them. For us, words and bhava are more important than the musical element.

What is your forte in music?

Sumitra: Our journey led us to create unique music for meditation as a tool to self-realisation. In America, Jain monk Sushilkumarji bestowed the title of ‘Sangeet Ratna’ upon Pratapji. We have also forayed into music for Jain raas-garba, devotional bhajan, discourses, etc. You can say our forte is spirituality in music.

Since childhood, I have grown up listening to your CDs and learning chants and stotra. How many have you produced to date?

He: To date, we have created more than 100 music CDs as well as 52 discourse CDs, the latest being an audio-video album of Anand Ghan Chobisi. We have published 11 books; the latest being Sahajananda Ghan Gura Gatha and Vishwa Maanv Rajchandraji. We have also performed and participated in over 1,000 concerts in India. Between 1981 and 2000, we performed extensively in London and the US.

How did your musical genes surface?

He: I learnt to play the sitar when I was quite young and practised it diligently. Sumitra started learning classical music at the age of 10. She has passed ‘Visharad’ [a three-year music course equivalent to a bachelor’s degree] in music.

Do you feel your efforts in the field of music have been rewarded?

She: Our reward is spiritual, not material. But we have enough and we are very content. We experience spiritual contentment.
What sort of upbringing and value systems did you both grow up with? Sumitraji, can you enlighten us?

I grew up in a Gandhian environment. My father Harjivan Dasji Kotak was involved in the khadi movement as was my mother Sharada Ben. She was a strong yet silent worker. After a few years, Bapu invited them to settle down in the Gandhi Ashram in Sabarmati. My father was responsible for establishing the first Khadi Bhanidar in Ahmedabad. It was known as Gandhi Haat. When we were young, even our handkerchiefs were made of khadi. Both of us have always worn khadi, right from childhood.

Tell us about your education and other milestones, Sumitraji.

I did my MA in Hindi and Sanskrit. At 22, we got married in the Ashram. Gurudev Rabindranath Tagore’s disciple Gurudayal Mallik was instrumental in getting us married.

What are the memories that reverberate in your life, Pratapkumarji?

I was born in Amreli in Saurashtra, but after my high school I went to Ahmedabad and later to Hyderabad for higher studies. I have done my MA in Hindi, then MA in English as well as the Sahitya Ratna course. At 15, I went to Pune and spent 15 days with Gandhi ji as a scout volunteer. It was a memorable period and left a deep impression on me. During my BA, I stayed with Pandit Shuklalji. I have done a padayatra with Vinoba Bhave. After my education, I partnered with my brother-in-law in an engineering company. I also taught at colleges in Bengaluru and Ahmedabad. In 1970, my elder brother asked me to come to Bengaluru. Sumitra was also a college lecturer. She has taught music to hundreds of students.

Your simple and serene lifestyle coupled with your dedication to music is an inspiration. Tell us about your children.

She: We were blessed with five daughters, but the eldest, Parul, passed away. Three of them are married. All of them are working. We also have three grandchildren.

How do you perceive the change in times across generations?

She: When we were growing up, family was very important. Our elders had a great influence on us and we spent a lot of time with family. Nowadays, children like to spend time with their peers and that becomes their influence. The mental
development is different across the decades. I am keenly interested in education and knowing which field children are specialising in.

How have you nurtured your own interests across decades?

She: It is a natural part of us. Music is our life and we cannot imagine life without it. It dominates everything else. Even the food that we eat.

Please elaborate.

She: As our love for singing is a priority, we have to take care of our voices and throat. We never use chillies or too much oil in our cooking. The food at home has always been sattvic—in our home, at his house and even in my maternal home.

Would you attribute your good health to sattvic food?

He: Yes, certainly! We have always believed in naturopathy and have never taken allopathic medicines. The right food in itself can be the medicine.

What is a typical meal at home?

He: Typically our food is infused with some Gujarati influence following Jain principles. We don't eat root vegetables nor do we eat after sunset.
Pratibha Jain, an author and translator from Chennai, is the co-author of two award-winning books Cooking at Home with Pedatha and Sukham Ayu. Her area of specialisation is documenting Indian traditions through research, translation and writing.

Do the children relish such food?

She: They too enjoy simple food, but certainly not as bland as ours. So we cook for them separately. Even the simple home-style dal is made differently for them, with more oil and spices.

You are indeed blessed. How did your interest in religion and spirituality arise?

She: I was born in a Hindu family, yet my parents gave us a secular viewpoint. We were not compelled or influenced by any particular religion. My father taught me to accept life’s turnings with equanimity. I think the best thing in life is to keep one’s mind open. This infuses us with adaptability. As life moved on, I kept adapting, I kept flowing with life. However, I was greatly influenced by Jainism because of Muni Sant Baal. He was a great Jain monk and deeply associated with Gandhiji. I always enjoyed the morning prarthana time in Gandhi Ashram.

He: My childhood was steeped in religious samskara. One of the strongest influences in my life was that of the great Jaina seer Shrimad Rajachandra. At 16, I read his Mokshamala. It deeply influenced me and I stopped eating after sunset.

To which Jaina sect do you belong?

He: I think in the true spirit of things, we are not just Digambar (sky-clad) or Shwetambar (white-clad) but can call ourselves ‘Atmambar’ (soul-clad, soulful).

That’s such a beautiful expression! It would be so wonderful if all of us could look at ourselves beyond sects and castes. Thank you so much.

**Moth ki sabzi**

*Moth* beans are a favourite among Marwari and Gujarati communities. They look similar to mung beans but are smaller and golden brown in colour. Tasty and healthy, these are used for making vada and *chilla* as well. Here is a simple, healthy and wholesome side-dish with *moth* beans.

**Ingredients**

- Moth beans: 1 cup
- Ghee (or oil): 1 tbsp
- Mustard seeds: ½ tsp
- Cumin seeds: ½ tsp
- Asafoetida powder: a pinch
- Curry leaves: 1 sprig
- Green chillies (optional): 1; finely chopped
- Tomato: 1; chopped
- Coriander powder: 1 tsp
- Cumin powder: 1 tsp
- Turmeric powder: ¼ tsp
- Red chilli powder (optional): 1 tsp
- Coriander leaves: a few; finely chopped
- Salt to taste

**For the paste**

- Fresh or dried coconut: ¼ cup
- Cloves: 3
- Cinnamon: 1
- Peppercorns: 5-6

**Method**

Rinse the **moth** beans well and soak them in enough water for 4-6 hours or overnight. Pressure-cook along with the water for up to 1 whistle. When the steam settles down, proceed with the recipe below.

Grind the ingredients for the paste coarsely using very little water. Heat the ghee in a pan and add the mustard seeds. As they begin to crackle, add the cumin seeds, asafoetida powder and curry leaves. Add the green chillies and tomatoes and sauté for 2 minutes. Add all the masalas and salt and sauté for a minute. Add the **moth** beans and half a cup of water. Allow everything to cook well for 5-7 minutes. Add the ground paste and cook for a minute. Switch off the flame and garnish with coriander leaves. Serve with steamed rice or hot *phulka*. 
Bond with the best: Besides being a fixed income-earning instrument, bonds offer a bouquet of choices

Is there any advantage if I invest in bonds? I have some cash that I need to invest. I wonder if investment in bonds can be a profitable alternative?” This casual query from one of my silver friends set me thinking about the pros and cons of bonds as a financial instrument.

Silvers are always on the lookout for fixed income-earning instruments to park their funds for a stable inflow. Given that they are easy to comprehend, offer a fixed income and are placed with banks, financial institutions and reputed corporates, the natural choice often veers towards fixed deposits (FDs). The calculation of income earned in FDs is fairly straightforward. However, when the question of investing in bonds arises, the issues do not remain as simple. This is because bonds are intrinsically very different from FDs and stocks.

Bonds

When we think ‘bond’ one is reminded of the legendary line, “My name is Bond, James Bond”, an integral part of all James Bond films! But if one moves away from Hollywood, bonds are essentially a commitment for various purposes. For example, while accepting employment in a company, the prospective employee might be required to sign a bond. But in finance, a bond is an instrument that indicates indebtedness to the bondholder.

A bond is a financial instrument issued for the purpose of raising capital, and various institutions use...
this method to garner funds. Among them are the central and state governments, government institutions and financial institutions as well as private entities such as companies.

As a bond indicates the indebtedness of the issuer, it is a debt security under which the issuer owes the debt holders (the investors) certain obligations or terms. According to the terms of the bond, the issuer has to pay the investor an interest, which is also called the coupon; and/or repay the principal at a later date, referred to as the maturity date.

The interest is usually payable semi-annually or annually, i.e. at a fixed interval just like FDs. However, just like stocks, bonds are securities with a difference. When an investor buys a stock, s/he obtains an equity stake in the company. In contrast, a bondholder has a creditor stake in the company, as s/he is a lender.

Hence, a bondholder has a priority status over the stockholder. In case of a situation of bankruptcy, a bondholder will be paid before the stockholder but not before the secure creditors. Most bonds have a defined term for redemption but stocks remain outstanding for an indefinite period of time. Bonds are less volatile than stocks; this is also why they have much lower performance compared to stocks in the long term.

**Choices galore**

Unlike FDs, when you invest in bonds, there are a number of varieties to choose from. An investor needs to determine the requirements or objectives while choosing a particular type of bond. Details about these bonds are available on websites of various financial institutions and asset management companies.

Some of these bonds are available in the secondary market and are tradable, while others are not. For instance, Government of India Savings (Taxable) Bonds are not traded on the secondary market. Let us look at the features of a few bonds:

- **Tax-Free Bonds** are one of the most popular, owing to their special feature of freedom from the payment of tax on the interest income earned. These bonds are issued by government institutions and public-sector companies at different times depending upon government programmes for garnering funds for various purposes through these bonds. Some public undertakings that raise funds through the issue of tax-free bonds are Indian Railway Finance Corporation Ltd (IRFC), Power Finance Corporation Ltd (PFC), National Highways Authority of India (NHAI), Housing and Urban Development Corporation Ltd (HUDCO), Rural Electrification Corporation Ltd (REC), National Thermal Power Corporation Ltd (NTPC), National Hydroelectric Power Corporation Ltd (NHPC), Indian Renewable Energy Development Agency Ltd (IREDA), etc. These are traded on the stock exchange and are liquid. If sold before one year, short-term gain tax is applicable while long-term capital gains tax is 10 per cent. So, unlike stocks, they do not enjoy the benefit of tax-free capital gains. One can remain invested for 10 to 20 years in these bonds.

- **Government of India Savings (Taxable) Bonds** enjoy a coupon of 8 per cent payable semi-annually. The interest earned on these bonds is taxable as per the income tax slab of the investor. Both options—cumulative and non-cumulative—are available and there is no ceiling on the investment amount. These bonds are non-transferable.
and, hence, non-tradable on the secondary market.

- Investors desirous of investing gains of long-term capital assets like land, house, property, etc, within six months of sale of these assets find a valuable financial instrument in **Capital Gains Bonds**. These bonds enjoy tax exemption facilities for transferring such gains with a condition of a three-year lock-in period. The facility is available for an invested amount with a limit of ₹ 5,000,000.

- **Corporate Bonds** are issued by large public and private companies for various purposes such as building a new plant, expanding the business or for purchasing machinery and equipment. These bonds are risky compared to the bonds discussed above, as an investor may lose all his investment in the event of the company going bankrupt. But they provide higher returns than government bonds.

- **Sovereign Gold Bonds** denominated in terms of gold grams, with a maturity of eight years, were issued in March 2016. This new instrument on stock exchanges has gained popularity. Recently, it is quoting at a premium of 11 per cent over the issue price. These bonds provide the benefit of the gold price, obviate the need to hold gold in physical form, and offer tax benefit in addition to 2.5 per cent interest.

- If an investor does not want to directly invest in bonds and yet wants to diversify the portfolio with bonds, an option is available in the form of debt mutual funds that invest in bonds. **Dynamic**

  If an investor does not want to directly invest in bonds and yet wants to diversify the portfolio with bonds, an option is available in the form of debt mutual funds that invest in bonds.

  **Bond Funds, Long-Term Income Funds and Gilt Funds** gain more during periods of falling interest rates.

  **Bond price and yields**

  It is important for an investor to understand the relationship between bond price, interest rate and yield. The bond price is indicative of the present cash inflows from it, discounted by the market yield. If a bond is not traded, its price and yield will remain unchanged. In case of a traded bond, if it is purchased at a lower price, the return (yield) from it will increase and vice versa.

  So, when interest rates start falling, bond prices start increasing in the secondary market and vice versa. In periods of a fall in bond prices, both the mutual funds and individual investors who want to cash out of the market by selling the bonds suffer a loss. On the other hand, cash-surplus investors can benefit by buying bonds when prices are low and selling them when prices rise; this allows them to earn capital gains, which is the difference between the buy and sell price.

  **Are they risk-free?**

  Like other financial instruments, bonds offer a mix of safety and risk. Highly rated bonds bought at an attractive coupon offer the same safety and fixed income as FDs over a long period. Bonds that are traded in the secondary market are exposed to the same risk as stocks owing to volatility in the market and the attendant risk.

  Look at the benefit of tax-free bonds that offer a reasonable interest coupon of 8 per cent over a longer period. An investor that parks surplus funds in these bonds will be freed of the worry of paying any tax over the interest income and will get a fixed income for a long time. On the other hand, an investor who invests in bonds that default on interest and the principal payment suffers a high risk.

  A sudden downgrading of a bond adversely affects the bond price. Debt mutual funds history is a standing testimony to the losses suffered owing to such downgrading of bonds. Individual investors suffer in such periods of volatility too.

  **Caution is the byword**

  Risk is inherent in financial investments and instruments. It is foolhardy to think that bonds are an exception to this feature of inbuilt risk owing to changes in the financial environment. However, risk levels vary and some risks never materialise. In addition to being fixed income-earning instruments, bonds offer a wide avenue to diversify an investment portfolio by carefully comparing the risks, expected returns and liquidity aspects. The Indian bond market is a strong one, and has witnessed significant expansion in recent years.

  No one wants to be a loser or bystander in the financial world. But a winner works to succeed. Silvers who have planned their investment portfolio with an eagle’s eye, patience, study and foresight can find bonds to be a useful financial instrument.

---

*The author is an economist based in Mumbai*
Feel like your best is still ahead of you? 
Become a Reliance Life Advisor and live the life you always wanted.

- Decide your own working hours
- Start without any investment, earn attractive commissions and rewards
- Get access to world-class training and skill development programs
- Progress to become Club Members and participate in national/international conventions

To become an Advisor, sms LIFE to 55454, visit the Careers page at reliancelife.com or walk into the branch nearest to you.

Over 1 Crore lives insured\(^1\) | Over 8,000 outlets\(^2\) | Top 3 Most Trusted Life Insurance Brand\(^3\) | 94.53% Claim Settlement Ratio\(^4\)
Good things often come at a price, and longevity is no exception. Medicine has improved life expectancy world over but that also means the longer we live, the more we have to grapple with issues such as Alzheimer’s disease. On the occasion of World Alzheimer’s Day on 21 September, we revisit this medical condition, and learn how to reduce the risk of developing it from Dr Prithika Chary, senior consultant neurologist and neurosurgeon at Kauvery Hospital, Chennai.

What is the difference between dementia and Alzheimer’s disease?

Dementia is a chronic syndrome characterised by a progressive, global deterioration in intellect including memory, learning, orientation, language, comprehension and judgement caused by degenerative, vascular and metabolic factors. It mainly affects older people; only 2 per cent of cases manifest before the age of 65. After this, prevalence doubles with every five-year increment in age. Dementia is a major cause of disability in late life.

Alzheimer’s is a type of dementia usually seen in people aged over 60. This is typically characterised by memory loss, language, behavioural and cognition issues. It is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills and, eventually, the ability to carry out even the simplest of tasks.

The disease takes its name from Dr Alois Alzheimer, who, in 1906, noticed changes in the brain tissue of a
Alzheimer’s is a heart-wrenching disease, especially for the family of the patient as it is characterised by progressive mental, physical and behavioural deterioration. While medicine can slow the progress of the disease, loved ones have no choice but to watch their parent, sibling or spouse waste away. A patient with this disease is almost like a baby and needs a lot of care. Some simple tips:

- Keep the home atmosphere safe as patients have issues judging steps and furniture while moving around
- Encourage them to remember as many activities as they can
- Serve food in a simple way and let them eat what they want
- Leave a night lamp on so it helps them get oriented if they wake up at night to use the washroom
- Take them for walks
- Help them with tasks so they stay active rather than take over the tasks completely
- Involve them in fun activities like puzzles or games that will help them stay happy and cheerful
- Make sure visitors are aware of their condition so the patient is not embarrassed
- Be a loving caregiver whether you are helping them bathe, dress or eat. It helps them feel better
- Join a caregiver group so you can share your experiences, seek help and make caregiving a less stressful experience for yourself

What causes Alzheimer’s disease?

The cause of this disease is unknown but there are several suspected triggers. This disease seems to have a genetic basis, where the APO E4 gene is considered the basis for the disease. Also, while the disease appears to be hereditary, there is no predictable pattern. There are many risk factors that predispose one to Alzheimer’s. These include lifestyle disorders such as hypertension, diabetes and dyslipidaemia or high cholesterol levels, which can cause blood circulation problems, which in turn can further cause dementia.

Simply put, high blood pressure and uncontrolled diabetes can cause infarcts or clots in the brain, which have an impact on blood circulation. This, in turn, can cause a type of dementia called vascular dementia. Hence early diagnosis of diabetes, hypertension and dyslipidaemia are crucial to reducing one’s risk of developing this debilitating disease. Keeping one’s brain healthy also means getting the right nutrition and exercise, and avoiding smoking and alcohol abuse.

What are the early symptoms and how is it diagnosed?

Loss of smell may be an early symptom and often manifests as a lack of interest in eating food as appreciating food flavours depends a lot on the sense of smell. When an individual takes a sudden dislike to food, one should investigate further. The diagnosis is done through neuro-psychological testing, where language, memory and cognitive defects are identified and an MRI is done to check for brain atrophy.

How does the disease progress?

There is a pre-symptomatic stage, where changes occur in the brain but symptoms are not seen clinically. Specialised tests like amyloid imaging can identify this stage. The next stage is mild cognitive impairment (MCI) without language or behavioural disturbances. The disease progresses in three stages: from mild to moderate, to severe. The mild stage is characterised by behavioural changes, getting lost, having problems with issues like counting money and taking longer than usual to complete daily tasks. Moderate Alzheimer’s is where the person finds it difficult to identify family members, dress properly or cope with new situations. In severe cases, the brain shuts down completely and the patient is completely dependent on other people. Towards the end, the individual is completely bedridden.

How is Alzheimer’s managed?

There is no treatment or cure for Alzheimer’s; the key is to manage the behavioural, psychological and social impact of the disease as best as possible and help the patient as much as we can. Primary among these is conserving the
patient’s cognitive functions for as long as possible by games and other activities that stimulate the brain. An ongoing study of 678 nuns in the Convent of Notre Dame in Philadelphia shows that if a person remains physically and mentally active throughout their lives and into their senior years, their chances of developing Alzheimer’s disease is lower. Many of these nuns lived past a hundred and were performing quite well cognitively till their death. Interestingly, post-mortems of their brains showed evidence of neurofibrillary tangles, senile plaques and amyloid deposits indicative of Alzheimer’s although this was not clinically evident during their life.

Drug treatment may temporarily alleviate symptoms and slow the progression. One group of drugs, which includes Donepezil, Rivastigmine and Galantamine, inhibits the destruction of a neurotransmitter called acetylcholine, a deficiency of which is linked to the disease. Another group of drugs used to treat Alzheimer’s is called NMDA agonists, such as Memantine, which protect brain cells from excessive action by the neurotransmitter glutamine.

Current management of this disease also focuses on dietary management using curcumin (turmeric powder) and extra virgin coconut oil, which are believed to help reduce the risk. Scientists are currently researching the possibility of a vaccine that can guard against this disease. Clinical trials are underway in the UK that focus on attacking the build-up of a protein called beta-amyloid, which forms a damaging waxy plaque on brain cells. The latest research, reported in scientific journal Nature, suggests that the drug not only removes the proteins but can restore mental functions.

Can the disease be prevented?

Yes, some research has shown that apart from working on keeping lifestyle disorders like hypertension, diabetes and high cholesterol at bay, paying attention to a few factors in life can reduce the risk of developing Alzheimer’s disease. These include regular exercise, a healthy diet, mental stimulation, quality sleep, stress management and an active social life.
Spot Cancer, Stop Cancer
Early detection and clinical management of cancer

MAKE BD SUREPATH™ LIQUID-BASED PAP TEST A PART OF YOUR ANNUAL VISIT.

Most cervical cancer can be prevented. A well-proven way to prevent cancer of the cervix is to have testing (screening) to find pre-cancers before they can turn into cancer.1

1. The BD SurePath™ is the only FDA approved Pap test available today with a 68.4% increase in HRF detection over conventional smears.2

References:
2. BDSurePath™ System Product Insert, direct-to-consumer package, March 2014

BD
Becton Dickinson India Pvt. Ltd.
6th Floor, Signature Tower B, South City I,
Gurgaon - 122001, Haryana, INDIA.
Tel.: (91-124) 2383566, Fax: (91-124) 2383224/5/6
Website: www.bd.com
email: bd_india@bd.com

BD, BD logos and all other trademarks are property of Becton, Dickinson and Company © 2011 BDMA-0811120
Just like my wife gave birth to our three children, I also became pregnant and gave birth to Sulabh,” says Dr Bindeshwar Pathak, founder, Sulabh International Social Service Organisation. His act of love was born of gut-wrenching experiences in his early years, when he repeatedly witnessed the pitiable treatment meted out to ‘untouchables’, the ‘lowest of the low’ in the Indian caste system. These experiences prompted Pathak to commit his life to liberating the people Mahatma Gandhi had called ‘Harijans’, whose sole purpose, it would seem, was to pick up night soil, carry it in buckets on their heads and transport it to dumping grounds.

“When I started work in the late 1960s, nobody would come near the untouchables, although people would gladly play with a dog. The untouchables were doing valuable work for society and, in lieu of this, they were handed down cruel resentment and humiliation,” says the 73 year-old, New Delhi-based humanist, who was born into a Brahmin family in Bihar. Pathak’s aching conscience drove him to become a visionary and reformer—and, eventually, founder of Sulabh International in 1970. Pathak realised he could use the humble toilet as a powerful tool for social change. He figured that by rooting out manual scavenging, the very practice that relegated ‘untouchables’ to the fringes of society, he could facilitate their assimilation into the mainstream.

Pathak designed the two-pit, pour-flush toilet technology that revolutionised sanitation in India—in one fell swoop, ‘Sulabh Shauchalya’ eliminated the need to manually collect and clear away night soil. In time, it helped change the perception of ‘untouchables’, gave them respect and paved the way for their integration into society. In fact, in the past 46 years, Pathak’s Sulabh International has built 1.3 million household toilets and 54 million government toilets based on his pioneering design. Almost 15 million people across India use these facilities every day.

With liberating all communities becoming its new mission, Sulabh has since gone on to promote human rights, environmental sanitation, unconventional sources of energy, waste management, social reforms through education, women’s empowerment and community health and hygiene. Naturally, Pathak has won many awards and accolades for his body of work, the latest being the declaration of 14 April as ‘Dr Bindeshwar Pathak Day’ by the Mayor of New York.

A mission to MAINSTREAM

Dr Bindeshwar Pathak, a social reformer and designer of the Sulabh Shauchalya, has carried on the legacy of Mahatma Gandhi and Dr B R Ambedkar, reports Suparna-Saraswati Puri.

Photographs courtesy: Sulabh International
In an exclusive interview, Dr Bindeshwar Pathak reveals how sanitation and social reform go hand in hand.

EXCERPTS FROM THE CONVERSATION

How did your family react to your choice of work?

I faced strong opposition because of my caste. It was very difficult for a Brahmin to work for untouchables at that time—they were poles apart in the India in which I grew up. I decided to live in a colony of scavenging untouchables in Bettiah town in the district of Champaran in Bihar. The idea was to see firsthand their pains and problems. While I was in the colony, I was in two minds about whether to continue this work as I faced tremendous opposition from my community. They were boiling with rage at my choice of ‘dirty work.’ Despite this, I stayed.

What were the first steps you took in your mission?

My early inspiration came in 1968, when I joined the Bhangi-Mukti (scavengers’ liberation) Cell of the Bihar Gandhi Centenary Celebrations Committee. I lived in Bettiah to witness what it was really like to be forced to pick up human excreta and be shunned by society. Cruelly ostracised, their children lived in isolation and played only with pigs or among themselves. Their living conditions were hellish.

Were there any incidents that strengthened your conviction to take up this vocation?

I vividly recall two of them. One morning, I heard a hue and cry in the neighbourhood. A newly married girl was crying bitterly as she was being forced by her husband and in-laws to go to the town to clean the bucket toilets. When I intervened, her mother-in-law retorted sharply, ‘This is our profession. If she doesn’t do this, what will she do? If she sells vegetables, who will buy from her hands? She is destined to do this her whole life.’ At that time, I had no answer.

The second incident occurred one afternoon, when I was going to the market to have a cup of tea with some friends. We saw a boy wearing a red shirt being attacked by a bull. People did not make a move to save him.

How did your family react to your choice of profession?

They were boiling with rage at my choice of profession. If she doesn’t do this, what will she do? If she sells vegetables, who will buy from her hands? She is destined to do this her whole life.’ At that time, I had no answer.

Apart from Sulabh’s toilet, what other tools have you used?

I adopted two towns in Rajasthan, Alwar and Tonk, as model towns to show that untouchables can be accepted by society. There I converted all the bucket toilets into Sulabh flush toilets and started giving the untouchables an education. Now they can read, write and sign their names. They are also engaged in making papadum, pickles, noodles and carpet weaving. They earn ₹15,000-20,000 per month as opposed to the ₹200-300 they used to earn while cleaning night soil.

We have fulfilled the four indicators of Dr B R Ambedkar, who dreamt of a scenario where all people would go together to worship in the temple, take a bath in the same pond, draw water from same well and share the same meal.

How far do you think you have come in rooting out ‘untouchability’ in India?

We are inching towards our goal of social acceptance as some villages have been established where untouchability is no longer practised—there is no manual cleaning of toilets and, most important, people from the once-untouchable community have found new vocations.

Whom did you focus on next?

After untouchables, the focus has been the widows of Vrindavan, Varanasi and Uttarakhand. Earlier, widows were not allowed to wear coloured clothes or ornaments, nor allowed to sing, dance or celebrate festivals. Now they celebrate Holi and Diwali; they participate in all social functions and festivals. This has helped change the attitude of the widows as well society. The widows are now willing to wear colourful clothes. We are showing them that they should live life as normal people. They should not be stigmatised as inauspicious. Earlier they wanted to die; now, they want to live their life.
What were the biggest challenges you have faced in your work spanning four decades?

The biggest challenge was that I am a Brahmin by caste. My father and father-in-law were opposed to my work for the untouchables. The second challenge was the development of technology. I am not an engineer; yet, the use of technology was the only way to bring about change. Third, there were financial issues growing up. We had to miss meals many a night, had no proper clothes to wear and were not able to pay our school fees on time. But it did not deter me from going ahead. There have been times when I have travelled extensively on foot and slept on railway platforms, sold my ancestral land and my wife’s ornaments to take the mission forward. There have been moments of utter hopelessness when I have even considered extreme steps like taking my own life. My challenges are beyond description but after starting my work, I became successful.

Tell us about some of your recent technological innovations.

Besides the two-pit ecologically compatible compost toilet technology and excreta-based biogas plant, we have also devised the Sulabh Effluent Treatment (SET) technology. The treated waste water is rendered colourless, odourless and free of organic particles; it can be used for aquaculture, agriculture, gardening or discharge into any water body. In the area of providing potable water, treatment plants have been installed at Madhusudankati in North 24 Parganas District, Mayapur in Nadia district as well as in Murshidabad in Murshidabad district, where underground water has unacceptable levels of arsenic content. We have also installed ‘water ATMs’ in some toilet complexes in urban areas and they have proved useful.

What legislative changes have you been able to bring about?

I am very happy that what I had envisioned about 50 years ago has become a national priority. The Prime Minister has made it a priority to provide toilets to every house by 2019. There have been other achievements too. In 1980-81, I asked the Ministry of Home Affairs to include liberation of scavengers and their rehabilitation on a ‘whole-town approach’ basis. Under the scheme, towns in many different states were adopted. It was also decided that state governments shall provide alternative employment to liberated scavengers. In 1986, it was my persistence with the Ministry of Welfare that led to the Protection of Civil Rights (PCR) Act, where stipends are given to the wards of Muslim and Christian scavengers as well for training and rehabilitation. Earlier, these were available only to Hindu scavengers. Further, Sulabh has set up an English-medium school in New Delhi for the children of the scavengers.

What made you set up the Sulabh International Museum of Toilets?

Motivated by a visit to Madame Tussaud’s in London, I built the museum in 1994. Located at Palam in New Delhi, it has a number of unique exhibits, like the oldest WC toilet from Harappan settlements dating back to 2,500 BC; the throne-like chamber pot of the French Emperor, Louis XIV, who while using it simultaneously gave an audience to select people; and even a bookshelf-type toilet from France bearing the name of an English classic embossed on its rim, intended to humiliate the British and hinting at their traditional cultural animosity.

What does a day in your life look like? How do you relax?

I immerse myself in work relating to sanitation 24×7. Thinking up ways to improve sanitation is in itself a relaxing pursuit. I also occupy myself with thinking and reading about spiritual matters, which in ordinary parlance is called adhyatm. This provides me mental relaxation and helps my physical well-being too.

What is the roadmap ahead for Sulabh International?

We aim to build as many public toilets as possible with assistance from governments, local bodies and business houses. We are also working towards motivating 20 million NRIs to help achieve ‘Open-Defecation-Free India’ by 2019.
India’s premier magazine for senior citizens, *Harmony-Celebrate Age*, is now available on international digital news stand Magzter.

The magazine can now be downloaded and read on a variety of digital platforms such as iPad, iPhone, Android, Windows 8 and tablets.

Download the free Magzter app or log on to http://www.magzter.com/IN/Harmony-for-Silvers-Foundation/Harmony---Celebrate-Age/Lifestyle/ today to read the latest issue of *Harmony-Celebrate Age*. 
When Prince Siddhārtha renounced his family and went on to become the ‘Buddha’ (enlightened one), the knowledge he gained and propagated began to spread far and wide within India and around the world, laying the foundation for Buddhism.

Today, Buddhism is one of the major religions of the world, and has a worldwide following of more than 500 million people. Though it originated in India, the profound teachings of Buddhism spread in Asia and beyond over the centuries. Buddhist ideas and philosophy still stay relevant in the contemporary world.

High-profile gathering

The two-day International Buddhist Conclave beginning 3 October at Sarnath near Varanasi, Uttar Pradesh, and concluding on 5 October at Bodhgaya in Bihar will see a convergence of thinkers, philosophers, intellectuals and political administrators from around the world.

Prime Minister Narendra Modi and UP Chief Minister Akhilesh Yadav are expected to grace the inaugural function being organised by the Union Ministry of Tourism in association with the tourism departments of Uttar Pradesh and Bihar. Foreign delegates and Buddhists from over 40 countries are expected to attend the meet. Earlier, similar conclaves had been organised in New Delhi and Bodhgaya (2004), Nalanda and Bodhgaya (2010), Varanasi and Bodhgaya (2012), and Bodhgaya and Varanasi (2014).

Currently, efforts are on to complete the Buddha theme park at Sarnath on a war footing. Earlier editions of the Conclave have played a major role in showcasing and projecting Buddhist thought, heritage and pilgrimage sites.

Multiple attractions

Besides charting out tourist circuits that highlight important Buddhist sites in different cities, the conclave would also see presentations, panel discussions and business meetings. An exhibition highlighting Buddhist attractions in India will also be inaugurated. Visits to important Buddhist sites in and around Bodhgaya and Sarnath are a highlight of the meet.

After a traditional welcome at Lal Bahadur Shastri International Airport, Babatpur, Varanasi, guests will be taken to ancient Buddhist sites such as Dhamek Stupa, Mulagandha Kuti Vihar and Sarnath museum. They will also get to watch Ganga aarti in the evening at Dashashwamedhi Ghat in Varanasi.

In 2015, Varanasi recorded a 4.5 per cent growth in tourism. As per statistics, a total of 57,16,297 tourists, including 54,13,927 domestic and 3,02,370 foreigners, visited the town.
Swadesh Darshan

The Buddhist Circuit has been identified as one of the 13 thematic circuits for development under the Ministry of Tourism’s new scheme for integrated development, ‘Swadesh Darshan’. The scheme is expected to cover all places associated with Buddhist heritage in the country.

The Ministry of Tourism, which provides financial assistance to state governments and Union Territories for tourism projects, sanctioned ₹33.17 crore in 2014-15 for the construction of a cultural centre at Bodhgaya, Bihar and ₹74.94 crore in 2016-17 for the development of the Buddhist circuit covering Sanchi-Sama-Rewa-Mandsaur-Dhar in Madhya Pradesh.

Buddhist Circuit in UP

Uttar Pradesh Tourism has ensured that travellers and pilgrims interested in covering sites related to Buddhism find it easy to do so through a planned itinerary. There is a well-defined Buddhist Circuit in the state with well-planned infrastructure and an astounding mix of sights related to Buddhist culture, nature and history, covering Kapilvastu, Kaushambi, Kushinagar, Sankisa, Sarnath and Sravasti in UP.

If Bodhgaya in Bihar is the place where the wandering Prince Siddhartha sat under a bodhi tree to meditate and attain enlightenment, then Sarnath near Varanasi too witnessed an important milestone in the Buddha’s journey. The deer park in Sarnath or Isipatana as it was known once historically is the place where Gautama Buddha first enunciated the principles of Buddhism.

Kapilvastu was where Prince Siddhārtha was raised and lived until the age of 29, when he renounced worldly life. Kaushambi is considered to be the place where Lord Buddha passed his sixth and ninth year after attaining enlightenment.

Kushinagar attracts Buddhists from around the world because it is the place where Lord Buddha breathed his last, attaining parinirvana. Sankisa, close to Sravasti, is believed to be the place where the Buddha descended to earth accompanied by Lord Brahma and Devraj Indra after giving a discourse to his mother, Mayadevi. Gautama Buddha is believed to have spent 24 monsoons in Sravasti, constituting a major part of his monastic life.

For more information visit Uttar Pradesh Tourism at http://uptourism.gov.in
KEEP AN ear OUT
Though hearing impairment is the second most common illness in silvers, digitalised miniature hearing aids available today amplify not just sound but quality of life, writes Sirekha Pillai.

The quiet Nair household in Kochi transforms into a virtual battle zone with frayed nerves every evening as the head of the family, 87 year-old Krishnan Nair, switches on the TV to catch his daily dose of news. While he has a hard time following the happenings even at a high decibel level, for others in the family it's a test of auditory endurance levels, resulting in a tug of war between Nair and others for the remote to control the audio.

Constantly turning the television volume up could be just one of the alarming signals in silvers to watch out for ('DIY test', page 46) when it comes to hearing impairment (HI). Though an invisible handicap, the effects of HI upon a person’s health, happiness and well-being are very real and even potentially dangerous. The dangers, however, are not purely physical such as not being able to hear honking vehicles while crossing roads or a fire alarm, but even psychological, with patients often tending to withdraw from social interactions, leading to depression ("Patients often don’t realise the severity of the problem", page 50). Given the gravity of the problem, it’s no surprise that deaf-blind American author and activist Helen Keller said, “Blindness cuts us off from things, but deafness cuts us off from people.”
How & why?

The World Health Organisation’s (WHO) definition of ‘deafness’ refers to the complete loss of hearing ability in one or both ears. Hearing loss occurs when the tiny hair cells inside our inner ear—which help us hear by picking up sound waves and changing them into nerve signals for the brain—are damaged or die. As the hair cells do not re-grow, hearing loss caused by hair cell damage is permanent. Hair cells are most commonly destroyed by the changes in the inner ear as one grows old. Genes and exposure to loud noise can aggravate and quicken the damage.

World over, presbycusis or age-related hearing loss, which is progressive and irreversible, is the most common cause of hearing loss, afflicting one out of three persons by age 65, and one out of two by age 75. In fact, presbycusis is the second most common illness, next only to arthritis, in silvers. A global survey by the WHO in 2012 estimated that over 164.5 million people above the age of 65—about one-third—suffered from hearing loss. The prevalence was the highest in Sub-Saharan Africa, Asia Pacific and South Asia.

However, experts say there is no need to press the panic button yet. In fact, WHO notes that almost half of the causes of HI are preventable; and about 30 per cent, though not treatable, can be managed with assistive devices.

AUDIOMETRIST TO POPULATION RATIO
1:500,000
SPEECH THERAPIST TO DEAF POPULATION RATIO
1:200

Ask yourself the following questions. If you answer ‘yes’ to three or more of these questions, you could have a hearing problem and may need to have your hearing checked by a doctor.

Do I have a problem hearing on the telephone or cell phone?
☐ YES ☐ NO

Do I have trouble hearing when there is noise in the background?
☐ YES ☐ NO

Is it hard for me to follow a conversation when two or more people talk at the same time?
☐ YES ☐ NO

Do I have to strain to understand a conversation?
☐ YES ☐ NO

Do many people I talk to seem to mumble (or not speak clearly)?
☐ YES ☐ NO

Do I misunderstand what others are saying and respond inappropriately?
☐ YES ☐ NO

Do I often ask people to repeat themselves?
☐ YES ☐ NO

Do people complain that I turn the TV volume up too high?
☐ YES ☐ NO

DIY TEST

Courtesy: National Institute on Deafness and Other Communication Disorders (NIDCD)
India talk

The major causes of hearing loss and ear diseases in India as identified by a WHO survey are earwax (15.9 per cent), presbycusis (10.3 per cent), middle ear infections, dry perforation of tympanic membrane and congenital deafness. What makes treating HI a huge challenge in India is the lack of skilled manpower and human resources. In fact, a WHO study raised concerns over the acute shortage of human resources to address the issue of deafness in India. The study listed the estimated number of ENT specialists and otologists in India as 7,000 and 2,000 respectively. It also found the audiometrist-to-population ratio to be an alarming 1:500,000, and the ratio of speech therapist to the deaf population to be 1:200.

The most common form of hearing loss—affecting one in four people over 65—is sensorineural (nerve) hearing loss, caused by constant exposure to loud noises, illness, injury or infection, damaging either the auditory nerve that controls hearing or the hair cells in the ear that help transmit sound. Moreover, as the nervous system becomes old, it finds it difficult to process the audio signals. A less common cause is conductive hearing loss, caused by earwax or fluid build-up, and even a punctured eardrum. While conductive hearing loss can often be corrected by treatment, sensorineural hearing loss can’t be reversed and has to be treated with hearing aids and cochlear implants.

Aid at hand

A hearing aid is an electro-acoustic device worn inside or behind the ear, and is used to amplify sound. It comprises a microphone, amplifier and speaker. The sound waves received by the microphone are converted to electrical signals and sent to the amplifier, which amplifies the

According to a 2009 article in the National Medical Journal of India, 63 million people suffer from significant hearing loss in the country.
power of the signals and sends them to the ear through a speaker. Earlier, silvers could be seen sporting hearing aids that were huge and looked like ‘plugs.’ These hearing aids had to be adjusted constantly to match the sound of one’s ambient environment. Urvashi Malhotra, a Bengaluru-based content developer for websites, recalls hearing whistles and buzzes coming out of her grandfather’s device. “I remember Dadaji constantly adjusting the hearing aid so he could hear right and tune out the background noise,” she reminisces. Research and development in recent years, however, has led to technological transformation in the hearing aid marketplace, making a significant difference in the lives of millions (‘Hi-tech aids’, page 50).

The state-of-the-art hearing aids available today are so sleek and virtually invisible that it’s not easy to guess you are wearing one. These models comprise a microcomputer that responds effectively to noise in the environment, cutting back echoes, filtering out background noise and automatically adjusting the volume. Being waterproof, they can even be worn underwater. Digital, discreet and wireless, they can be connected to smartphones and the TV. Most are computer-programmed to match the nuances of a particular person’s hearing loss. Whether they stay inside your ear canal or wrap around the contour of the outer ear, these tailor-made, high-performance aids amplify not just sound but quality of life.

Anup Narang, director of Delhi-based ALPS, manufacturers of digital hearing aids in India with a market in 30 countries worldwide including America, Asia and Africa, points out that the latest trend abroad and in India is miniaturised hearing aids, which are hi-tech digital products. “Digital hearing aids connect silvers to Bluetooth devices, laptops, music players and television, allowing them to connect to life,” he explains. Besides quality, pricing sets desi digital aids apart. “While a hi-tech hearing aid would cost around ₹100,000 abroad, it would be available in the Indian market for ₹30,000 to ₹40,000,” he adds.

How alarming is the issue of hearing impairment in India?

According to the 2011 census, over 5 million people suffer from hearing impairment in both ears. According to the data, of the 5,071,007 cases, 2,677,544 are males and 2,393,463 are females. These figures comprise those who suffer from moderate to severe hearing loss.

Is there a serious urban-rural dichotomy?

Over 70 per cent of these cases have been reported from rural areas. More than any other factor, it’s largely owing to the fact that the majority of India still lives in villages.

How serious is the issue among silvers?

Roughly 40 per cent of silvers have difficulty in hearing. It has been found that silvers seek treatment for hearing loss only if hearing tone exceeds 60 dB (decibel). Hearing in the range of 0-20 dB is considered normal. Most silvers have 40 dB hearing, which is considerable and has to be taken seriously. But they avoid seeking help until it worsens to 60 dB, which is alarming.

What are the repercussions of not getting treated?

It’s a proven fact that hearing loss in silvers accelerates dementia and cognitive deficits. It also leads to third-party disability, affecting other members of the family and caregivers. Communication breakdown with significant members of the family owing to hearing loss can lead to other systematic disorders such as stress, diabetes and hypertension. Communication breakdown can also lead to the neglect of silvers.

What has the Government’s stance been?

The Maintenance and Welfare of Parents and Senior Citizens Act 2007 does take care of a lot of these issues. Hearing is a public health issue because of its insidious nature. It’s unfortunate that while blindness and other conditions have been treated so vigorously, hearing impairment hasn’t got the same attention. I think it’s more of a societal problem. There’s more stigma attached to wearing a hearing aid than glasses. Sporting a hearing aid is seen as a sign of ageing. We need to realise that untreated hearing impairment can lead to cognitive load, with more energy being consumed. However, successive governments have done what they could by provid-
Different problems, different styles

Hearing aids come in different sizes, styles, power and circuitry. People with severe hearing loss often need a larger size to accommodate the added circuitry and wires. The position of the hearing aid—behind or inside the ear—is determined by its size.

In-the-ear (ITE): Used for mild to severe hearing loss, these fit completely in the outer ear. They are custom-made to fit an individual. On the flip side, they can be damaged by earwax and ear drainage, and the tiny size can cause minor adjustment problems.

Behind-the-ear (BTE): As the name suggests, they are worn behind the ear and come with a case and 'earmold' or dome. The case, equipped with electronics, controls, battery, microphone and loudspeaker, is connected to a plastic earmold that fits inside the outer ear. These are used by people with mild to profound hearing loss. However, if not fitted properly, they produce a whistling sound. Interestingly, BTE aids can be connected to Bluetooth cell phone technology, enabling the wearer to hear directly from the phone, cutting out background noise. A new kind of BTE aid is an open-fit hearing aid that fits behind the ear completely with only a narrow tube inserted into the ear canal, enabling the canal to remain open.

Canal aids: They fit into the ear canal and are available in two styles. The in-the-canal (ITC) is customised to fit the size and shape of the ear canal. A completely-in-canal (CIC) hearing aid is neatly hidden in the ear canal.

Does it include spreading awareness too?

The ADIP scheme has an inbuilt awareness programme. Special efforts are also undertaken by the Ministry of Disability Affairs to create awareness about welfare schemes. I feel the reach could grow manifold if awareness material is in an accessible format such as sign language, text versions, etc. The Accessible India Campaign launched in 2015 meant to create access for the differently abled community is also a good beginning. But to empower them, one needs to ensure participation.

What are the schemes you have pioneered?

We created an empowered town panchayat in Kulgaon-Badlapur in Thane district. Today, all the parks, railway stations and public places in this town panchayat are accessible for the disabled. The major hospital in the area has ramps and an induction loop system to help the hearing-impaired. There is a talking level crossing in front of a blind school in the area. Even the cinema halls there have three seats reserved for the disabled. In 2003, the town panchayat received the Barrier-Free Panchayat Award from the President of India. It's a self-sustained programme and runs on just ₹10 collected per household per year.

We were able to commercialise a low-cost cross hearing aid invented by one of my colleagues from Kolkata. We also formulated, finalised and introduced sign language interpreter and instructor courses, auditory verbal therapy for post-cochlear implant training, a postgraduate diploma in media and disability communication (Mumbai University), and a PhD in audiology and speech-language pathology in universities. We also designed the first accessible website in the country in 2007, which received a national award in 2010. My team developed a low-cost assistive noise level indicator for facilitating communication in hearing-impaired children. Our censor-certified national anthem in universal design won an international award. The Indian anthem is the only one in the world in universal design!

Is the Government-run free hearing aid scheme beneficial?

The Government has made hearing aids accessible and affordable. I only wish post-fitment training, showing clients how to handle them, could be strengthened for maximum benefit.

Dr Rangasayee Raghunathrao is director (technical) and professor at Dr S R Chandrasekhar Institute of Speech and Hearing, Bengaluru. He was president of the Indian Speech and Hearing Association in 1985-86 and 2014-15. He also served as director of the Ali Yavar Jung National Institute for the Hearing Handicapped (AYJNIHH) from 2001 to 2013.
in the ear canal. Though extremely popular as they are invisible and give a more natural experience of hearing with comfort, they may be difficult for the user to adjust and remove because of the small size. There is also danger from the build-up of earwax. They are used for moderately severe hearing loss.

Cochlear implants: A surgically implanted electronic device that provides a sense of sound to those with severe hearing loss, cochlear implants comprise a microphone, speech processor and a transmitter placed behind the ear and an array of electrodes in the cochlea, the auditory portion of the inner ear. Sound waves picked up by

What causes hearing impairment?

Hearing loss can happen owing to anatomical, physiological, psychological and social reasons. Anatomical causes include accidental trauma, deformities of the ear since birth, fluid formation, dryness of the inner ear, extra bony growth, external deformities or absence of the outer ear and blockage of the nose. Physiological reasons include ageing, viral attack, nerve problems, change in physiological or biological conditions within the body, and medicine or treatment for health hazards such as malaria, encephalitis, cancer, tuberculosis, stroke, etc. Psychological factors comprise depression, shocks and mental blocks. Social status and cosmetic reasons can affect the acceptance of hearing loss and worsen its severity in the long run.

What are the warning signs to watch out for?

The warning signs are: sound becomes muffled; asking for repetitions; losing interest in continuous discussions; talking loudly; asking others to speak loudly; turning up the volume of radio, television, and CD players; a ringing sound in the ear (tinnitus); irritability; avoiding phone calls; pronunciation errors; and problems with balance.

What are the latent dangers, both physical and psychological, for someone who refuses to get treated?

Refusal to seek treatment may have serious repercussions in emergency situations; chances of missing honking on busy roads or fire alarms in buildings are high. If hearing loss has been caused owing to nerve involvement or a virus, there is a possibility of developing giddiness or vertigo. The patient might start experiencing noise in

“Patients often don’t realise the severity of the problem”

Dr Anirban Dasgupta
the implant are converted into electrical energy and fed to the brain, which in turn perceives it as sound. If the hearing loss is severe, doctors recommend a cochlear implant in one or both the ears.

**Cochlear or not?**

Different from a hearing aid, a cochlear implant—which can set one back by ₹ 600,000 to ₹ 800,000—bypasses the damaged portions of the ear to directly stimulate the auditory nerve. Hearing with the help of a cochlear implant is different from normal hearing and takes time to learn.

Dr Ashok K Sinha, director of Ali Yavar Jung National Institute for Hearing Handicapped

As a society, are we not serious enough about hearing impairment and the need to treat it?

Unfortunately, we aren’t. The situation in India is quite dismal. Though hearing camps are conducted by different social organisations, they are not done in sound-treated rooms in a proper manner. Similarly, though we donate hearing aids and do free fitting for silvers, there are hardly any follow-up programmes to see how they are faring. Also, we hardly train patients to use the aids appropriately.

Then and again, we hardly measure noises in industrial areas or insist on workers wearing protective devices in high-noise industries. Most of these industries don’t get regular hearing checkups done for their employees.

The high cost of hearing aids, thanks to the huge selling margin for dealers or dispensers, is also a dampener. Unfortunately, 50 per cent of those selling hearing aids are non-professionals, trained in using auto-fit software by different manufacturing companies, where physiological fittings and matching are rarely paid attention to.

What initiatives has the Government taken to combat deafness?

Different government organisations and NGOs are implementing government policies and strategies. The Ministry of Social Justice and Empowerment and the Ministry of Health have initiated many measures. These include screening camps, ADIP schemes, making hearing aids available at cheaper rates, sometimes absolutely free, and making cochlear implants available freely for certain economical groups, among others.

What is the latest technology and treatment for hearing impairment worldwide?

Cochlear implants, bone conduction implants, brainstem implants, automatic adjustable digital hearing aids and water-resistant hearing aids are the latest in treatment.

How can we tackle hearing impairment?

The prices of hearing aids must be scaled down while reducing sales commissions or margins, which are 75-80 per cent higher than the manufacturing cost. The Government should enforce strict rules on crackers and different high-intensity sound makers and restrict their usage. Educating people on the dangers of headphones and mobile phones will also help us in our fight against hearing impairment.

Dr Anirban Dasgupta, former Voice Coach at Kokilaben Dhirubhai Ambani Hospital, is an audiologist and speech-language pathologist with specialisation in professional voice, cochlear implant, laryngectomy, hearing device, cleft lip and palate, vertigo rehabilitation and swallowing management
The Ali Yavar Jung National Institute for Hearing Handicapped disburses digital behind-the-ear hearing aids to families with an income of less than ₹ 15,000 per month under the Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP) scheme. This scheme is open to all age groups

(AYJNIHH) in Mumbai, points out that when it comes to cochlear implants for silvers, one has to tread with caution. "Cochlear implants are recommended for silvers only after proper medical and audiological examination by an ENT specialist. Sometimes what we perceive as a hearing problem in a silver may be a perceiving problem—of not being able to understand and correlate what is being implied—suggesting neural degeneration in the brain. In such cases, cochlear implants don't work," he says.

Madhuri Gore, principal and head of the Department of Audiology, Dr S R Chandrashekhar Institute of Speech & Hearing, Bengaluru, concurs. She recommends cochlear implants for silvers only "if the degree of loss is so bad that they can't hear with hearing aids and only if their general health is good". Recalling how a 65 year-old got an implant done recently because he didn't want to compromise his independence, Gore points out that educated and socially aware individuals are more open to seeking treatment. "With the sophisticated and advanced technology available today, the quality of hearing aids has improved drastically," she says. "Hence, there's no need to shy away from them." Gore recalls how her grandfather gave up wearing his clumsy hearing aid after trying it just once. "He told us he was better off without it!" she smiles, adding, "That was in the 1970s. Now, of course, the scene is different."

However sophisticated they might be, adjusting to a new hearing aid is not a cakewalk. ('How to care for your hearing aid, page 53) Besides minor discomfort, background noise, and whistling sound, the 'plugged up' sensation can cause the wearer's voice to sound louder inside the head.
Desi initiatives

Keeping up with the trend of desi low-cost innovation in different spheres, whether it is the Nano or Aakash tablets, the Centre for Development of Advanced Computing (C-DAC) has developed affordable hearing aids under project ‘Tarang.’ The project has been partnered by premier institutes such as the All India Institute of Medical Sciences, CMC Vellore, and the All India Institute of Speech and Hearing, Mysuru. “Tarang has been a massive success,” says Biju Oommen, associate director and group head of the Hardware Design Group, C-DAC, Thiruvananthapuram. “People order aids from our website and get them programmed from our audiologist or go to one of our partner institutes.” Though the C-DAC website—www.cdac.in—is the primary contact for buying Tarang, the technology is in the process of being transferred to Delhi-based Best Hearing Solutions and the Kerala State Electronics Development Corporation Limited (KELTRON). Available in two models—body worn (₹ 4,773) and behind-the-ear (₹ 5,340)—Tarang uses digital signal processing techniques. Hearing devices with similar features sell in the market in the price range of ₹ 10,000 to ₹ 100,000.

The imported cochlear implants, which have been available in India for almost two decades now and cost ₹ 700,000 to ₹ 1 million, are also being indigenously developed in Defence Research and Development Organisation (DRDO) labs. The price of these bionic ears, ‘Sravan,’ is expected to be in the range of ₹ 100,000 to ₹ 150,000, thus benefiting thousands suffering from severe HI. Developed by Defence Bio-Engineering and Electro-Medical Laboratory (Debel), a unit of DRDO in Bengaluru, Sravan is undergoing field trials and should be ready to roll out soon.

Government measures

For its part, the Government of India launched the National Programme for Prevention and Control of Deafness in 2007 to combat hearing impairment. Implemented at the primary healthcare level, this programme envisages early identification, diagnosis and treatment of ear problems leading to deafness and focuses on training medical personnel. Initiated on pilot mode in some states and union territories, it aims to cover the entire country by 2017.

Meanwhile, AYJNIHH, an autonomous organisation under the Ministry of Social Justice and Empowerment, disburses digital programmable BTE hearing aids to those with a family income of less than ₹ 15,000 per month under the Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP) scheme. This scheme is open to all age groups.

The way forward

Statistics show that only one out of five people who would benefit from a hearing aid actually use one. Among the reasons could be factors ranging from social stigma attached with wearing a hearing aid to prohibitive costing of digital hi-tech aids that are all the rage now.

Reinforcing this surmise is Kolkata-based Babul Basu, who treats geriatric psychological issues related to hearing impairment. “Silvers are hesitant to spend on themselves. They are also apprehensive about wearing hearing aids for fear of marring their appearance,” he says. “They need to realise that the right treatment at the right time can make them not only confident but also independent.” He sees support groups—family or friends—as a key factor in motivating silvers to seek treatment.

Recalling how a prominent city judge’s wife was pulling out from her social circle because of severe hearing impairment, Basu points out that her friend convinced her to attend counselling and seek treatment. “Today, the lady has an active social life, and wants to go in for a hearing aid for her second ear too. What’s more, she has managed to convince her husband, who earlier had misgivings, to go in for one,” he chuckles.

Spreading awareness about the need to treat hearing loss at an early stage is imperative not just to derive optimal benefit from hearing aids but prevent other systematic disorders such as stress, diabetes and hypertension and to arrest dementia (“Hearing loss accelerates dementia and cognitive deficits”, page 48). A holistic and comprehensive approach that involves government, medical personnel and society at large is the need of the hour to reduce the burden of deafness in India and arrest further deterioration.
WHEN THE GODS CALL

Gustasp and Jeroo Irani
Helicopter rides make travelling to Kedarnath, the highest jyotirlinga, a breeze.

As our six-seat chopper lifted off in a flurry of dust and noise, blades whirring, we felt like air-borne demigods. Leisure Hotel's Char Dham Camp at Guptakashi, Uttarakhand, located amid flower-spangled landscaping, was swallowed in the mist as our chopper skimmed over snarling ravines and gorges.

The flight was more scenic than white-knuckled—and why would we be afraid when our mission was spiritual? We were flying to Kedarnath, the abode of Lord Shiva in the Garhwal Himalayas, one of the Char Dhams, sacred to Hindus and the highest of the 12 jyotirlinga located in India. The chopper flew like a nimble gnat over the romping Mandakini river, swooping over mountain folds and the 15-km walking path where weary pilgrims trudged like tiny ants that never sleep.
The chopper soared into innocent blue skies with marshmallow clouds. Eight minutes later we landed at a small helipad (3,581 m), hewn in the midst of mountains that seemed to frown at our intrusion. Our pilot, Colonel Rajgopalan, an ex-Army man, told us the weather would in all likelihood pack up soon and advised us to rush for our darshan and be back in an hour. Normally, pilgrims get two hours at Kedarnath if they arrive by helicopter.

The mountains rose in a radiant rampart ahead of us as we walked to the petite grey stone 8th century temple, which presided proudly over the pilgrim town, its entrance festooned with garlands. From there a queue of pilgrims, waiting for darshan of Lord Shiva, snaked away into the distance. The pilgrim town is essentially a conglomeration of buildings—some a pile of rubble, after the disaster of 2013—wedged in a green valley. This is not a place to tarry, should the mountain titan decide to crack his knuckles, though tourist-friendly facilities have now been created.

A paved path led to the temple via the makeshift offices of helicopter companies, tented accommodation for pilgrims, sparse dormitories for silvers, dhabas, restaurants and via the ghats on the Mandakini river where pilgrims take a purifying dip. We walked shoulder to shoulder with weary devotees—some bent and elderly—with staves who had trudged up 15 km from Gaurikund, feeling faintly guilty about our short comfortable flight.

Most of them were beaming, even though many told us that it took them six to 18 hours to climb up with short rests along the roadside. Some even took halts to sleep in the open to rest their tired limbs. But nothing deterred them for they were buoyed by boundless devotion to the divine. Frail men in dhotis and women in flimsy saris and chappals were borne along in basket chairs, strapped on the backs of sturdy Nepalis, some as young as 16.

We were part of a pan-Indian army of spiritual souls, resonating with a melee of accents and languages, ranging from Hindi, Tamil, Telugu, Malayalam and Marathi, to city slickers who had flown in and spoke impeccable English. Some had come with elderly parents in tow, who in keeping with tradition were fasting prior to getting a darshan. There was a sprinkling of young trekkers, and extended families on the ultimate yatra, best done before you turn 70.

All were bound by collective faith that could literally move mountains and seemed to vibrate across the bare bones of the earth as they chanted, “Om Namah Shiva,” with a
thumping regularity. The chant seeped into our skin and cells. Those were goosebump-moments as we saw pilgrims being blessed by ash-smeared sadhus in flaming orange robes, waving peacock feathers; other less dramatic but equally imposing holy men conducted puja outside the temple, their faces blurred by scented smoke, giving the ritual a timeless feel.

The queue moved towards the temple entrance quietly and with infinite patience that sprang from a faith so boundless and deep, the likes of which we had never seen before. It rippled softly like a river through the crowd, faces aglow with an inner light that announced that all were on a common mission: to seek reprieve from suffering and aspiring for moksha, a release from the endless cycle of births and rebirths.

"It is this spirituality that holds the country together and keeps us going," said a devotee from Mumbai, almost moved to tears by the teeming multitudes who had braved hardships to come to the ultimate dham. In contrast, he and his family had arrived by helicopter and were staying in comfort at Leisure Hotel’s Char Dham Camp at Guptakashi. Yes, pilgrimages are great levellers, erasing all divisions of caste, creed and even religion.

We were mute spectators to this ancient cameo of a throbbing spirituality that we could not entirely identify with but could only dimly understand. No one questioned our camera-festooned presence as we moved amidst the crowd, taking it all in and storing it in our memory bank and in digital images. People smiled indulgently; this was a live-and-let-live gathering of the pious, intent on connecting with their God and happy to share His beneficence with everyone there.

The occasional tout wanted to take us away to god-knows-where but took our brush-off with a sporting smile. A standard opener of itinerant priests wanting to sell their services was: "Aap kahan se aaye ho (Which part of the country have you come from)?" They smiled benevolently at our Westernised urban look, strangely out of sync in this other-worldly gathering of simple folk who were carrying their possessions in neat little bundles.

The VIP darshan (for a price) allowed us to enter the hallowed precincts from a side entrance and pay homage to the lingam enshrined in the inner sanctum of the shrine, said to have been built by Adi Shankaracharya in the 8th century. The current temple stands next to the mythical temple believed to have been built by the Pandavas to atone
for the sin of killing their brethren in the war in Kurukshetra, as narrated in the Mahabharata. The Pandavas sought out Lord Shiva to obtain his blessings and forgiveness but the Lord gave them the runaround and finally took refuge at Kedarnath in the form of the Nandi bull.

In the courtyard and near the temple door stands a huge statue of the Nandi bull. Some pilgrims prostrated themselves in the courtyard before moving into the assembly hall, richly decorated with figures of various deities and scenes from Hindu mythology. As they made their exit, they stopped by a huge boulder to pay their obeisance, for it is now part of folklore that it was this boulder that prevented the torrential waters of the melting glacial lake from destroying the temple in the 2013 disaster.

We walked back to the helipad only to discover that mist and clouds had rolled in on gossamer wings and obliterated the flight path of the choppers. Thunder rumbled above and seemed to echo in the barrel-chested mountains. We would have to spend the night in Kedarnath and managed to get two beds in a dormitory for silvers with en-suite facilities that we shared with a burly man from Bihar and another from Punjab. But the camaraderie that binds all those who embark on a spiritual quest helped mute any twinges of discomfort that the four of us might have felt on being thrown together at short notice.

The astringent Himalayan air, thick with devotion, knifed us, yet we revelled in it. People gathered at the glowing shrine, swaying and chanting even as temple bells pealed and drums pounded in a stirring, almost primeval ritual.

Kedarnath is the third leg of the holy Char Dham yatra in Uttarakhand. The other stages of this pilgrim trail, considered to be the most sacred by Hindus, are Yamunotri, the source of river Yamuna; Gangotri, the source of river Ganga; and Badrinath, the abode of Lord Vishnu. One may even undertake one or two dham yatras.

WHEN TO GO: The Kedarnath shrine is closed in the winter months and is open generally from mid-May to November. The dates are decided by the priests in the temple at Ukhimath where the idol rests and is worshipped in the winter months. But the best months to travel are May, June, September and October. July and August see a lot of rain and landslides.

GETTING THERE
By air: The nearest airport is in Dehradun, from where buses and taxis are available to travel to Guptkashi.
As people gathered for the evening aarti, everything was shrouded in a surreal atmosphere. The astringent Himalayan air, thick with devotion, knifed us, yet we revelled in it. People gathered once again at the glowing shrine, swaying and chanting even as temple bells pealed and drums pounded in a stirring almost primeval ritual. For this service, the deity is festooned in flowers and gold ornaments and a gold umbrella suspended over its head. The lamp-lit sanctum was not visible because of the rush of people outside it. But the air was heady with the fragrance of incense, the chanting of Sanskrit shlokas and Vedic prayers while the snow-clad peaks that framed this moving spectacle seemed to smile down enigmatically. Little wonder then, that in the Indian tradition, the Himalayas are said to be devatma (with the soul of God). The petite Kedarnath temple stood timeless and inviolate even as the moon’s beams seemed to gild the ancient stone.

The next morning the skies were clear and our chopper lifted off again into the rarefied air. We pondered on how pilgrimages had become easier—we had not huffed and puffed up to stratospheric heights nor bumped upward on a pony or in a palanquin. But we had got our darshan—we had viewed Kedarnath temple; seen God in the faces of the multitudes who go there to seek Him; felt his presence in the unpolluted air as pure and heady as the waters of the Mandakini that would join the Alaknanda at Rudraprayag to ultimately become Ma Ganga, the mother of all rivers.

We could not have asked for more!
Experience

A second childhood

Wouldn't it be great to have a second childhood? To start life afresh? Because at Harmony, a magazine for people above fifty five, we believe that age is in the mind. Which is why, you should live young. Visit us at: www.harmonyindia.org
THE JATRA ARTISTS of West Bengal are an endangered breed of the 16th century folk theatre by the same name. Capturing the last generation in their costumed-best, Soumya Shankar Bose, nephew of one of the actors, began photographing the now unemployed actors. Bose explains the provocation for his work, “In 2011, my uncle, who was known as the Asgar Ali of Jatra in the 1960s and 70s, had to quit the stage and take up work in a railway factory.” He says Jatra employed high-energy dialogue and loud music to tell four-hour-long stories using extravagant props. Ever since it lost out to TV in the 1970s, it has suffered a steep decline. Presented by the Indian Foundation for the Arts, the photographs were recently exhibited at the now-defunct Chitrabani Library in Kolkata in a multimedia form. The exhibition will travel to Bengaluru soon.
Man of the match

A RETIRED ARCHITECT RECORDS THE STORY OF A NATION THROUGH A QUIRKY HOBBY—COLLECTING MATCHBOX LABELS—DISCOVERS AMBICA GULATI

To most people, matchboxes are nondescript containers of matchsticks that are carelessly discarded once empty. But to some, like 60 year-old Gautam Hemmady, they are little treasures that chronicle the story of a nation and its culture over time.

Hemmady, a retired Delhi-based architect, is a ‘phillumen-ist’. "Yes, there is a name for people like me," he chuckles. "I am a collector of matchbox labels. I spend hours online in search of new labels, buying collections on eBay, and exchanging with other collectors." During the past four years, Hemmady has collected over 25,000 matchbox labels and recently held his first exhibition at the India International Centre in Delhi, titled Matchbox Labels And The Stories They Tell.

The oldest labels in his collection date back to 1880-1890, although they are difficult to date precisely. There is no central archive or scale to which the labels can be compared and catalogued. "Almost everything is learnt from observations that collectors make and from the labels themselves, in a speculative sort of way."

Giving us a peep into his unique world, Hemmady says matchboxes have always been used for advertising. Cigarette, cigars or beedi manufactures commissioned special labels, and even the swadeshi movement tapped into its potential. "There are one or two ‘protest’ labels, but Independence-era matchboxes are mostly of the patriotic kind, with symbols like the flag, Ashoka chakra, the charka, and calls to support Indian industry."

Although there hasn’t been an outright popular label over time, people do recognise ‘Ship’ as a brand as it has been around since 1942, and imported to India well before that time, says Hemmady. Currently, ‘Aim’ has a very strong following (since 2003). ‘Home Lites’ (1987) continues to
be popular and ‘Ship’ with several changes continues to survive in this market, he adds.

“Indian gods and goddesses are a popular theme with most manufacturers as are movies. In fact, it’s difficult to think of something that has not been featured on matchboxes,” remarks Hemmady, pointing to the similarity to Raja Ravi Varma’s paintings, showing a woman and man on a swing, much like Radha-Krishna.

There are over 5,000 matchbox brands in India, he adds, explaining that the industry flourished during British times. After Independence, manufacturers moved south, near Coimbatore in Tamil Nadu. “Even though cheap and efficient plastic lighters are replacing matchboxes world over, it will be a while before they completely take over in India, which is the largest manufacturer and exporter of matchboxes in the world,” he says.

Hemmady spends considerable time crisscrossing Delhi in search of new labels. Even a holiday is fun only if he finds new matchboxes to take home. “Different parts of the country have different labels to offer a collector. But I also tell my neighbourhood paanwallah to keep the wrappers of the cartons for me, or to buy a new brand when he can. I think he finds me quite strange,” he adds with a chuckle.

In fact, it was an interaction with paanwallah one wintry evening four years ago that led Hemmady to his new love. “I was out for a walk to warm myself. As I strolled down the road, I noticed a different matchbox on sale at each paan-and-cigarette shop. And each paanwallah was willing to talk about where they sourced their matchboxes. I remember enjoying those little conversations immensely.”

Collections are valued based on how much someone is willing to pay for them. “About 200 delightful labels from the 1920s and ’30s cost me about ₨ 6,000,” he reveals. “A small collection of about 1,500 matchboxes from the ’90s cost me about ₨ 10,000 (plus travel to and from Chennai, a biryani dinner and an idli breakfast!). Every period has its charm and I would like to save anything I can afford to.”

This hobby has become Hemmady’s single-minded passion, bordering on obsession. He has begun writing about matchbox labels and meticulously catalogues them by recording details of each label on a neatly organised Excel sheet. But to what end? “When I began collecting, it surprised me how little information there is about the Indian match industry,” he responds. “It is all very unorganised and little has been written about it. So I decided to establish some sort of archive. Sometimes I feel I’ve bitten off more than I should have.”

Hemmady has always been a bit of a recluse but so deep is his commitment that he has even given up using his phone after he lost out on a chance to procure nine Mahatma Gandhi labels from Japan. “I was bidding on eBay and suddenly the phone rang. I forgot about the auction, which was to end in a few hours, and I lost the labels,” he shares.

Phillumeny is only Hemmady’s latest hobby. He’s collected books, clocks and watches, tools and drawing instruments, little glass bottles, stamps (of course!), even wood species. “I like arranging them, organising them, reading about them, at times just looking at them and discovering little things. It’s my way of exploring worlds I knew little about.” Enough said!

—with inputs from Natasha Rego
Dancing a story

The scintillating dance drama *Meera – The Soul Divine* premiered on 30 July to a mesmerised audience at The Music Academy, Chennai. Coming together for the first time in their illustrious careers, this production on the life of Meera, one of the greatest saint poetesses of Bharatvarsha (India), was a collaboration between Bharatanatayam exponent Chitra Visweswaran and Carnatic music composer Bombay Jayashri Ramnath. “The initial composition of the melody line by Jayashri was followed by frequent interactions... the dance and music grew together, step by step, which resulted in a beautiful synergy. Working with a musician as sensitive to lyric and situation as Jayashri, inspiring us with her stirring compositions and bhakti-laden soulful voice, has given wing to my creativity,” says Visweswaran, whose Chidambaram Dance Company presented the show as a fundraiser for AIM for Seva, a community development programme for rural and tribal children across India.

---

LIVE AND LET LOVE

Known for his classical stories, Saif Hyder Hasan’s new play *Mr & Mrs Murarilal* is a sharp deviation from his earlier work. Set in contemporary times, the play features three lonely people—a seemingly cheerful retired army cook (Satish Kaushik), a battered *chowkidar* (Amit Pathak), and a lonely grandmother (Meghna Malik)—who chance upon each other. The stories of their lives unravel as they try to find solace in each other’s solitude. “Murarilal is not an easy play to execute or experience. It is camouflaged...underneath the façade of song, dance and comedy, a tragedy is lurking,” Hasan tells us. “Old-age loneliness is something you see in the people around you. With this play, I wanted to dwell on that, and the romance of companionship.” The play, which also marks actor Satish Kaushik’s return to stage after a four-year hiatus, opened recently in Mumbai.
In his long career with the English print media, Raju Bharatan has worn many hats. At 17, he was the originator of the ‘Sunday Cryptic’ crossword in The Times of India, where he set over 5,000 crosswords.

In the 1960s, he was recruited by C R Mandy, the last British editor of the The Illustrated Weekly of India, where he spent over three illustrious decades reporting on cricket, dance, music and films, before retiring as assistant editor in 1993. (Bharatan also set the Harmony crossword puzzle for several years beginning September 2004.)

His latest project is a book that released last month: Asha Bhosle: A Musical Biography. “Although writing on cricket is my passion and music is my pastime, my pastime has progressively been converted to a full-time job, so much so that I have written three musical biographies, including that of both the Mangeshkar sisters (the third being one on Naushad),” says Bharatan, who is also the author of a book titled Journey Down Melody Lane, an overview of Indian film music.

The Mangeshkar sisters—Lata Mangeshkar and Asha Bhosle—monopolised the Indian music industry for years, owing to their spectacular voices and extreme professionalism, a fact Bharatan addressed over 20 years ago in Lata Mangeshkar: A Biography. “Everything about the film industry then was casual but time was precious,” he says. “Music directors trusted only these two singers to deliver a song at its best within that ambit. So the directors became fixated on them and they, in turn, became the most dependable singers.”

Bharatan knew the sisters at close quarters and was privy to Bhosle’s internal struggles. “She was second to Lata throughout and always carried that burden,” he points out. “Except for O P Nayyar, she was second choice for everyone else, that is, if they couldn’t get Lata or if it was a small film. She would generally end up with second-line songs.”

O P Nayyar was one of the finest music directors of the 1970s and ‘80s, the first person to make Bhosle believe in herself, Bharatan says. “The second person to give her a modern identity was R D Burman, and in between there was S D Burman, who also influenced her a lot. So, Asha’s quest for identity revolves around these three, which I have brought out in the book.”

Bharatan says he did not have to research his book, nor did he need to approach Bhosle before writing it. Perhaps that is why his biographies include candid tidbits about India’s most famous musicians. He remarks, “People have always thought of Lata Mangeshkar as being very staid and without a sense of humour. In fact, the contrary is true. She is a great prankster, always laughing and full of mirth.” Who would’ve thought!

At 85, Bharatan’s mind is as sharp as ever and his memory intact, although one detects a slight sense of remorse at not being able to set crosswords any more. “It can be done in seconds on the computer now, and publications prefer to run syndicated crosswords from abroad.” Still, he’s open to change and even learnt to use a computer, which he used to write the new book, albeit “as a glorified typewriter.”

As Asha Bhosle: A Musical Biography is an unauthorised publication, does he think Bhosle has read it? “Every word! And I can imagine Lata telling her, ‘Mine is over…now it’s your turn.’”

—Natasha Rego
Partha Mukherjee raises a toast to the glory days of a Kolkata icon, Bourne & Shepherd—one of the world’s oldest photo studios that recently shut shop forever.

In June this year, a piece of history slipped into oblivion, unsung and unnoticed. No light bulbs popped to mark the occasion when Bourne & Shepherd, arguably the world’s oldest photographic studio, downed its shutters in Central Kolkata one last time. Once patronised by royalty, nobility, viceroys and artistic geniuses, the studio finally conceded defeat to the sweep of technology and the passage of time, 176 years after it opened on 10, Chowringhee Place. The four-storey edifice that housed the studio now looks forlorn. Without its fabulously famous occupant, it’s just another colonial-era building sans its soul.
A page from history

Bourne & Shepherd was founded in 1840 by famous British photographers Samuel Bourne and James Shepherd. There was a time in the mid-19th century when the elite of Kolkata was spotted at three places: at K C Das gorging on sweet delicacies; at Cuthbertson & Harper buying shoes; and at Bourne & Shepherd sitting for hours as a subject in front of the camera. Their patience was handsomely rewarded as the studio would churn out magic in black and white.

This was not only a studio but a treasury of history. Its images of Calcutta from more than a century ago include priceless pictures of Strand Road, the Pontoon Bridge across the River Hooghly that connected Calcutta to Howrah, and bullock carts rolling along the cobbled stretch overlooking the General Post Office. These are among the studio’s many photographs in the archives of Victoria Memorial, Kolkata, and Museum of Art & Photography (MAP), Bengaluru. That’s not all. Some of Bourne & Shepherd’s photographs are also with the Smithsonian Institution in the US, the National Gallery of Portraits in London and the Cambridge University Library.

Standing tall

Back in time, the studio was patronised by the British aristocracy as well as elite Indians. Jayant Gandhi, the last owner who assumed the mantle in 1964, says, “I have heard from my predecessors that
Lord Ramakrishna Paramhansa, his wife Sarada Devi, Rabindranath Tagore, his nephew Abanindranath Tagore, Pandit Iswarchandra Vidyasagar, Rudyard Kipling and Field Marshal Sam Manekshaw had all graced the studio. According to him, legendary filmmaker Satyajit Ray used to frequent the studio too, to examine period images to verify details he included in his films. “I have helped him browse through pages of old albums, and Charulata and Shatranj Ki Khiladi are testaments to this,” adds Gandhi. “His son Sandip Ray visited us when he was making Gorosthane Sabdhan following the same tradition. We learnt from the master how to remain meticulous and pay attention to every detail in our work.” Despite its photographers experimenting with a variety of compositions, portraits were the studio’s biggest strength. “Bourne & Shepherd emerged as a trendsetter in this genre of photography,” says Gandhi. “It was popular for brides-to-be to take their pictures here to send them to matrimonial agencies. Some of its pictures have also been used as documents in legal cases.”

End of an era

Tragedy struck in 1991, when a fire ravaged the studio, destroying its precious collection of photographs. Although it stoically soldiered on, Bourne & Shepherd never fully recovered from this devastating blow. But its biggest challenge was time itself.
“The concept of photography has undergone a sea change,” shrugs Gandhi. “Now, all one needs to take pictures is a smartphone and a PC. Digital photography is all the rage.”

He shares that to keep the studio going, he tried to reinvent the business by concentrating on industrial photography, documentaries and commercial photography, and the studio saw a golden run from the 1970s to the 1980s. “During this period, we had 30 in-house photographers who were sent on prestigious assignments.”

Still, there was no preventing the inevitable. The matter-of-fact Gandhi confesses that emotions ran high when the studio had to hand over the reins. On 28 April, Premshankar Gupta, the studio’s last manager, turned in the key to the property to the insurance company that owns the building.

As if in anticipation of the impending closure, Tasveer Art Gallery recently concluded its year-long exhibition of Bourne & Shepherd images (sourced from the rich holdings of the Museum of Art & Photography) in five cities across the country. The touring exhibition was accompanied by the publication of a new catalogue that carries an original essay by scholar of early Indian photography Hugh Ashley Rayner on the life and works of Samuel Bourne. The studio may have downed its shutters but the photographic legacy of its proprietors will evidently live on.
India was not an alien country for the 30 year-old Mark Tully when he arrived here in 1965 as BBC’s India correspondent. In fact, he was born in Calcutta in 1935 to a British entrepreneur when the British Empire in India was at its pristine glory and Calcutta its numero uno city. It was in Calcutta and at a British boarding school in Darjeeling that a young Mark grew up.

Nevertheless, Mark’s upbringing in India was somewhat sheltered and secluded, very much British-like. For the first five years, there was a stern English nanny who became his matron-mother-mentor all rolled into one. Playing with children of the natives was a strict no-no. He was even forbidden from speaking in Hindi or Bengali since those languages were considered “the language of the servants”. This was to ensure that his upbringing was completely British, devoid of any Indian vestige.

Yet, there was more of India in Mark Tully’s bloodline than England—the native land of his paternal forebears. His maternal forefathers lived in Eastern United Provinces (present-day Uttar Pradesh). His great-great-grandfather was an opium agent and his great-grandfather a trader, though he became a civil servant after 1857. One of his mother’s uncles was also in the Indian Civil Service. Interestingly, his father-in-law was an indigo grower.

As was the practice of British residents in India those days, Mark was sent to England when he turned 10. The focus of the British educational system was to groom students into gentlemen. Mark religiously visited the church. He was good at languages and learnt both Latin and Greek. He also studied theology and history. Mark nurtured a desire to become a priest. But that was not to be. “It so happened that the pub became my favourite rendezvous. I would even entice my fellow students to accompany me. Incidentally, I also enjoyed the company of women. On serious reflection, I decided that the Church was not the right calling for me; the Church authorities too readily concurred,” Mark once told me. What was possibly a loss to the Church was surely a gain for the world of journalism and news broadcasting.

He yearned to be a journalist, yet he could not get an immediate opening. He took up a job with the BBC in London in its human resource division. However, his heart lay in news reporting and he bided his time until he found an opening of sorts in the news section. Finally, his dream was fulfilled when he became the bureau chief in New Delhi. Those 25 years were the most productive and satisfying years of his life. They were the most momentous years in India’s post-Independence history, and he had the privilege of having a bird’s-eye view of all those events. In no time, Mark created a niche as a foreign correspondent and over the following years became the recognisable face and credible voice of the BBC in India. During those heydays, Mark gathered legions of fans all across the country.

Mark created a niche as a foreign correspondent and over the years became the recognisable face and credible voice of the BBC in India. During those heydays, Mark gathered legions of fans all across the country. I was then one of his most diehard fans and admirers. At times, I even envied his immense popularity and dreamt of becoming Mark Tully’s clone. I craved to meet him but our paths never crossed then. In due course, I got deeply involved in my new business that took me not only all across the country but elsewhere in the world. In those hectic travelling schedules, Mark Tully faded into the background.

Meanwhile, his popularity soared, taking him to iconic heights. Those were tumultuous years. Jawaharlal Nehru had died a year before Mark’s arrival in India. Indira Gan-
Dhi ruled the roost then. The 1965 war with Pakistan and birth of Bangladesh in 1971 were some of the important events Mark covered. There were also a string of historic tragedies that rocked the country. The Bhopal gas tragedy was the most upsetting. The clamping of Emergency by Indira Gandhi was one of the darkest periods in the annals of Indian parliamentary democracy. The upright BBC journalist did not shy away from calling a spade a spade. Indira, as was her wont, took much umbrage, and there was a move to arrest him. Here is the story in Mark’s own words, “I heard it from Inder Gujral that a man named Mohd Yunus in Indira Gandhi’s darbar wanted to take my trousers down, give me a good beating and arrest me. I had subsequently recorded all this in a book. The provocation was a canard that the BBC had reported the resignation of Jagjivan Ram, which in reality we had not. It was Gujral who thus saved me.”

Mark was then deported to England. However, that did not stop him from reporting on the goings-on in India during that dark period. “The result was that the whole of India tuned in, then and thereafter, to my radio’s broadcasts, ‘The Voice of India’, to hear what they thought was an accurate coverage of events,” Tully later wrote. He once even managed to sneak into India under an assumed name. Eventually, the deportation order was withdrawn.

Mark also roundly criticised Operation Blue Star and the atrocities that followed Army operations. The attack on the Golden Temple had produced a sense of outrage among all sections of the Sikhs. Together with his friend and colleague Satish Jacob, Mark wrote a book on the subject, *Amritsar: Mrs Gandhi’s Last Battle*.

It was only three years ago that my long-nursed unfulfilled wish came to fruition when Mark Tully and Satish Jacob came to Dehra Dun at the invitation of the Doon Library and Research Centre and Bharatiya Vidya Bhavan. The enthusiastic response he received at an interaction with students from several schools was truly amazing. None of those present at the meet were even born during Mark Tully’s reign as the uncrowned king of foreign correspondents, yet Mark received a standing ovation. However, it was that evening at a dinner with select guests that I had the pleasure of having Mark to myself much of the time.

We stood in one corner and talked random stuff, sipping our drinks. He drank beer and I Scotch. “Why do you drink beer at this time as it is generally a daytime drink?” “Oh! I love beer,” he said. “When do you drink Scotch?” I asked, holding my own glass. “I reluctantly take Scotch whenever I run out of beer, but that is very rare,” he said, taking a swig from his mug. And so, the conversation followed.

Mark has spent much of his life in this country. In many ways, he is truly an Indian. All his five siblings were born in Calcutta. His older son Sam is married to Nandita, an Indian banker in London. His younger daughter Emma is married to Peter Kerkar, son of a Swiss mother and Marathi father. And now Mark has become an Overseas Citizen of India. An uninterrupted spell of nearly three decades as a foreign journalist in India must have been something much more than a mere odyssey of rediscovery for the 81 year-old Mark Tully.

The writer is a veteran journalist based in Dehradun
Hope is the thing with feathers

In this ode to optimism, Emily Dickinson (1830-1886) talks about the spark of hope that dwells in every heart.

'Hope' is the thing with feathers—
That perches in the soul—
And sings the tune without the words—
And never stops—at all—

And sweetest—in the Gale—is heard—
And sore must be the storm—
That could abash the little Bird
That kept so many warm—

I've heard it in the chilliest land—
And on the strangest Sea—
Yet, never, in Extremity,
It asked a crumb—of Me.
As the fourth densely populated city in the world, the soul of Mumbai lies in its people. Yet, in this city of millions, we often overlook the peripheral lives around us. That’s not the case with Karishma Mehta and her trusty brigade of photographers, who recently released the large-format book, HUMANS OF BOMBAY (Arun & Karan Vaidya; ₹ 1,650; 368 pages). Armed with their cameras, they set about the streets and made heartfelt conversations with complete strangers. This resulted in a photo-blog, Humans of Bombay, inspired by the hugely famous Humans of New York site by Brandon Stanton. Over the past two years, Humans of Bombay has captured touching stories of Mumbai’s diverse citizens. Going by the adage that everyone has a story, the book contains delightful stories on the anxiety of losing a friend, the thrill of finding a lover and the moment of self-realisation, from the most ordinary people. With no name, age and occupation, the only identifiable feature of each subject is the image and story. While it does contain some recognisable faces and places from the city, the book comprises previously unreleased stories, as well as several that had garnered attention online. Funny, insightful, quirky and intimate, these stories strike a chord in your heart.

―Dharmendra Bhandari

Narrated as a lively conversation between a grandfather and his American-born grandson, AMAZING SECRETS OF THE BHAGAVAD GITA (Rupa; ₹ 295; 299 pages) simplifies the spiritual concepts delineated by Lord Krishna to Arjuna on the battlefied of Kurukshetra. The format of the narration is similar to the hugely successful debut work of the author, Am I a Hindu?, where the practices of Hinduism were simplified by a father for his son. In the present book, Ed Viswanathan unravels concepts as diverse as salvation, karma, chakra, yoga, abortion, homosexuality, creation and annihilation of the universe in a lucid manner. Interestingly, he also draws parallels with the teachings of The Bible, Buddhism and Zoroastrianism. Further, he quotes a 2010 research study by the University of Sheffield that states that the recorded vibrations produced by the magnetic field in the outer atmosphere of the sun sound similar to Aum. Validating the teachings and universal allure of the Bhagavad Gita, Viswanathan throws in names such as Robert Oppenheimer—father of the atom bomb—who quoted a couplet from the Gita after the very first atomic explosion at the bombing range in New Mexico in 1945.

Also on stands

Spitfire Singh: A True Life of Relentless Adventure
Mike Edwards
Bloomsbury; ₹ 499; 434 pages
Written by a former Royal Air Force pilot, it unravels the story of Harjinder Singh, one of the driving forces behind the Indian Air Force becoming the fourth largest in the world.

The Girl Who Chose
Devdutt Pattanaik
Puffin Books; ₹ 199; 115 pages
India’s favourite mythologist is back – this time with a retelling of the Ramayana through the five choices made by Sita.

What Can I Give?: Life Lessons from My Teacher, A P J Abdul Kalam
Srijan Pal Singh
Penguin; ₹ 162; 237 pages
Singh, Kalam’s close disciple and adviser during his post-presidency years, brings alive the man behind the legend through personal anecdotes and unseen pictures.
War and peace

D
ocumentation is Shiv Kunal Verma’s forte. Whether as a filmmaker or defence chronicler, this 56 year-old’s style of storytelling is distinct and dispassionate. “I was born into 2 Rajput,” says Verma, who is considered an authentic voice on military affairs, thanks to over 25 years of engagement as a chronicler with the Indian defence forces. Incidentally, 2 Rajput, his father’s parent battalion, was annihilated in the 1962 War. “The challenge in writing about wars is that everyone has his own version of events,” affirms the writer.

With his informative and straightforward style, Verma has contributed significantly towards literature on conflict. Some well-known titles include Ocean to Sky: India from the Air (2007); The Long Road to Siachen: The Question Why (2012) about “the geopolitical reality that has plagued the subcontinent”; and the recent 1962: The War That Wasn’t (Aleph; ₹ 995; 425 pages).

“How do we expect the younger generation to learn unless we unravel what really happened? My book is an attempt to set the record straight,” he says.

In 1992, along with wife Dipti, Verma made a historical documentary film for IAF titled Salt of the Earth. J R D Tata underwrote the entire cost for the film. Other films by the couple include Naval Dimension, Making of a Warrior, The Kargil War and Aakash Yodha about the airborne attack during the 1999 Indo-Pak conflict. After his three years in Ladakh with Tiger Tops Mountain Travel, an environmentally responsible tourism initiative, Verma joined India Today and then worked with Associated Press before directing the Project Tiger television series.

At the release of 1962: The War That Wasn’t, organised by Panjab University in association with Chandigarh Literary Society, Suparna-Saraswati Puri interacted with the author. Excerpts from the conversation:

Do writing and filmmaking go hand in hand for you?

At a basic level, storytelling is at the centre of both writing and filmmaking. While in a film, storytelling is visual, in writing one has to use words to paint the same picture.

What were the challenges you faced while writing 1962: The War That Wasn’t?

I wanted to write the book for a variety of reasons, first and foremost of which was the involvement of 2 Rajput, my father’s parent battalion. I was a three month-old baby when my parents crossed the Brahmaputra and then the Digaru on the back of an elephant that belonged to 2 Assam Rifles.

The biggest challenge for me was visiting the terrain where our Army was deployed. Take Ladakh for instance, very few people get to the Karakoram Pass that overlooks Daulat Beg Oldi. The Qara Qash and Galwan River Basin—all at altitudes in excess of 17,000 ft—are areas where even present-day commanders have little or no access. I was fortunate that I got to work with Tiger Tops Mountain Travel as it gave me a very good idea of the terrain. Also, while shooting with the IAF I did some really interesting sorties over the most remote posts. Sitting at the back of an AN32 with your legs literally out of the aircraft, it was something else altogether! No amount of maps and satellite images amount to anything—there is no substitute to actually being there. It’s behind me now so I can afford to talk about it with an air of romanticism, but it’s quite back-breaking.

What kind of research went into the book?

By its very nature, 1962: The War That Wasn’t is a different book. When you are researching history of this nature, it’s like opening a door; you never quite know what you’ll find inside. Invariably, there are a large number of other doors behind the door you have peeked into, so you keep digging, wondering where it all leads to. The truth is somewhere out there. In this case, there were many who had tried to tell their stories but it was all lost in a haze of half-truths and self-exonerating accounts. Eventually, it’s while putting all the pieces together that you get the whole picture.
Do you think family members of martyred soldiers have found closure with your book?

Families, I am not too sure, 1962 was too long ago. But as a country, I sure hope so. The first phase of the 1962 conflict was the build-up, which includes the events after the annexation of Sinkiang and Tibet leading up to the Dalai Lama’s escape into India. This includes the entire period of the 1950s, when prime minister Jawaharlal Nehru for reasons of his own encouraged the Hindi-Chini bhai bhai policy and then repeatedly lied to the Indian people that all was well when it was quite obvious that serious trouble was brewing at the border.

The second phase was the events between 8 September (Dhola incident) and the ceasefire, when incompetent officers played out a charade that let the Indian Army and its men down. These officers—mainly Biji Kaul—played complete havoc with the system, so much so that 4 Division literally scattered “like birds at the first twang of the bow”.

The third phase is what happened after the conflict. To protect the prime minister and his immediate group from having to take the blame for what happened, a web of lies was spun, so much so that even officers and men who were part of the action had no clue what the real situation was. This, to my mind, was perhaps the biggest crime. For half a century we let the country live in the shadow of the ‘nine-foot’ Chinaman, whereas in reality, the only nine-foot factor we needed to come to grips was our own shadow.

Do you think politics and literature can be separated?

The reason why this book has been received so well, despite the story in essence being a chronicle of a defeat, is partly because I have also looked at the civilian side of things. The fact that I don’t wear a rank on my shoulders gives me a distinct advantage. By the very nature of my style, I am trying to tell the complete picture.

What was of pivotal concern while researching for the book?

Regardless of battalion, personal affiliations were pivotal. It is easy to point fingers at others but extremely difficult to acknowledge the failure of your immediate own. The Kargil War taught me one thing: three men fighting the same battle will give you three different perspectives. It’s important to understand that the ‘I’ factor gets heightened during a conflict where bullets are flying around. To be able to then arrive at what you think actually happened is the key to writing a definitive book. I certainly did not want the book to be an ‘also ran’. I felt we, as a country, owed it to the men who fell in both Ladakh and North East Frontier Agency (NEFA). My book is a posthumous tribute to them.

How do you relax?

Between bouts of feverish writing, I’m generally quite relaxed. I like to take my Labrador Blaise for a walk or go over what has been written with Dipti.

Tell us about your father’s role in the writing of this book?

My dad, who had fought as a captain in the 1962 war, was a major bouncing board for this book and we would talk endlessly about what happened. In fact, I think it was the last book he read before he passed away.

What next?

I’m trying to get the 1965 book going, but at present I am mentally too drained to start writing just like that. I will have to get to the keyboard again—1965 is to be followed by the 1971 war, after which David Davidar, my publisher, wants me to do a fourth volume that covers Siachen, Blue Star, IPKF and the Kargil War. Finally, to complete the series, the last book will be on the 1947-48 J&K operations.
Thoughts matter

Our world is shaped by what we think, writes Louise Lynn Hay

What we think about ourselves becomes the truth for us. I believe that everyone, myself included, is responsible for everything in our lives, the best and the worst. Every thought we think is creating our future. Each one of us creates our experiences by our thoughts and our feelings. We create the situations, and then we give our power away by blaming the other person for our frustration. No person, no place, and no thing has any power over us, for ‘we’ are the only thinkers in it. When we create peace and harmony and balance in our minds, we will find it in our lives.

Which of these statements sounds like you?

“People are out to get me.”
“Everyone is always helpful.”

Each one of these beliefs will create quite different experiences. What we believe about ourselves and about life becomes true for us.

The universe totally supports us in every thought we choose to think and believe

Put another way, our subconscious mind accepts whatever we choose to believe. They both mean that what I believe about myself and about life becomes true for me. What you choose to think about yourself and about life becomes true for you. And we have unlimited choices about what we can think. When we know this, then it makes sense to choose “Everyone is always helpful”, rather than “People are out to get me”.

The universal power never judges or criticises us

It only accepts us at our own value. Then it reflects our beliefs in our lives. If I want to believe that life is lonely and that nobody loves me, that is what I will find in my world.

However, if I am willing to release that belief and to affirm for myself that “Love is everywhere, and I am loving and lovable”, and to hold on to that affirmation and to repeat it often, it will become true for me. Now, loving people will come into my life, the people already in my life will become more loving to me.

Most of us have foolish ideas about who we are and many rigid rules about how life ought to be lived

This is not to condemn us, for each of us is doing the very best we can at this very moment. If we knew better, if we had more understanding and awareness, we would do it differently. Please don’t put yourself down for being where you are... “Men don’t cry!” “Women can’t handle money!” What limiting ideas to live with.

The point of power is always in the present moment

All the events you have experienced in the present lifetime up to this moment have been created by your thoughts and beliefs you have held in the past.

However, that is your past. It is over and done with. What is important in this moment is what you are choosing to think and believe and say right now. For these thoughts and words will create your future. Your point of power is in the present moment and is forming the experience of tomorrow, next week, next month, next year, and so on.

The only thing we ever are dealing with is a thought, and a thought can be changed

No matter what the problem is, our experiences are just outer effects of inner thoughts. Even self-hatred is only hating a thought you have about yourself. This thought produces a feeling, and you buy into the feeling. However, if you don’t have the thought, you won’t have the feeling. And thoughts can be changed.

The past has no power over us. It doesn’t matter how long we have had a negative pattern. The point of power is in the present moment. What a wonderful thing to realise! We can begin to be free in this moment!

*Excerpted from the book, You Can Heal Your Life. Hay (8 October 1926) is an American motivational author and the founder of publishing company Hay House*
Most silver citizens would give anything to experience youth again.

Our yearly subscription costs just Rs. 432.

Wouldn't it be great to have a second childhood? To start life afresh? Because at Harmony, a magazine for people above fifty-five, we believe that age is in the mind. Which is why, you should live young. Visit us at: www.harmonyindia.org
Subscribe to *Harmony - Celebrate Age* now and get 

**MOVIE DVDs**

**Subscription Card** (Please tick below for your choice of subscription)

- I would like to gift a subscription OR
- I want to subscribe to HARMONY

<table>
<thead>
<tr>
<th>Subscription</th>
<th>You Pay</th>
<th>You Get</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years (24 issues)</td>
<td>₹ 720</td>
<td>Movie DVDs hamper worth ₹ 250</td>
</tr>
<tr>
<td>1 year (12 issues)</td>
<td>₹ 432</td>
<td>Movie DVDs hamper worth ₹ 125</td>
</tr>
</tbody>
</table>

Please fill in CAPITAL LETTERS and mail the form below with your Cheque / DD to Harmony Care, Living Media India Limited, A-61, Sector, 57, Nodia (U.P) - 201301. In case of Credit Card payment you may fax the form to: 0120-4078080.

**Personal details:** Mr/Mrs __________________________

Address ___________________________________________

City _____________ State ___________________________ Postal Code _____________ Country _____________

Phone __________________ E-mail ____________________

I wish to pay by: □ Cheque □ Demand Draft

I am enclosing Cheque / DD No. _______________ dated ___________ drawn on (specify bank) __________ made payable to M/s LMIL-A/C Harmony for ₹ ____________

(Add ₹ 10/- for non-Delhi cheques) or please charge to my Credit Card.

□ Amex □ Visa □ Master Card □ Diners

Card Number ____________________________

Card Member’s Name ____________________________

Card Expiry Date ____________________________

Card Member’s Signature ____________________________

Date of Birth _______________ Month _______ Year _______

I want to gift the subscription to (Please do not fill if subscribing for yourself):

Mr/Mrs/Ms _______ First Name ____________________________

Last Name ____________________________

Address ___________________________________________

City _____________ State ___________________________

Postal Code _____________ Country ___________________________

Phone (Off.) _____________ (Res.) ___________________________

E-mail: ____________________________________________

Website: www.harmonyndia.org For queries e-mail us at: harmonycare@intoday.com

**SUBSCRIPTION TERMS & CONDITIONS:** Rates and offer valid in India only. Allow 3-4 weeks for processing of your subscription. Free subscription gift will reach you within 8-10 weeks of commencement of your subscription. It will not be possible to entertain any request for cancellation of your subscription once your free gift has been despatched. The free subscription gifts are covered by guarantee for manufacturing defect/quality/damage in transit as per standards laid down by the manufacturer. Add ₹ 10/- for non-Delhi cheques. Please write your name and address on the reverse of the Cheque / DD. Do not send cash. All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only. The publisher reserves the right to terminate or extend this offer or any part thereof at any time, or to accept or reject any or all forms received at their absolute discretion without assigning any reason. Information regarding such cancellation / extension / discontinuance will however be published subsequently in the magazine. For further details, please contact our Customer Care Department: Write in to Harmony Care, Living Media India Limited, A-61, Sector-57, Nodia (U.P) - 201301; Call: (91) 120-4078000 from Delhi & Fax: (91) 22-2479900 from Rest of India, Fax: (91) 22-2478092; E-mail: harmonycare@intoday.com

NOTE: Harmony collects and processes personal information for the purposes of customer analysis, market research and to provide you with any further details from our organisation. Steps have been taken to ensure that consistently high standards of data protection are in place.
We go 50 years back in time to bring you products, people, events and fashion that have influenced the world

ROCKSTEADY

When The Beatles’ lead guitarist-singer George Harrison walked into a Ravi Shankar concert in London in June 1966, it was a defining moment for the popular English rock band and for Indian classical music. The collaboration between Shankar and The Beatles inspired the 60s’ psychedelic sound, drawing heavily on sitar strains and Indian ragas. It also led The Beatles to their multicultural phase, resulting in masterpieces such as Rubber Soul, Revolver and Sgt. Pepper’s Lonely Hearts Club Band with songs like Love you to and Tomorrow never knows.

Though The Beatles had experimented with the sitar’s wonderfully lilting tunes in Norwegian Wood in 1965, it was not until Harrison visited India to learn the instrument from the maestro in 1966 that the rock band blended Indian classical elements with pop music, triggering the trend of raga rock. To quote Harrison, the music was “like an excuse”; the real purpose was to search for a “spiritual connection” with the culture of India. That said, the dialogue between Eastern and Western music turned Shankar into a hippie musical icon. He distanced himself from the hippie movement later, but Shankar’s love and respect for Harrison remained intact. In a TV interview in 2009, Shankar admitted, “When people say George Harrison made me famous, that is true in a way.”

Harrison collaborated with Shankar on two Concert for Bangladesh benefit performances in 1971, co-produced a four-CD album for Shankar’s 75th birthday, and produced the sitar maestro’s Chants of India in 1997, in which Sanskrit mantras were combined with a choir and Western instrumentation. Being the first Indian musician to cross borders, Shankar’s music influenced great musical minds such as The Rolling Stones, Stevie Wonder, jazz saxophonist John Coltrane and composer Philip Glass.

Two months after his death in 2012, Shankar won his fourth Grammy for an intimate collection of ragas titled The Living Room Sessions Part 1.

THIS MONTH, THAT YEAR: SEPTEMBER 1966

- On 9 September, NATO moved the Supreme Headquarters Allied Powers Europe (SHAPE) to Belgium, after being evicted from France.
- On 18 September, the Punjab Reorganisation Act 1966 was passed into law, separating the Hindi language population in the state from Punjabi language speakers.
ZOMBIE STATISTIC

n. A false or misleading statistic that keeps getting repeated no matter how often it has been refuted.

**Example:** A statistic commonly used when referring to the brain drain is that 350,000 Canadians live in Silicon Valley. However, Dan Munro, a principal research associate in public policy at the Conference Board of Canada, recently researched the number and found through US community surveys and the census that there are no more than 25,000 Canadians living there. Mr Munro called the 350,000 figure a *zombie statistic*. … It just won't die,” he said.

—Jane Taber, “There should be consequences for Ontario grads leaving Canada: CEOs”, *The Globe and Mail*, 23 June 2016

---

DEATHIST

n. A person who is prejudiced against the belief that science and technology will someday overcome human death.

**Examples:** Of course, people obsessed with control have to eventually confront the fact of their own extinction. The response of the tech world to death has been enthusiastic. We are going to fix it. Google Ventures, for example, is seriously funding research into immortality. Their head VC will call you a *deathist* for pointing out that this is delusional.


---

How old would you be if you didn’t know how old you were?

—American League baseball player Satchel Paige (1906-1982)

---

Jafaican

pp. An English dialect chiefly characterised by the use of accents and words, particularly slang terms, which borrow from or mimic Jamaican English.

**Example:** He refers to Multicultural London English, generally known as MLE, which features new words borrowed from outside the UK—exactly the variety of slang that Andy, of West African origin, is talking about. MLE is often linked to recently emerged multicultural hybrid *Jafaican*, or fake Jamaican, with West African and Asian undertones.


---

White-Fi

n. Wireless networking that transmits over the unused spaces in the TV spectrum.

**Example:** New devices including smartphones, tablets and computers that know how to detect unused spectrum can use it to transmit wireless broadband signals, also known as White-Fi or ‘Super Wi-Fi’. These frequencies are especially useful because they can carry a lot of data over long distances and reach indoors.


---

Cobra effect

n. When an intended solution makes the original problem worse.

**Example:** The *cobra effect* is a well known term in behavioural economics, referring to an anecdote from British colonial rule in India. The story says that a British governor, wanting to eliminate the cobra population in Delhi [sic], declared a bounty for each dead snake. To his horror, illegal cobra breeders began popping up all over the city—raising the snakes, then killing them and collecting the money. Realising his mistake, the governor ended the bounty in order to stop the breeders, which caused them to release their now worthless animals into the city, exponentially increasing Delhi's cobra problem.

—Ian Evans, “Missouri struggles with feral hogs—and hog hunters”, *Undark*, 1 July 2016

---

Fauxmance

n. A fake romance, particularly one used to generate publicity for the participants.

**Example:** Is the James Packer and Mariah Carey romance a giant publicity stunt—a *fauxmance* rather than a real-life romance?

Bubbly alchemy

We have grown so used to buying certain daily-use products from local stores that we forget that some of these were once made at home. Making your own bread, pickle and jam is one thing...have you ever thought of making your own soap, body butter and shampoo? Now, you can. This September, expert soap maker and proprietor of the Mishikrafts line of bath and body products Priya Jain is conducting weekend workshops in Bengaluru to spread word of a “chemical-free bathing experience”. The entire process is not unlike a college chemistry lab class—just be sure to have a comfortable workspace for yourself. There will be some working with borax, lye, essential oils, shea butter and beeswax from which you can make three types of soaps, lip balm, body butter, body wash, shampoo and bath salts. Jain will teach you to then flavour them with kitchen ingredients such as turmeric, gram flour, oats and oils, all for ₹4,500. The workshop will provide all the material and let you take home most of what you make. If you’re thinking of switching to a more organic lifestyle and doing this on a regular basis, Jain will also hook you up with places to source your material. Call (0) 9886008996 to book a spot in one of her workshops.

FINDOM

n. The practice of deriving erotic pleasure from being forced to give another person cash or presents; the person deriving this pleasure.

Example: This hacking role-play is typically a subset of financial domination, or findom, which is basically when one person gives another control of their finances as a form of humiliation.

—Katie Notopoulos, “The men who pay to be hacked for pleasure”, BuzzFeed, 12 February 2016

Dumpster fire

n. A person, organisation or situation that is hopelessly and disastrously out of control.

Example: “Whenever someone was having a really bad day, or someone was completely out of sorts, she’d just go, ‘Oh man, that guy’s a dumpster fire.’ Or she’d go, ‘Oh, that whole organisation is a dumpster fire,” Wise recalled in a phone conversation recently.


Post-factual democracy

n. A democracy in which ignorance and irrationality hold sway over facts and reason.

Example: Thirdly and perhaps most significantly, we now live in a post-factual democracy. When the facts met the myths they were as useless as bullets bouncing off the bodies of aliens in a H G Wells novel.

“I want to share and spread the philosophy of Kashmir”

Utpal Kaul, 60, Delhi, on sustained efforts to keep Kashmiriyat alive

For 60 year-old Utpal Kaul, home means Kashmir. Though a resident of Delhi since the 1990s, his heart clearly belongs to his homeland. A Kashmiri Pandit, Kaul keeps ties with his homeland intact by taking an active role in preserving, protecting and promoting the rich cultural heritage of Kashmir. He publishes books and articles on the subject under Utpal Publications for free, besides delivering lectures on Kashmir around the country. “My aim is to share the philosophy of Kashmir with as wide an audience as possible,” he avers. Among the 70-odd titles on the state that he has published are History of Kashmir Shaivism, Kashmir across LOC, The Rich Heritage of Jammu and Kashmir, The History of Medieval Kashmir and Kashmir Crisis: Unholy Anglo-Pak Nexus. Kaul even gifts these books for free to those who cannot afford them. Insisting that publishing is not a profit-making business for him, he says, “For me, publishing is a way to keep interest in Kashmir and its culture alive.” Nostalgically recollecting life in the idyllic Valley, which he left along with other Pandits in 1989, Kaul elaborates, “We lived on an island in Dal Lake with only 25 homes around us. Our home had 14 rooms!” Kaul, who had submitted his PhD thesis on the ancient history of Kashmir just before the exodus, was disheartened to learn that the 1,000-odd pages of the thesis were burnt down along with his precious collection of over 5,000 books. Today, he is not just a publisher, but guest lecturer, travel consultant on the Valley, and the founder of Panun Kashmir, an organisation for displaced Pandits. In 1997-98, Kaul was also involved in the making of Kashmir File, a serial on Doordarshan. He inherits this passion from grandfather Samsar Chand Kaul, who had authored books such as Beautiful Valleys of Kashmir & Ladakh (three editions) and Birds of Kashmir and Srinagar & Its Environ in the 1940s, an attempt to map birds in the Valley. On a mission to preserve and protect all rare manuscripts dealing with the state, Kaul even buys books from other publishers. “The history of Kashmiri Pandits goes back at least 5,000 years,” he says. “We need to preserve the culture of the state in all its purity!”

—Ambica Gulati
NOW, IT’S OUR TURN TO LOOK AFTER MUMMY’S HAIR.

With Godrej Expert Rich Crème hair colour, we can give Mummy’s hair the ‘dekhbhaal’ she has always given us.

It not only covers greys, but its aloe-milk protein formula keeps hair soft and shiny. Now, that’s what we call colour, along with Rich Crème’s ‘dekhbhaal’.

If she can look after us so well, even we should do our bit, right?
IndianOil touches a million lives across the nation everyday. Being the largest enterprise in the country’s energy sector, IndianOil well understands its responsibility to the society. With myriad initiatives under Corporate Social Responsibility, ranging from healthcare to hygiene and sanitation, education to nutrition, infrastructure development to community welfare, women empowerment and many more, IndianOil leaves no stone unturned to reinforce its commitment to the nation.