



## Menopause and memory: Study links symptoms to later cognitive decline

Menopause brings a range of physical and emotional changes, but new research suggests its impact may extend beyond immediate symptoms. A study published in PLOS One found that women who experience more menopausal symptoms may be at a higher risk of cognitive decline and behavioural impairments later in life—both considered early markers of dementia.

The study, led by Zahinoor Ismail of the University of Calgary, analysed data from 896 postmenopausal women participating in the CAN-PROTECT study. Participants, with an average age of 64.2 years, reported menopausal symptoms such as hot flashes, sleep disturbances, mood swings, and forgetfulness. Researchers found that a greater symptom burden was associated with poorer cognitive function and increased behavioural impairments in mid- to late life. Women with more symptoms had higher ECog-II scores (indicating cognitive impairment) and MBI-C scores (suggesting behavioural changes).

While hormone therapy was not significantly linked to cognitive function, it was associated with fewer behavioural symptoms. Given that women face a threefold higher risk of developing Alzheimer's disease, understanding the long-term effects of menopause on brain health is crucial.

The authors emphasise the need for further research to confirm these findings, ideally through long-term studies that consider factors like age at menopause and surgical menopause. They conclude that greater menopausal symptom burden may signal a higher risk of later cognitive and behavioural decline, with oestrogen-based hormone therapy potentially offering some protection against behavioural symptoms.

# Cancer can be avoided! It's not mere a genetic lottery

TAUFIQUR RAHMAN

The National Cancer Institute of America defines cancer as "a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body." Major causes include genetic mutations, environmental factors, lifestyle choices, and infections. Experts now call it a lifestyle disease, which has reached epidemic levels in many countries.

In Bangladesh, diagnosis is limited, surveillance is inadequate, and treatment is expensive. In a highly polluted city like Dhaka, thousands likely have undiagnosed cancer. With unhealthy food and lifestyle habits, the disease may be far more prevalent than reported.

Common cancers in Bangladeshi women include breast, oral, stomach, tracheal, thyroid, ovarian, and cervical cancer. In men, tracheal, stomach, lung, oral, and esophageal cancers are more frequent. Bangladesh has 13–15 lakh cancer patients, with two lakh new cases annually. Cancer accounts for 10% of all deaths and ranks as the sixth leading cause of noncommunicable disease-related mortality. This number is likely underreported due to limited diagnosis and awareness, leading to delayed treatment.

The medical system treats cancer as a genetic lottery, yet genetics alone do not explain rising cancer rates. Over the past 50 years, our environment has changed a lot. Pollution, junk food, adulterated food, and unhealthy cooking habits have increased. Exposure to electric and magnetic fields (EMFs) from power lines, cell phones, Wi-Fi, and microwaves is another concern. EMFs disrupt cellular function, while microplastics, chronic stress, heavy metals, seed oils, artificial light, and poor metabolic health contribute to rising cancer rates. European studies have linked prolonged EMF exposure to an increased risk of leukaemia.

Cancer is not random. Our body creates and destroys cancer cells daily,



but the disease takes hold when the immune system is weakened by stress, poor sleep, and toxins. Bangladesh faces severe plastic pollution, with rivers and water sources contaminated. Formalin, commonly used in food preservation, releases formaldehyde gas, which is highly toxic. It can cause kidney failure, neurological damage, and even coma.

Preventing or managing cancer requires lifestyle changes. Natural ways to fight cancer include:

- Morning sunlight—30 minutes within an hour of waking.
- Quality animal protein—grass-fed meat twice daily.
- Organ meats—liver, heart, and kidney weekly.
- Raw dairy—unpasteurised milk and cheese.
- Oysters—6-8 weekly for zinc and minerals.
- Reduced EMF exposure—Aeroplane mode at night, turning off electronic devices.
- Proper sleep—In bed by 10 PM.
- Eliminate processed food—avoid

chips, chocolates, and soda.

Regular exercise reduces the risk of 13 types of cancer, including metabolic cancers. Even after diagnosis, exercise lowers the risk of death from breast, prostate, and colon cancer. A study in Cell Press found that exercise inhibits tumour growth by cutting off its blood supply. High-fibre foods like lentils, chia seeds, avocados, oats, almonds, popcorn, apples, and broccoli help detoxify the body.

Small lifestyle changes can make a difference. Avoid short-distance rickshaw rides—walk instead. If worried about the sun, use an umbrella or sunscreen. Use stairs instead of elevators. Wear a mask to protect against air pollution. Avoid bottled juices and sodas, opting for fresh fruits and vegetables.

Cancer treatment is expensive, but prevention is cost-effective. Changing your environment and lifestyle can help fight cancer, manage its progression, and lead to a healthier life.

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## Instant stress busters: quick ways to relax

Feeling overwhelmed? You don't need hours to unwind—just a few minutes can make a big difference. Try these simple yet effective techniques to ease stress fast.

**Calm your mind in 10 minutes**

- **Chew gum**—Research suggests chewing gum for at least 10–15 minutes can help reduce anxiety, improve concentration, and promote relaxation.
- **Take a walk**—A short stroll can remove you from a stressful situation and trigger endorphins, your body's natural mood boosters.
- **Try yoga**—A few gentle poses can lower cortisol levels, slow your heart rate, and help you feel more at ease.
- **Practice mindfulness**—Stay present by focusing on your breathing, scanning your body, or mindfully engaging in small tasks like sipping water.
- **Write it down**—Jotting down your thoughts can help clear your mind and provide insight into your stress triggers.



• **Do 4-7-8 breathing**—Inhale for 4 seconds, hold for 7, and exhale for 8 to calm your nervous system and ease tension.

• **Tap away stress (EFT)**—Gently tapping specific points on your body while repeating affirmations can help release built-up stress.

• **Talk it out**—Expressing your feelings can improve your mood.

**Deeper relaxation in 30 minutes**

- **Exercise regularly**—Moving your body daily improves oxygen flow and helps build resilience against stress.
- **Take a warm bath**—heat relaxes your muscles, increases circulation, and elevates your mood.
- **Declutter your space**—A tidy environment promotes mental clarity and reduces anxiety.

Incorporate these quick stress-relief techniques to feel the difference instantly!

# The hidden web of chronic diseases: A global health crisis

RAISA MEHZABEEN

Chronic diseases are an undeniable reality, affecting millions worldwide. While often considered separately, conditions like osteoporosis, hypertension, type 2 diabetes, cardiovascular disease, Alzheimer's, obesity, depression, and even COVID-19 are intricately linked. The key underlying factors—impaired glucose uptake, iron deficiency, and chronic inflammation—create a complex web of health risks.

**The complexity of chronic diseases:** Modern healthcare tends to treat diseases individually—hypertension with blood pressure medication, diabetes with insulin, and osteoporosis with calcium. However, these conditions share common metabolic roots. Insulin resistance, a hallmark of type 2 diabetes, also contributes to cardiovascular disease, obesity, and even Alzheimer's. Chronic inflammation fuels depression, NAFLD, and numerous other disorders, demonstrating the systemic nature of these diseases.

**The role of glucose uptake and iron deficiency:** Impaired glucose uptake due to insulin resistance or inflammation affects everything from brain function to immune health, increasing risks for Alzheimer's, depression, and cardiovascular disease. Iron deficiency further complicates matters, leading to anemia, worsening osteoporosis, hypertension, and metabolic disorders like NAFLD. The liver's role in iron metabolism makes iron depletion a contributing factor to fatty liver disease, which is becoming a global epidemic.

**COVID-19 and chronic diseases:** The COVID-19 pandemic exposed the vulnerability of individuals with chronic conditions. Obesity,

diabetes, and cardiovascular disease increased the risk of severe COVID-19 complications. The virus itself disrupted glucose metabolism, triggered inflammation, and led to iron dysregulation, accelerating chronic disease progression. Long COVID symptoms, such as fatigue and brain fog, reflect underlying metabolic disturbances, highlighting the lasting impact of the virus on global health.

**Obesity, depression, and the vicious cycle:** Obesity and depression, often seen as separate conditions, share biological pathways involving inflammation and metabolic dysfunction. Obesity-induced inflammation disrupts neurotransmitter balance, increasing depression risk, while stress and hormonal disturbances from depression promote unhealthy eating



habits. This creates a cycle that fuels further metabolic and psychological issues.

**The overlooked link between hypertension and osteoporosis:** Hypertension, a major cardiovascular risk factor, also affects bone health. It accelerates calcium loss through urine, weakening bones over time. Chronic inflammation and oxidative stress further contribute to osteoporosis, highlighting the unexpected connections between these diseases.

**NAFLD—the silent epidemic:**

NAFLD, caused by excessive fat accumulation in the liver, is now the most common chronic liver disease worldwide. It is not just a liver condition but a systemic issue that exacerbates insulin resistance, cardiovascular disease, and chronic inflammation, making it a central player in this disease network.

**Breaking the chain: A holistic approach**

Given the interconnected nature of chronic diseases, an integrated healthcare approach is crucial:

**Dietary interventions:** Anti-inflammatory, fiber-rich diets like the Mediterranean or DASH diet can improve glucose metabolism and overall health.

**Physical activity:** Regular exercise enhances insulin sensitivity, reduces inflammation, and supports mental health. Resistance training preserves bone density, while cardiovascular exercise benefits heart health.

**Mental health support:** Addressing stress and depression through therapy, mindfulness, and social support can break the cycle of declining mental and physical health.

**Early screening and integrated care:** Routine check-ups and interdisciplinary care from nutritionists, endocrinologists, cardiologists, and mental health professionals can improve outcomes.

To combat chronic diseases effectively, we must move beyond isolated treatments and adopt a systemic approach. Recognizing the interconnectedness of these conditions will allow for better prevention, management, and a healthier future.

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## How mental health affects self-confidence in thinking

A new study published in PLOS Mental Health found that people with anxiety and depression often doubt themselves, while those with compulsive behaviours (like obsessive-compulsive disorder) tend to be overconfident in their thinking.

Researchers studied how well people judge their own memory and perception. They discovered that those with anxiety and depression were less confident in their abilities, even when they performed well. On the other hand, people with compulsive tendencies were often too sure of their decisions, even when they made



mistakes. The study also found that these confidence patterns exist at different levels. Some people struggle with confidence

in specific tasks, like remembering details, while others have a more general lack of self-trust, affecting their overall self-esteem.

Understanding these thinking patterns could help improve mental health treatments. By helping people recognise and adjust their confidence levels, therapists might be able to reduce anxiety, depression, or compulsive behaviours.

In short, the way we think about our own thinking—called metacognition—affects our mental well-being. Learning to balance confidence could be key to improving mental health.

## Bangladeshi medical students shine at prestigious SCALPEL IV symposium in Barcelona

STAR HEALTH REPORT

Bangladesh has achieved a mentionable feat in the global medical community as two of its young medical students were invited to participate in the prestigious SCALPEL IV Symposium in Barcelona. Out of all the participants from Asia, only two were selected from Bangladesh: Rakibul Hossain Rafi, a final-year student at Uttara Adhunik Medical College, and Muhtasim Islam, a final-year student at Shaheed Suhrawardy Medical College. Their participation in this highly competitive event was a significant achievement. Held from February 15-17, 2025, at Campus del Mar, Pompeu Fabra University, the SCALPEL IV Symposium was a premier international event for aspiring surgeons.

This year's edition was particularly special as it marked the international version, attracting over 150 participants from various universities across Europe. The symposium provided a unique platform for students to explore the latest advancements in surgery through a range of engaging activities. The event featured expert-led conferences covering cutting-edge topics such as vascular surgery, emergency surgery, uterine transposition, robotic surgery, bariatric surgery, and the role of women in surgery. These sessions allowed participants to gain valuable insights from renowned professionals in the field. Alongside the conferences, interactive workshops were conducted, offering hands-on experience in vascular surgery, cardiac surgery, ophthalmological techniques, orthopaedics, trauma surgery, gynaecology, and robotic surgery.

Beyond technical learning, the symposium also emphasised networking and collaboration, providing opportunities for students to connect with experienced doctors, residents, and fellow aspiring surgeons.

This exchange of knowledge and experiences fostered a sense of global community among those passionate about surgery. For Bangladesh, the selection of Rakibul Hossain Rafi and Muhtasim Islam at such a prestigious international event underscores the growing presence of Bangladeshi medical talent on the world stage.

Their participation reflects the dedication and potential of young medical professionals in the country, inspiring future generations to pursue excellence in surgical education and research. This achievement is a proud moment for Bangladesh, demonstrating that its medical students are not just keeping up with global advancements but are actively contributing to the field.

As these young professionals continue their journey, their experience at SCALPEL IV will undoubtedly serve as a stepping stone toward even greater contributions to medical science and surgery.

CHANGING MINDSETS:

## Empower yourself to make ear and hearing care a reality for all!

World Hearing Day 2025, celebrated on March 3<sup>rd</sup>, emphasises the theme, "Changing mindsets: Empower yourself to make ear and hearing care a reality for all." This campaign encourages individuals of all ages to prioritise their ear and hearing health. It builds on the 2024 focus by urging people to protect their hearing from loud noises, regularly check their hearing, and use hearing aids when necessary.

The World Health Organisation (WHO) aims to shift attitudes towards hearing health, motivating people to adopt healthier habits that prevent hearing loss. The campaign also highlights the importance of supporting those who are already living



with hearing loss, fostering an inclusive approach to hearing health.

Key initiatives for 2025 included the launch of the WHO-ITU Global Standard for Safe Listening in video games and sports, as well as a school module on smart listening designed for inclusion in educational curricula. These efforts are part of a broader strategy to create a culture of safe listening and to empower individuals to take control of their hearing health for life.

Source: World Health Organisation