

PROTECT ENVIRONMENT

By becoming selfish, man is shooting himself in the foot in the pursuit of progress. Intoxicated by industrialization and progress, it is disturbing the balance of the environment. The population is increasing rapidly. People need houses etc. to live. Forests are being cut down to get land.

Tree plantation is being done but still forest erosion has increased significantly. The farmer is doing agriculture by clearing the forests. If there are no forests then where will the animals and birds live? Their home is the forest. Trees and forests are being cut to obtain many types of valuable wood.

The environment is being harmed so much that mankind is continuously falling prey to natural disasters. It is also the responsibility of man to keep the water of all reservoirs and rivers clean and protected.

Today the whole world is worried about the environment. If we all do not become alert now, then nature will take its fierce form and everything will come to an end.

Durga Ashtami and its significance

OMKAR DATTATRAY

Durga Ashtami is the most important day of the Navratri festival and it occupies an important place in the order of significance of the nine days of Navratri. It is the eighth day of Navratri and is dedicated to Maa Durga and everyone is celebrating the nine days long festival with pomp and show as well as with devotion to propitiate Maa Durga. Durgashtami is the Ashtami in Navratri is the eighth day of the festival. As we celebrate Shrad Navratri of 2023, we all know that Ashtami is one of the most important days in Navratri and devotees undertake fasts to please Maa Durga on this day. But why the Ashtami is so important? Ashtami during Navratri has multiple significance. We will put forwards some of them to throw light on why Durga Ashtami is so significant and is highly venerated during Navratri. Astra Puja on Ashtami day, the eighth day of Navratri is also known as Astra Puja and known as Virashtami. This is because all weapons are propitiated and worshipped on this day along with a display of martial arts. AS an answer to the prayers of gods and humans, Maa Durga decided to annihilate the demon Mahishasura, the buffalo faced giant. As she prepared for the war, all gods gave their divine weapons and powers to Maa Durga. All those weapons were worshipped and handed over to Maa Durga on the day of Ashtami and therefore the day came to be called as Astra Puja. Another name Virashtami attributed to this day heralds the courage and valor of Maa Durga. The emergence of Maa Kali (Ashtami). On the day of Ashtami, Maa Kali emerged from the face of Durga. In addition, Astanayikas or the eight aspects of Durga emerged from her and assumed their roles in war. Therefore on the day of Ashtami, the war with Mahishasura gained full momentum and force. There was a fierce battle between Kali and demons Chanda, Munda and Raktabhija. As part of the Navratri Puja, Ashtami is so significant in worshipping the 64 Yoginis, Maa Kali, Maa Durga and the Ashtanayikas. The eight aspect of Durga that emerged from her and assumed distinctive forms and names include Brahmachari, Maheshwari, Kameshwari, Vaishnavi, Varahi, Narasinghi, Indrani, Maa Chamunda. Each of these aspects signifies a particular attribute of Ma Durga. The Puja done on the day of Navratri Ashtami is meant to propitiate all the aspects of Ma Durga together and there it is highly significant. It is believed that Ma Durga manifested on Ashtami day. Month on month, special Pujas are performed to Ma Durga on Ashtami. The Ashtami falling during Navratri festival is called Maha Ashtami or Maha Durga Ashtami. This is also second day of the last set of three days of Navratri dedicated to worshipping Ma Durga. On Maha Durga Ashtami Durga is propitiated with an elaborate Puja. Ashtami and Navami are auspicious days to celebrate the essence of womanhood. Therefore on this day Kanya Pujan is observed by Hindus across India. Kaniya Puja on Ashtami or Navami is offered to the Shakti. Usually nine girls who have not attained puberty are invited to homes and their feet are washed. They are considered to represent the nine forms of Durga namely Shilputri, Brahmachari, Chandraganta, Kushmanda, Skandmata, Katayayni, Kalatratri, Mahagauri and Siddhidatri. They are presented with delicious food and some nice gifts which are believed to propitiate Ma Durga. It is believed that on Ashtami, the eight incarnation of Ma Durga namely Maha Gauri took birth. She is the symbol of her devotees welfare. She is the problem solver and bestows good health, good life, and happiness to all. The most famous Sandhi Puja connected with Navratri is observed on Ashtami. This is the time when the Ashtami tithi ends and Navami tithi starts. At this juncture, Balidan or sacrifice is offered to Ma Durga. Since animal sacrifice is prohibited for the Hindus, a symbolic Balidan consisting of cutting vegetables like pumpkins is done on this day. Durga Puja or Navratri is one of the most important and revered of all Hindu festivals. This Pan-India festival involves the ceremonial worship of Goddess Durga in nine forms spread over nine nights and celebrated in different ways across various parts of India. Durga Ashtami is celebrated in particular with great passion and fervor especially in West Bengal. The ten armed Goddess riding lion is highly regarded in this part of the country and even the weapons of Goddess Durga are worshipped while reciting mantras in a ritual known as Astra Puja. Ashtami marks the eighth day of the festival and on this auspicious day, devotees tend to observe rigorous fast, feast and worship Goddess Durga who symbolizes strength. A celebration of traditional culture and customs, massive idols of Goddess Durga are installed throughout India, while enormous Puja Pandals are set up at various places for devotees to visit and worship Goddess Durga. Durga Ashtami celebrates the victory of Goddess Durga over the evil buffalo demon, Mahishasura. Legend has it that owing to a boon bestowed upon Lord Beahma, Mahisasura could only be defeated by a female warrior. When Lord Indra was vanquished in the battle field, the holy trinity, Brahma, Vishnu and Shiva created Durga and each part of her body was blessed with strength, with energy of different male Gods. On this day, Durga Ashtami, she made use of the use of weapons that symbolized their masculine strength to defeat Mahisasura with the trident. In this festival women tend to take center stage while being stark reminder of how women used to hold a lot more power and status in ancient India. In certain parts of the country, especially West Bengal, Odessa, and Assam, animal sacrifices are performed at temples to commemorate the occasion. In South India, computers, vehicles, books and equipments are worshipped on the ninth day as an expression of gratitude for the blessings received in the previous year. By offering the tools of their trade to God, one commits to performing all work as worship. On the day of Ashtami before breaking the fast, nine girls blow the age of ten are worshipped and fed sumptuously and among other things, presented with new clothes. One of the many reasons why this festival is widely celebrated to receive blessings of the Goddess with the aim of being granted wealth, prosperity, as well as knowledge. Every festival in India has a profound attachment and significance with buying investments in the form of gold, silver properties. This is because festivities are usually associated with wealth and people strongly tend to believe that investing in some significant or start something new on such auspicious occasions will bring in more happiness and prosperity in the following year. In short, Maha Ashtami holds a great significance among Hindus. The eight form of Maa Durga is worshipped on this day. It is believed that eight forms of Maa Durga emerged from her and these eight Shaktis are Bharnini, Maheshwari, Kaumari, Vaishnavi, Varahi, Narasinghi, Indrani and Chamunda. Thus Durga Ashtami is most significant for the samatan Dharma and Hindus celebrate it with great devotion and fervor.

(The author is a columnist, social and KP activist).

Bolder Bones, Brighter Futures: Your Path to Healthy Bones on World Osteoporosis Day

DR. SABARATHINAM. R. SUBRAMANIYAM

As we approach World Osteoporosis Day on October 20th, it is crucial to shed light on the significance of bone health in our lives, as understanding and prioritizing bone health is essential for everyone. Understanding osteoporosis is crucial because prevention and early intervention are key. As bones lose density, they lose strength, making them more prone to fractures, leading to chronic pain, disability, and a significant decline in quality of life. By raising awareness and taking proactive steps, we can work towards building and maintaining robust bone health for ourselves and future generations.

What is Osteoporosis?

Osteoporosis, a term that might sound distant, holds profound implications for our bones: derived from Greek words meaning "porous bone," is characterised by the gradual weakening of bone density and structure. Imagine your body as a building - osteoporosis essentially weakens the foundation (bones), making it more susceptible to fractures.

The inner structure of healthy bones resembles a honeycomb, with a balanced mix of minerals and protein providing strength. However, with osteoporosis, this intricate structure begins to deteriorate. As a result, bones become more porous and fragile, resembling a sponge rather than a solid structure.

The most concerning aspect of osteoporosis is its silent progression. Individuals are unaware of the condition until a bone fracture occurs, typically in the hip, spine, or wrist. Common fractures due to osteoporosis often happen from minor falls or even routine activities, such as bending over or lifting.

Postmenopausal women are particularly vulnerable due to hormonal changes that affect bone density. Men can also develop osteoporosis, especially in later years. Factors such as a family history, poor nutritional status, certain medical conditions and medications can contribute to its development.

The Importance of Bone Health

Bones are the unsung heroes of our bodies. Our bones form the scaffold upon which our bodies are built. They provide the framework to stand, walk, run, and engage in daily activities. Beyond this foundational role, bone health is intricately linked to overall well-being. Within the bone marrow, blood cells are produced (RBC, WBC and platelets), bones protect vital organs and serve as a storehouse for essential minerals, particularly



calcium and phosphorus.

As we age and become susceptible to osteoporosis, bone health becomes increasingly crucial. Strong and healthy bones contribute to an active and independent lifestyle. Conversely, weakened bones can lead to fractures, chronic pain, and a diminished ability to carry out daily tasks.

Understanding the risk factors

It's crucial for early identification, prevention, and management of the condition. If you have concerns about your risk factors, discussing them with your healthcare provider for personalised guidance and preventive strategies is advisable.

Non-Modifiable Risk Factors:

1. Age (risk increases with age)
2. Gender (Women are more prone- particularly postmenopausal women due to a decrease in estrogen levels)
3. Family History of osteoporosis
4. Ethnicity (Asian individuals are at higher risk)
5. Medical History (such as rheumatoid arthritis, Crohn's disease, celiac disease)
6. Hormonal Disorders (such as hyperthyroidism and Cushing's syndrome)
7. Early Menopause (<45 years)

Modifiable Lifestyle Factors:

1. Dietary Factors (Inadequate calcium, protein intake)
2. Vitamin D Deficiency (due to insufficient sunlight exposure, poor diet)
3. Sedentary Lifestyle
4. Smoking and Excessive Alcohol Consumption
5. Long-Term Use of Certain Medications (Corticosteroids and anti-epilepsy drugs)
6. Some conditions that result in low estrogen levels, such as amenorrhoea
7. Gastrointestinal Surgery (Procedures that affect nutrient absorption)
8. Poor Physical Function due to Conditions like Parkinson's.

Empowering Individuals through Early Diagnosis: A Proactive Approach

Osteoporosis has a stealthy progression, often advancing without revealing overt symptoms until a fracture occurs. Recognising the latent nature of this condition underscores the impor-

tance of early diagnosis and intervention to mitigate the risk of fractures and preserve bone health.

1. Comprehensive Medical History and Risk Assessment (such as family history, existing medical conditions, lifestyle choices, and medications)
2. Thorough Physical Examination (Height loss or alterations in posture may serve as early indicators of vertebral fractures)
3. Bone Density Testing: Dual-Energy X-ray Absorptiometry (DEXA) Scan: This non-invasive gold standard test assesses bone mineral density (BMD) at specific sites like the spine, hip, or forearm. Results are expressed as a T-score, comparing an individual's BMD to that of a healthy young adult.

above -1: Normal bone density
between -1 and -2.5: Osteopenia (indicating low bone density)
below -2.5: Osteoporosis

Tips for Maintaining Healthy Bones

Remember, building and maintaining strong bones is a lifelong process. By incorporating these tips into your lifestyle, you can take proactive steps to preserve and enhance the health of your bones. Remember, small, consistent efforts can yield significant long-term benefits for your skeletal system.

1. Balanced Diet (protein, calcium, vitamin D, magnesium, phosphorus-rich foods),
2. Supplements if Necessary (calcium and vitamin D),
3. Hydration,
4. Regular Exercise (Weight-bearing and resistance exercises),
5. Avoid Smoking and Excessive Alcohol,
6. Maintain a Healthy Body Weight
7. Fall Prevention (removing tripping hazards, using handrails, and appropriate footwear),
8. Regular Check-ups, including DEXA scan (especially for postmenopausal women and older adults)

Pharmacological Interventions

Once osteoporosis is diagnosed, Pharmacological therapies are central

in preventing bone loss and promoting bone density. It is crucial to adhere to prescribed regimens and promptly communicate any concerns or side effects to healthcare providers.

1. Teriparatide (a synthetic form of parathyroid hormone, administered through daily subcutaneous injections)

2. Bisphosphonates (These drugs, including alendronate and risedronate, inhibit bone resorption and are often the first-line treatment)

3. Hormone-Related Therapies (Estrogen therapy for postmenopausal women or selective estrogen receptor modulators such as raloxifene)

4. Denosumab (A biologic agent inhibiting bone resorption, administered as an injection every six months.)

Spread Awareness, Break the Silence

In the bustling tapestry of our daily lives, the significance of our bones often goes unnoticed. Remember, breaking the silence on osteoporosis requires a collective effort. By actively participating in awareness campaigns and encouraging those around you to prioritise bone health, you contribute to a healthier and more informed community (Share information about osteoporosis with your family and friends, Utilize social media platforms to disseminate information about bone health, Collaborate with local organisations to organise workshops and seminars, Distribute flyers containing essential information about osteoporosis and Display them in local healthcare facilities and public spaces, Educate the younger generation on the importance of preventive measures, Encourage those at higher risk, to undergo regular health check-ups)

In Conclusion: Forging a Path to Stronger Bones

Empowering individuals with knowledge about their condition is central to successful management. Understanding the rationale behind prescribed medications, the importance of lifestyle modifications, and the role of regular follow-ups fosters a collaborative partnership between patients and healthcare providers.

As we commemorate World Osteoporosis Day, let us collectively embark on a journey of understanding and nurturing our bones. By incorporating these detailed insights into our lives, we can build a resilient foundation for a healthier and more vibrant future.

(The writer is Assistant Professor, Deptt of Orthopaedics, AIIMS, Jammu).

Preserving Natural Resources

G.L. KHAJURIA

With around 330 million hectares of the geographical area, India ranks seventh largest landmass globally. The systems and types of land use have been conditioned by multihued factors such as climatic conditions, temperature, air precipitation so on and so forth. And of these, the climatic conditions are primarily expressed in terms of precipitation, rainfall received in various parts of the Country. Rainfall in India is unequally distributed in spaces. The mean annual rainfall ranges from less than 10 mm in parts of Rajasthan desert to more than 4000 mm in the western Ghats.

The intra-annual distribution of precipitations is also uncertain and seasonally skewed. The bulk of rainfalls is received during the South-West monsoons (mid June to September). However, during this season there are periodic spells or drought which are frequent in the arid and semi-arid areas /zones of the country covering the states of Rajasthan, Gujarat and partly some portions of Madhya Pradesh located in the central India. Consequently, the Crop yield of rainfed sorghum-Millet of the arid and semi-arid areas of India are subjected to periodic fluctuations.

The spatial difference in the availability of precipitation reflect in the relative differences in the amount of per unit area runoffs from the various rivers of India both in inter and intra annual terms. The central water commission (1988), places the average annual natural runoff available to India at 1880 million cubic meters. The water storage structures created or under construction are able to store only 13.5% of the mean annual runoff, in so far as ground water resources are concerned.

The estimates are that the replenishable ground water resources in India excluding North-east is 420 BCM per year of which 35.7 BCM per year is utilizable for irrigation against actual utilisation of only 106 BCM per year. The unusual distribution of precipitation and water resources have conditioned agricultural cropping system and other systems of farming, though irrigation has successfully transformed the water starved areas of Punjab, Haryana and western parts of Uttar Pradesh into the food bowls of India. However, there are sufficient indications that the agricultural front has stopped expanding. This is quite evident from the fact of net areas having increased from 119 million ha in 1950-51 to 140 million ha and stabilized at that level. In any case, an expanding agricultural front was not essentially and environmentally conducive, since extension of cultivation to marginal lands had produced in its wake of the problems of soil and water erosion. And when this fact is related to the agricultural area subject to double or multiple cropping, the area of agricultural land sown more than once increased from 25,52,400ha in 1971 to 36,77,000ha in 1986-87, resultantly increase in food grains production by 42 million tones in the period 1970-71 to 1985-86.

As a consequence, it can very conveniently be concluded that agricultural production in India has had been on intensive margin

i.e. modern technologies of production initiated during green revolution of late 1960's. But spatial width of the intensive agricultural operation is narrow since the green revolution has been evident mainly in the northern western portions of India and portions of Andhra- Pradesh and Tamil Nadu in South India.

India is as well endowed with large areas of non-agriculture production. And these areas are having expanse and diversified forest cover ranging from temperate vegetation in the sub-Himalayan and Himalayan region of moist-ever green forests in the North-east, the western coast and the Andaman and Nicobar islands. The forest cover of our country as per survey of India's latest report (2015), reveals that we continued to have 21% of forest despite population explosion, increased biotic pressure arising from grazing, encroachments and diversification of forest areas for multidisciplinary purposes. As a result, therefore, there have been a marginal increase of 1% forest cover.

The overall situation is that the total green cover now stand for 69788sqkms (21.23%) of the geographical area and upto 5871 sqkms (10.92%) from 92,027 sqkms as had earlier from existing during the year 2011 survey report. As such there has been a marginal increase of just 31 sqkms in very dense forests, whereas moderately dense forest went down to 1991sqkms and open forests accounts for 7831 sqkms. As per Anmol Kumar, the Director General, Survey of India, the carbon stocks of the county have increased by 4.07% whereas regeneration capacity is around 48% of the total forest area. Broadly speaking, the forests of India have been divided into 16 major groups comprising into 221 types. Tropical deciduous forests form the major percentage of forests cover in India (37% of total forest cover) followed by tropical dry deciduous forest (29.6%). The tropical wet evergreen forests comprise only 8% of total forest cover. Of the total area around 63.91 millionha & dense forests (crown dense cover) account for only 38.50 m. haec. There is no tree cover over 11.27 M. Hae forests are under stocked. About 52.8% of forests don't have adequate regeneration. The per capita forest area has astonishingly decreased drastically. Apart from natural forests, manmade forests area also increased on account of afforestation programmers initiated by government of India as well various state governments under various schemes. The lands so afforested have substantially been increased. Despite this progress in afforestation, the target of 33% land area under forest cover as laid down in the National Forest Policy 1988, will be a remote goal at the moment. The reasons are the tendency towards deforestation and diversion of forest land towards non-forestry activities by the multi-disciplinary departments of all hues. And apart from meeting up fuelwood and fodder requirements, the increasing incidents of authorized as well as unauthorized felling. In so far as forest conservation measures are concerned, these are not well in place, whereas the trend of deforestation is more severe compared to that which had been over the years. With rising consciousness and the apprehensions involved

allowing it to degenerate, there is an urgent need to build the methods for the protection and preservation of our natural resources. However, considering that the forests are the bedrock for the economic growth and development and also support the need of much of the population, these must be put to optional use. This involves integrating environmental concerns with all activities and making of correct choices and treads offs.

To ensure that the best choices are being made and the value of protecting the environment is not being ignored, adequate human resource development, especially through proper training programmers, needs to be promoted. In so far as training aspect is concerned, the imparting of specific skills are warranted to be inculcated. And these involve such sort of persons who are either experience as a part of work to perform certain tasks which require skills or those who would like a citizens of voluntary groups or organizations perform such tasks and such persons can be classified as civil servants who are required to assist in the formulation of policies and plans, and to carry out development projects or activities so associated with such programming. Two: professionals both technical (engineers, scientists, lawyers, Judges or Social scientists and managers, both within and outside the governmental organizations. These persons are needed to be involved in designing, assessing and managing projects activities having potential impact on the environment. These all educators or trainers who educate and train other people need, therefore, be trained initially themselves. Fourth; environmental activists who are basically involved in fighting for the environment often against government or corporate interests should qualify the skills to effectively carry on this coveted job on broader spectrum. As a corollary, therefore, different categories of people need training to effectively perform the tasks related to the conservation, protection and regeneration of environment and to use one or more of the available strategies for which training needs to be imparted. Special emphasis should be laid to retraining environment implementation assessment (EIA). The need for sustainable development involves, among other things, the ability to assess the impact of development activities and the projects on the environment. This enables the making of correct choices so that only those projects that are environmentally viable are given the green signal, and even their environmental impact is minimized. The EIA also gives a direction for the development of new processes and technologies which help in determining the real social costs of products and services and highlights the need for conserving resources and finding or developing substitutes scarce ones.

The rapid rate of economic growth in India means that there are at any given time, a large number of development projects in planning and implementation of environmental boosting. There is, therefore, a dire need to build trained human power for environmental implementation assessment (EIA), especially among independent institution and within the government.

(The writer is former Deputy Conservator, J&K Forest).

YOUR COLUMN
Kudos and Appreciation

Dear Editor,

Through the columns of your esteemed paper, I would like to shower kudos and appreciation upon the great writer-Madam Sumaina Malik who has revealed realities upon the eatables with poison, be it Milk, fruits, vegetables, edible oils with the greed of getting more income. Whosoever-be it vegetables growers, Dairy farmers, fruits growers, edible oil producers are definitely playing with the health of all children, oldies, youngmen and more so all walks of life. Such adulterated, sprayed vegetables, fruits, milk and all edible oils we consume are detrimental and harmful in the shape of slow poison. Such adulterated things i.e. eatables we are consuming daily have given rise to innumerable dreadful diseases such as cancer, diabetes, Blood pressure (High and low) Cardiovascular diseases, liver damage, become weak eye-sight and what not ill-effects I may tell you. Let all the wrong doers be appealed through this article not try to play with the health of all innocent people who have got no alternatives to consume such eatables. They should not at all adopt such misacts to getting more and more money for taking ill-

gotten money with them after death. The LG's administration is also requested to take preventive measures to check this menace before such adulterated eatables are supplied to the public markets are to be tested in laboratories. In case, this monster of food adulteration growing with every passing day at alarmingly is not checked dire consequences have to be born with. It is further highlighted that what is the good of spending crores of money over the cure of dreadful diseases of the patients to be hospitalised in Super-Specialty Hospitals, such adulteration to be stopped forthwith by the Govt., Madam Sumaina Malik's respectful name must be Kingly name as Sumaina Baadshah who has tried her level best to highlighting such realities being prevailed over in the minds of greedy growers.

Tara Chand Bhagat (Talab Tillo, Jammu)

Investigation and trial on political rivals

Dear Editor,

Everybody would agree in principle that political and personal vendetta should not lead the people in power to conduct investigation and harass the rivals. The parties that accuse those in power

for conducting investigations do the same thing when they come to power. Further, no party admits that investigation against rival party members is the outcome of political vendetta. Politicians neck-deep in corruption cry hoarse when legal action is taken against them even in genuine cases holding the government responsible for muzzling the voice of opposition. Where there is need to expose the corrupt elements, all political parties rally round such corrupt elements accusing the ruling parties of indulging in with-holding. No political party in power admits that investigative action is taken to intimidate the political rivals. And no opposition political party admits that the person on whom investigation and trial are conducted are necessary to keep the present system corruption-free. It is common that opposition parties cry hoarse when enquiries are conducted against rivals. It is also common that ruling parties do not refrain from conducting investigations even when it is satisfied that there is no prima facie case against the accused. Since vindictive action by one group of political parties against the other can never be done away with, it is necessary that governments must change from time to time so that investigations are conducted whenever wrongdoings are noticed irrespective of the party the politician belongs to, in order to weed out corrupt elements as much as possible.

K.V. Seetharamaiah