

## CONSERVATION OF HERITAGE SITES

Jammu & Kashmir, often referred to as "Paradise on Earth," is renowned for its breathtaking landscapes and rich cultural heritage. From ancient temples and forts to Mughal gardens and Sufi shrines, the region boasts a wealth of heritage sites that reflect its historical and cultural diversity. However, the preservation of these invaluable assets faces numerous challenges, necessitating concerted efforts for their conservation.

Heritage sites in J&K are not just relics of the past but are also vital for understanding the region's cultural evolution. Structures like the Shankaracharya Temple, Bahu Fort, and the Mughal Gardens of Srinagar serve as testaments to the architectural brilliance and cultural amalgamation of different eras. The region is home to significant Buddhist monasteries like Hemis and Thiksey, reflecting its ties to Buddhism, alongside Islamic architecture seen in structures like the Khanqah-e-Moula and Jamia Masjid. These sites also hold spiritual and emotional significance for the local communities.

Beyond cultural importance, these sites play a key role in boosting tourism, contributing significantly to the economy of the region. Protecting and preserving these sites ensures the sustainability of tourism and the livelihoods of countless individuals associated with it.

Recognizing the importance of preserving its heritage, the government of J&K, in collaboration with organizations like the Archaeological Survey of India (ASI), has undertaken initiatives to restore and conserve various sites. Several monuments have been declared protected under the Jammu & Kashmir Ancient Monuments Preservation Act. Restoration projects, like those of the Mughal Gardens and Sheesh Mahal in Ramnagar, have successfully revived some of these sites.

To ensure long-term conservation, there must be a multi-pronged approach. Community participation is crucial, as local people are the custodians of their heritage. Awareness campaigns can educate citizens and tourists about the value of preserving heritage. Integration of modern technology, such as digital mapping and 3D scanning, can aid in documenting and restoring sites.

Their conservation is not just a responsibility but a necessity to safeguard the region's identity and its contribution to world heritage. By adopting a collective and sustainable approach, J&K can ensure that its rich cultural tapestry remains intact for generations to come.

## Brain Tumours: Silent But Potential Threat to Health

DR. RAJKUMAR SINGH

Unlike other tumours that may develop in more accessible parts of the body, brain tumours directly impact the command centre of human function—the brain. The growth of abnormal cells in this organ can lead to life-altering consequences, making early detection and treatment crucial. While medical advancements have made significant strides in understanding and treating brain tumours, challenges remain in both diagnosis and management.

### Types of tumour

It can be classified into two main types: primary and secondary. Primary brain tumours originate in the brain itself, while secondary, or metastatic, brain tumours spread from cancers that have started elsewhere in the body. Within primary tumours, there are both benign (non-cancerous) and malignant (cancerous) types. While benign tumours may not spread to other regions, they can still exert pressure on vital brain structures, leading to severe complications. Gliomas, meningiomas, pituitary tumours, and medulloblastomas are some common types of primary brain tumours. Glioblastoma multiforme (GBM), a particularly aggressive form of glioma, is known for its rapid growth and resistance to treatment, making it one of the deadliest brain cancers. On the other hand, meningiomas are often benign but can still cause significant neurological symptoms depending on their size and location. The exact cause of brain tumours remains largely unknown. However, certain risk factors increase the likelihood of developing these tumours. Genetic mutations play a crucial role, and individuals with a family history of brain tumours are at a higher risk. Exposure to high doses of radiation, whether through medical treatments or environmental factors, has also been linked to brain tumor development. Additionally, lifestyle factors such as prolonged exposure to carcinogenic chemicals and electromagnetic fields have been suggested as potential contributors, though more research is needed in

this area.

### Symptoms, treatment and challenges

The symptoms of a brain tumor vary based on its size, location, and rate of growth. Common symptoms include persistent headaches, seizures, vision or hearing problems, cognitive impairments, and difficulty with balance or coordination. Some patients may also experience changes in personality, speech difficulties, or memory loss. In many cases, these symptoms are subtle in the early stages, leading to delayed diagnosis. Diagnosing a brain tumor typically involves a combination of neurological exams, imaging studies (such as MRI or CT scans), and, in some cases, biopsy procedures. Advances in imaging technology have significantly improved the accuracy of brain tumor diagnosis, allowing doctors to detect tumours at earlier stages. However, the challenge remains in differentiating between benign and malignant growths without invasive procedures. Treatment for brain tumours depends on various factors, including the type, size, and location of the tumor, as well as the patient's overall health. The three main treatment approaches are surgery, radiation therapy, and chemotherapy. Surgical removal is often the first step in treating brain tumours, particularly when they are accessible and well-defined. However, due to the delicate nature of brain tissue, complete removal is not always possible without risking severe neurological damage. In cases where total resection is not feasible, surgeons aim to remove as much of the tumor as possible while preserving brain function.

### Use of radio and chemo therapy

Radiation therapy and chemotherapy are commonly used to target remaining cancerous cells after surgery or when surgical removal is not an option. Traditional radiation therapy has been supplemented by advanced techniques such as proton therapy and stereotactic radiosurgery, which allow for more precise targeting of tumours with minimal damage to surrounding healthy tissue. Chemotherapy,

while effective in some cases, often faces challenges due to the blood-brain barrier, which limits the penetration of many drugs into brain tissue. One of the most significant challenges in brain tumor treatment is recurrence. Even with aggressive treatment, malignant tumours like glioblastomas tend to reappear, often in a more resistant form. This necessitates ongoing research into new treatment modalities, including immunotherapy, targeted molecular therapies, and gene therapy. Recent breakthroughs in personalized medicine offer hope, as they tailor treatments to individual genetic profiles, potentially increasing effectiveness and reducing side effects.

### Other impacts and prospect

A brain tumor diagnosis is not just a medical crisis; it is a life-altering event that affects patients and their families on multiple levels. The uncertainty surrounding treatment outcomes, the risk of recurrence, and the potential loss of cognitive or motor functions create immense emotional stress. Depression, anxiety, and fear are common among patients, necessitating psychological support alongside medical treatment. Caregivers, too, face significant burdens. They often take on the role of primary support providers, balancing medical responsibilities with personal and professional obligations. This can lead to burnout and emotional exhaustion. Support groups, counselling services, and community resources play a crucial role in helping both patients and caregivers cope with the emotional toll of brain tumours. Scientific research continues to explore innovative approaches to brain tumor treatment. One promising area is immunotherapy, which harnesses the body's immune system to fight tumor cells. CAR-T cell therapy, which has shown success in treating certain blood cancers, is now being investigated for its potential in brain tumor treatment. Similarly, advancements in nanotechnology offer hope for delivering drugs more effectively across the blood-brain barrier.

Latest techniques

Artificial intelligence (AI) and machine learning are also making significant contributions to brain tumor diagnosis and treatment planning. AI-powered algorithms can analyze medical images with greater accuracy than traditional methods, allowing for earlier and more precise tumor detection. Additionally, AI is being used to predict treatment responses, helping doctors personalize therapies for better outcomes. Despite the severity of brain tumours, public awareness remains relatively low compared to other forms of cancer. Advocacy efforts are essential in promoting research funding, supporting patients, and educating the public about early symptoms and risk factors. Organizations dedicated to brain tumor awareness play a vital role in providing resources, facilitating research, and fostering a sense of community among those affected. Governments and healthcare institutions must also prioritize brain tumor research and treatment accessibility. In many parts of the world, specialized care for brain tumours is limited, leading to disparities in diagnosis and treatment outcomes. Bridging these gaps through policy changes, medical infrastructure development, and international collaboration can significantly improve survival rates and quality of life for patients.

### Challenges ahead

Brain tumours are a formidable medical challenge that requires a multi-faceted approach encompassing early detection, advanced treatment, psychological support, and ongoing research. While medical science has made remarkable progress, there is still much to be done in terms of improving survival rates and minimizing the impact of these tumours on patients' lives. Increased awareness, continued research, and compassionate care are the keys to making meaningful strides in the fight against brain tumours. By working together—scientists, healthcare providers, policymakers, and the public—we can hope for a future where brain tumours are not just treatable but preventable.

(The writer is a youth motivator)

DR BHAVNEET KAUR

Each year world oral health day is celebrated globally on 20th March as a step to start a year long campaign to spread oral health awareness in the society. The theme of this year's world oral health day 'A happy mouth is a happy mind' focuses on reframing the conversations around oral health. What do we mean by a happy mouth and what is the mouth - mind connection that can create happiness?

As dental professionals we understand the implications of oral health on psychological well-being. Let us all know that Oral health care is not just a clinical concern, but it is an essential part in the overall mental and emotional health of an individual.

Oral health conditions like gum disease, tooth pain, tooth loss, tooth stains and all other dental conditions significantly can impact the overall happiness quotient in an individual contributing more to depression, anxiety, social isolation, stress and diminished self-esteem in both the individuals having the disease and their family members too who are facing how to deal with such dis-

ease. Let us also know that it is commonly seen that certain conditions like rampant caries and early childhood caries are so contagious that the rate with which it starts involving the entire dentition with added oral complications becomes a root cause of many parental stress and concerns. So what exactly is the parameter of achieving happiness? Is happiness just a state of mind or does your mouth also hold the key to a happy mind?

Let us unveil the secret behind this mouth-mind happiness-

Think of the iconic 'say cheese' before posing for pictures. Research has proven there are certain vowels when spoken aloud they allow the speaker to spread their lips during its articulation, and as we do so the muscles of the face get stretched accordingly simulating a smile. So to put it in simple words the quality of our speech significantly impacts the brain. The way you stretch the muscles of your face to pronounce the right sounds of vowels has the capability to send signals to the brain that it's time to either relax and smile or to frown and cry. So the first step is to

practice on your vowels properly. For that we must know certain sounds are labial, some lingual, some labiodental, some linguodental and accordingly. So proper alignment and presence of our teeth is essential for many speech sounds so yes, it is simple. For a happy mouth, have all your teeth in proper healthy order.

Self care is reassuring that we are not dependent on others and the feeling of self sufficiency helps in staying confident and happy. Let us understand that the way the technology is fast growing, for us to keep pace with the fast forward technology in all spheres is difficult. To add to it sometimes certain diseases and advancing age makes things more complex. For the mind to stay active and happy one needs constant stimulation and a sense of accomplishment of tasks. Taking care of one's oral health routine forms the most basic way to validate that on a regular basis especially when struggling with mental health problems such as depression and anxiety. It is often seen that poor mental health makes doing things daunting, but when we focus on making our mouth happy by even a simple technique like brushing

daily we are actually increasing the chances of getting a valuable serotonin boost by completing these simple tasks on a daily basis adding to our confidence that we can take care of ourselves. So yes, a happy mouth is a happy mind.

Let us understand, when we keep our mouth cleaner and healthier it certainly impacts our appearance. Aesthetics these days is a huge part of self-esteem, making one feel more confident and so on. It is often seen patients after getting dental cleanups professionally are more inclined to laugh and smile after their scalings. Believe it or not, the smile-mind connection is real. Research has proven that even a simple act of smiling or laughing triggers the release of dopamine and serotonin, which in turn relieves anxiety, boosts immunity and increases happy feelings. So yes, if the mouth is fresh and happy the mind is happy too!

Let us know, the mouth is an index of our mind. Many times people become aware of their hidden psychological problems only after a dental visit. It is documented that most of the various oral habits such as lip biting, finger sucking, bruxism, etc have a deep root-

ed psychological etiology. Sometimes even a simple fracture of teeth can reveal the most ugly face of social problems such as physical abuse which can be brought to the concerned authorities to save an innocent life. The mouth-mind connection becomes also more significant to understand when the person is already immune-compromised. Certain medications reduce salivary flow or disrupt the normal balance of bacteria in the mouth which can further compromise the mouth's normal defenses, allowing at times multiplication of other microbes such as growth of fungal infections, commonly called oral thrush that may further impair one's overall mental health. It is a fact that an unhealthy mouth can potentially aggravate other medical conditions as well. For example, for a diabetic, a mouth infection can alter your blood-sugar levels and make your diabetes harder to control, adding to the mental stress. So resolving to practice good oral hygiene every day is the key to optimal health and focusing on keeping your mouth happy will ultimately also do wonders to keep your mind free from any unwanted added

stress.

To put it simply, Can we fake a happy smile if we are having dental problems and dental pain? Broken teeth, malaligned teeth and absent teeth are known to make one more conscious of their smiles. Furthermore, scientific studies are revealing that oral health is also connected to a long list of systemic diseases, such as heart disease and Alzheimer's. Let us not forget, a Balanced diet is essential not just for a healthy mouth but also for a healthy mind. So with this year's world oral health day theme the focus on oral health care awareness sees another light. Yes, as a sector we must expand our approach to oral health care, offering not just a treatment to pain, but also on adding peace to the mind. Early and regular oral checkups will help us not worry of painful and costly procedures in the future. Happiness and health is a two way process as the mouth- mind connection exists! So next time whenever you need a little boost don't forget to book your appointment with a nearby dentist. Do remember a happy mouth is a happy mind!

(The author is a Dental Consultant)

## Students' mental health should be top priority

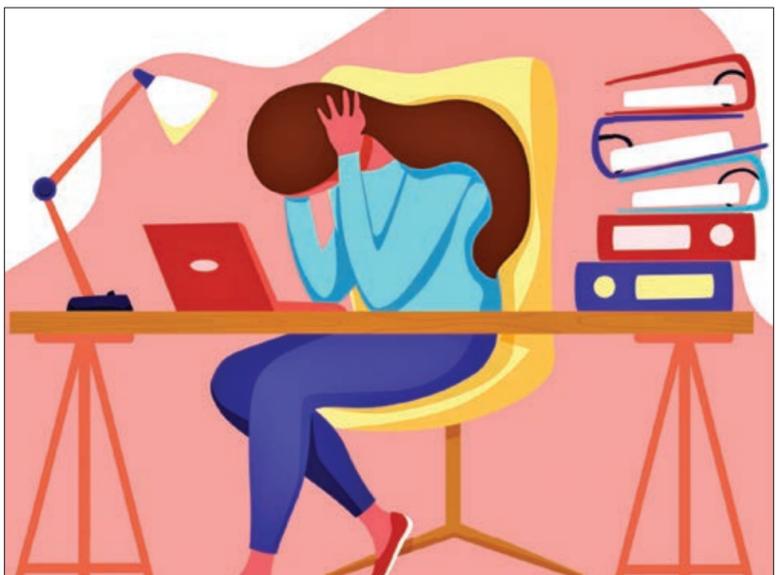
SHIVANSHU K. SRIVASTAVA

The Supreme Court's decision to set up a national task force to tackle student suicides in higher educational institutions is an imperative move. The alarming increase in student suicides, which have now overtaken even farmers' suicides, is a scathing commentary on India's academic milieu, where performance is often valued above students' well-being. The reality that some of the most gifted minds in the nation grow so hopeless and unsupported that they resort to the ultimate act of despair is not only a tragedy for their loved ones; it is a national crisis that calls for urgent and bold response.

Higher education should be a place where you grow, discover, and expand your mind. For many students, however, it has unfortunately become a relentless pressure cooker with little to no reprieve. The stress that comes with academic expectations, financial burdens, and competition is exacerbated by discrimination on the basis of caste, gender, ethnicity, disability, and socio-economic background. To make matters worse, there aren't any robust support systems in place for them in educational institutions. The absence of timely and adequate mental health care for students - not to mention the huge stigma associated with issues like depression and anxiety - means that many of them suffer in silence until it is too late.

This question has played out recently in high-profile cases. The intervention by the Supreme Court is in response to a case featuring two IIT Delhi students, Ayush Ashna and Anil Kumar, reportedly died by suicide after suffering extreme academic strain and caste-based discrimination. Their families argue that they were exposed not just to an academically rigorous environment, but one that alienated them socially. Complaints of caste bias were instead dismissed rather than taken seriously and addressed. The police investigation determined that there was no foul play, deaths were blamed on academic failure and depression. But this narrow conclusion ignores the systemic institutional failures that contribute to the conditions where other students are driven to take their own lives.

This is not an isolated event. The phenomenon



of student suicides is not unknown to India, especially in prestigious institutes like IITs, IIMs, AIIMS, and central universities. The academic elitism that is so embedded in the culture - failure is stigmatized, mental health issues are brushed off - makes for an oppressive space for many students.

The Supreme Court national task force of 10 members, headed by the former judge Justice S Ravindra Bhat, has been mandated to analyse key factors resulting in student suicides, evaluate the existing policies for students and make recommendations on concrete measures to ensure safe and inclusive educational spaces. It is likely to look into issues such as ragging, sexual harassment, financial and academic pressure, among others. It too must investigate how institutional indifference and its failure to set up adequate grievance redressal mechanisms compound the distress of its students. Anti-ragging policies,

mental health cells in universities must be in place, but their implementation must also be rigorous, their accessibility ensured, and their efficacy be assessed through independent reviews.

But one area that deserves a lot of attention is the academic structure itself. Indian higher education institutions have had a long-standing myth regarding rigid and uncompromising evaluation system focused mostly on degrees and rankings rather than holistic growth. Coupled with a lack of career alternatives, the fear of not measuring up drives students to the brink. While some of the more global ones are flexible and designed to accommodate for student comfort, Indian universities typically do not have much in the way of remedial mechanisms in place to help students survive. Rather than treat academic struggles as growth opportunities, institutions punish those who don't meet expectations, driving them helplessly into despair.

Faculty members and administrators play a significant role in the culture of a campus, as well. Professors, mentors, and institutional leaders need to be trained to detect semiotic signs of mental distress in their students so as to give them the support they need as opposed any academic scolding. Also, dividing the sensitization programs for the existing faculty also on a compulsory basis for making their teaching practices, judicious, inclusive and empathetic for the students. Complaints of faculty members discriminating against or humiliating students on account of their caste, language or socio-economic background are not uncommon. Identify and eliminate such attitudes so that educational institutions serve as spaces of equal opportunity and the people there as role models to students, not bodies of exclusion and prejudice.

Moreover, one of the biggest sources of student distress continues to be financial strain. Tuition fees, accommodation, and other expenses are extremely high for students - one-third of students currently study with insufficient means, particularly those from lower-income backgrounds, due to a lack of financial aid or scholarships. For many, the unbearable weight of managing these burdens while also succeeding academically is too much to handle. Institutions need to launch stronger financial aid programs, emergency assistance funds and mental health counseling services so students can avoid being crushed by financial despair.

Educational institutions need to prioritize restructuring their mental health systems, so they can better accommodate and support their students. Most have dilapidated counseling centers with insufficient staff to meet increasing student demand. Where mental health services are available, they are often tied up in bureaucratic knots that have made it hard for students to get patients to call them back, let alone see them in a timely manner. Trained psychologists should be hired, counseling should be confidential, and mental health awareness programs should be included in the academic curriculum.

The goal of the task force cannot just be to offer recommendations, but rather to advocate for their earnest implementation. The problem is

that many such government and institutional policies are often on paper only and never implemented in practice. The Supreme Court must ensure that this issue is under lock and key for the duration of the task force's proposed reform efforts. A legal structure should also consider regular mental health assessments, student well-being surveys and grievance redressal mechanisms to bring sustenance and sustenance in such an ecosystem. The task force also should suggest consequences for institutions not successfully wise to student welfare concerns.

And in the end this needs to be addressed to create higher ed institutions that stop working right up to the line of excluding students and look instead to nurture them in order to give them what they need to thrive, instead of what the elite-driven high-pressure environment tell them they need in order to compete. It's a matter of more than laws and rules - it's also about attitudes, a culture of caring, and responsibility across the board among faculty, administrators, policymakers, and, yes, students. It is imperative for society to understand that academic success and mental health cannot be in competition with one another, that rather, there is a correlation between the two.

Tragedy losing young lives to institutional negligence and academic pressures should be a wake-up call. The loss of every student suicide also highlights a systemic failure - a profound societal loss that extends beyond the individual student. The Supreme Court's task force is a step in the right direction, but the real test will come next - ensuring its findings don't just fester, but instead inspire real systemic change. A good educator must develop their own momentum as terrorism schools need to be the places for hope and opportunity not the graveyards of broken dreams. Our country owes its students an atmosphere in which they are encouraged to thrive, sure, but more crucially, where they can stumble, learn, and get back up again without their world crumbling or the prospect of failure looming over them as they take their next steps.

(The writer is writer, poet and advocate, holding a Master of Laws (LL.M.) from Banaras Hindu University (BHU))