

## Brighter bricks, cleaner air: simple changes in brick kilns bring big benefits

Brick manufacturing is a vital industry in Bangladesh and South Asia, but it is also a major source of harmful air pollution and carbon emissions. These kilns, often powered by coal, contribute significantly to respiratory problems and climate change.

However, a new study led by researchers from Boston University, Stanford, icddr,b, and the Bangladesh University of Engineering and Technology has found a way forward. By providing simple training and support to 276 kiln owners in Bangladesh, the researchers encouraged energy-efficient changes—like better stacking of bricks and using cleaner fuels. These changes led to a 23% drop in energy use and reduced harmful emissions by 20%.

Importantly, 65% of kiln owners adopted these improvements voluntarily—without being forced by law—because they also saved money and improved brick quality. In fact, the social benefits from reduced carbon emissions outweighed the cost of the changes by an incredible 65 to 1.

The success continued into the following year, showing that the improvements were sustainable. If adopted widely, this approach could cut Bangladesh's annual carbon emissions by 2%.

Practical, profit friendly solutions have the potential to improve industries such as brickmaking, provided that there is an investment in training, support, and the well-being of workers. Achieving cleaner air, healthier populations, and a more robust economy can indeed be complementary goals.



## Is stress wrecking your immune system?

DR NUR-A SAFRINA RAHMAN

Stress! It is the constant hum in the background of modern life—whirring through overflowing inboxes, surprise bills, and an endless scroll of bad news. We get used to it, even call it normal. But here's what we rarely talk about: chronic stress does not just mess with your mood—it slowly wears down your immune system.

**How stress disarms your body's defences:** Your immune system is a finely tuned defence network. But when stress lingers, it starts to tamper with your body's built-in protections.

Chronic stress can actually reduce the effectiveness of vaccines. People under high stress may produce fewer protective antibodies—meaning your body may not fully “remember” how to fight off future infections.

**The real immunity myth: can you supplement away stress?** Each winter, there is a rush for vitamins, herbal teas, and “immune boosters”. But the real threat to your immunity might not be in your medicine cabinet—it is in your calendar, your phone, and your overdrive lifestyle. That is not to say nutrition does not matter. But without managing stress, even the best supplements can only go so far. It is time to flip the script on what true immune support looks like.

**Five proven ways to protect your immune system:** The solution is not complicated—but it does require consistency.

1. **Sleep like you mean it** - Your immune system does its best work while you sleep. Aim for 7-9 quality hours. Wind down with rituals—dim lights, a book, deep breathing—and skip the screens before bed.

2. **Move more, not harder** - Exercise strengthens immunity and reduces stress—but more is not always better. Choose moderate activities like walking, yoga, or swimming. Overtraining can backfire, raising cortisol levels.

3. **Feed your defences** - A balanced diet supports gut health—home to a large part of the immune system. Prioritise:

- Brightly coloured fruits and vegetables
- Lean protein sources like legumes, eggs, and fish
- Fermented foods (think yoghurt or kimchi) for beneficial bacteria

4. **Make time to de-stress** - Mindfulness is not fluff—it is medicine. Just 5-10 minutes of daily meditation, breathing exercises, or journaling can help lower cortisol and calm your nervous system.

5. **Do not isolate—connect** - Strong relationships buffer stress. Even short, positive interactions with friends, family, or community members can have measurable effects on immune resilience.

**Your strongest shield? Stress awareness:** Stress is invisible, but its effects are not. And while supplements may help, no pill can offset a lifestyle that is constantly in overdrive.

Supporting your immune system starts with giving your mind and body a break. That does not mean overhauling your life—it means tuning in, slowing down, and making space for rest, connection, and joy.

Your immune system is always working for you. Is not it time you returned the favour?

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## BREASTFEEDING VS. THE BOARDROOM

# Workplace barriers to breastfeeding

DR SHAHED IMRAN

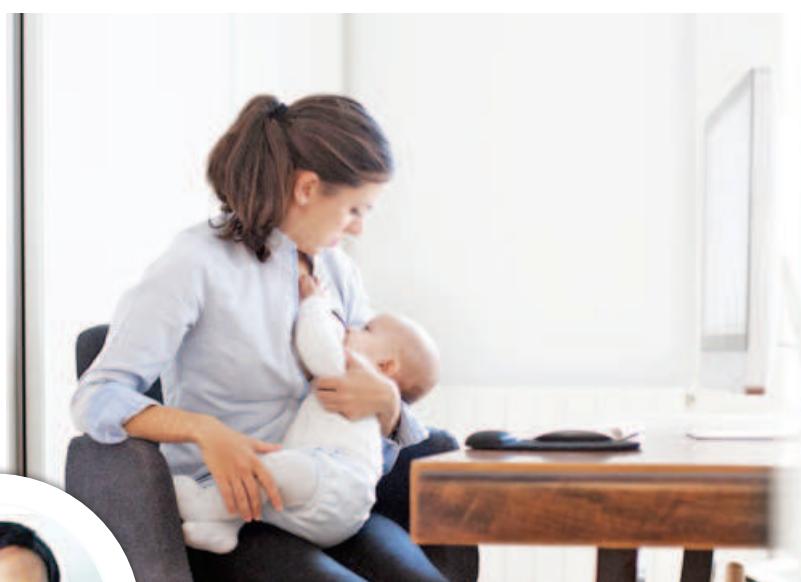
Exclusive breastfeeding (EBF) is considered the gold standard for child nutrition, significantly contributing to the intellectual development and overall health of a child. The World Health Organisation (WHO) recommends exclusive breastfeeding for the first six months of life, followed by continued breastfeeding along with appropriate complementary foods up to two years of age.

Breastfeeding provides essential nutrients crucial for a newborn's growth, development, and survival. Despite these well-established benefits, globally only 44% of infants aged 0-6 months are exclusively breastfed. Alarmingly, according to the Bangladesh Demographic and Health Survey (BDHS) 2022, the rate of exclusive breastfeeding in Bangladesh has declined from 65% in 2018 to 55% in 2022.

Research shows that exclusive breastfeeding in the first six months strengthens a child's immune system, protecting them from diarrhoea and acute respiratory infections—leading causes of child mortality in underdeveloped countries.

Qualitative studies conducted in Dhaka and other urban and rural areas have identified significant barriers to optimal breastfeeding practices among working mothers. However, comprehensive research focusing specifically on exclusive breastfeeding practices among corporate-sector working mothers in Bangladesh remains limited.

Breastfeeding not only enhances sensory and intellectual development but also protects children from infectious and chronic diseases later in life. It reduces infant mortality, speeds up recovery from illness,



and offers long term benefits for maternal health, including regulating menstrual cycles. Failure to breastfeed exclusively for the first six months is linked to various childhood illnesses, stunted growth, poor academic performance, reduced productivity, and compromised intellectual development.

While the desire to breastfeed is natural for mothers, environmental challenges can often disrupt this process. Common issues such as breast engorgement, plugged ducts, and mastitis can lead to temporary or permanent cessation of breastfeeding.

Several factors contribute to the low EBF rates, including cultural and traditional beliefs, socioeconomic conditions, maternal employment, educational background, father's occupation, misinformation, delivery method and positioning, and maternal health complications.

Additionally, inadequate laws and regulations surrounding maternity leave pose significant challenges.

Studies suggest that a mother's mandatory presence at the workplace can hinder consistent breastfeeding. With rapid development and industrialisation, over 600,000 women have joined the workforce in Bangladesh, making this issue even more pressing.

Promoting exclusive breastfeeding is vital for improving child health outcomes and reducing infant mortality rates in Bangladesh. Government and NGO initiatives are working to educate mothers and communities about EBF and to provide the necessary support for its successful practice.

Corporate workplaces need to become more mother-friendly. Implementing and maintaining inclusive maternity and paternity leave policies is essential. With cooperation from all sectors, Bangladesh can work toward achieving a higher rate of exclusive breastfeeding—benefiting not just mothers and children, but society as a whole.

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## Which is better for children with asthma: syrup, nebuliser, or inhaler?

DR AHAD ADNAN

Treating a child's asthma presents certain difficulties for paediatricians. The first is that parents are unwilling to acknowledge that asthma may strike youngsters as well. Child asthma is indicated by recurrent coughing, nighttime awakenings due to coughing, and temporary alleviation of respiratory symptoms following the use of certain medications, particularly nebulised treatments. These kids frequently have a runny nose, scaly scalp, itchy skin, and a family history of the same condition.

Worldwide asthma treatment guidelines are established by the Global Initiative for Asthma (GINA), an international organisation. For specific reasons, medical professionals are recommending the use of inhalers for asthma medicine and discouraging the use of oral medications.

1. The oral version of a certain medication is required in the greatest quantity, followed by the nebulised form and the inhaler in the least amount. Therefore, the latter version is likely to have the fewest adverse effects.



2. In addition to the lungs, oral medications have adverse effects on the stomach, kidneys, liver, and heart. In contrast, inhaler drugs only directly affect the lungs.

3. The cornerstone of asthma treatment is steroids. After extended use, they cause a number of adverse effects. These oral medications might cause short stature, mouth infections, heart problems, stomach issues, and other issues in growing children. It is surprising to learn that inhaled steroids virtually never cause these issues.

4. Controlled asthma is achieved by using a regular inhaler.

5. The cost of treatment is a significant concern. The initial cost of the inhaler and spacer is a clear worry. However, we can conclude that inhalers are reasonably priced when taking into account the limited usage of other treatments and overall health over time.

Despite the foregoing counselling, the guardians continue to have doubts, primarily due to superstition and carelessness. For these, we also have answers.

• Does an inhaler have a negative

### impact on the heart?

The right inhaler dosage and timing have no effect on the heart. Instead, some oral medications can occasionally produce tremors, palpitations, and an elevated heart rate.

• Is an inhaler a medication that lasts a lifetime?

Asthma in children is basically unrelated to adult continuation. The majority of teenagers are symptom-free from childhood asthma. Two elements are important here: confirming asthma with tools like the FeNO test and spirometry, and adjusting medication through regular evaluation. Maintaining a respiratory-friendly lifestyle is essential.

• Is not the inhaler a module for adults?

The inhaler is only a method of drug use. Medication dosages for children are closely adhered to.

• Despite utilising an inhaler, asthma control is not being attained. Why?

A child's doctor must verify that a spacer is being utilised correctly. It is necessary to screen out other potential related morbidities such as immunological deficiency, GERD, heart disease, TB, and cystic fibrosis. Asthma control is required for a considerable amount of time with “difficult asthma”.

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## HAVE A NICE DAY

### Troubled parents, troubled children

DR RUBAIUL MURSHED



Parenting is one of life's most powerful responsibilities. It is not just about raising kids—it is about shaping the next generation. Research in behavioural genetics and developmental psychology shows that while genetics accounts for about 40-50% of differences in traits like temperament and intelligence, the rest is shaped mainly by environmental factors, particularly the home. Other key influences include friendships, access to education, and connection with nature—elements of the broader social and ecological systems that shape a child's life.

Parents are a child's first and most lasting environment. The way they express love, set boundaries, and manage emotions teaches children how to understand relationships, self-worth, and safety. Between the ages of 4 and 16, children go through critical developmental changes that shape how they think, feel, and interpret the world. These years build the foundation for emotional regulation, confidence, and core beliefs.

When parents struggle with unresolved emotional pain—chronic stress, trauma, or neglect—those wounds can silently ripple into a child's life. As Dr Bruce Perry emphasises, early experiences do not just affect feelings—they shape brain development. A home filled with fear or criticism can leave lifelong scars.

Research shows that harsh parenting—yelling, scolding, or physical punishment—can harm a child's emotional well-being. Such children may grow up anxious, withdrawn, or insecure. However, this is not about blaming parents—it is about awareness. Children do not need perfect parents; they need present, caring ones. Even imperfect efforts at consistency, listening, and love can heal and shape resilient adults.

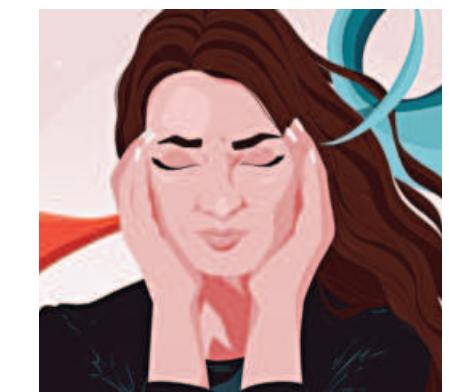
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## New guidelines aim to help prevent migraine attacks

The American College of Physicians (ACP) has released new guidelines to help prevent episodic migraines—those intense, recurring headaches that can last from hours to days and are often accompanied by nausea, light sensitivity, and more.

Many people suffer from migraines but never receive proper preventive treatment. The updated guidelines focus on helping doctors choose effective medications that patients can afford and are likely to stick with.

The ACP recommends starting with commonly available oral medications that have been proven to reduce the frequency and severity of migraine attacks. If those are not effective or cause side effects, newer treatments—designed specifically to



## Youth wellness in focus: insights from the 2025 festival survey

STAR HEALTH REPORT

Dhaka Flow's Second National Youth Wellness Festival 2025 brought together students from ten top universities in Bangladesh to explore mental health, emotional wellbeing, and sustainable living. Key messages included: “Healing is cool, seeking help is courageous, and movement is critical.”

A large-scale survey conducted during the festival revealed youth realities—stressing both urgent challenges and powerful potential. Reaching hundreds of students aged 19-24, primarily from Computer Science & Engineering (25.3%) and Business Administration (24.1%), the data showed 35% feel stressed daily and 20.8% feel mentally overwhelmed every day. Nearly a quarter sleep only 5-6 hours per night.

Despite these struggles, 85% of students actively participate in climate-positive



actions, and 75% feel confident leading community change. Yet emotional isolation remains: 19% feel lonely often, and 28.6% lack a safe space for creative expression. While 43% engage in moderate physical

activity, 12% are sedentary. Abuse is a key issue, with over 11% reporting regular experiences.

The report offers concrete recommendations: policymakers should fund campus-based mental health programmes and expand access to green spaces; universities must enhance counselling and create 24/7 wellness zones. Curriculum designers should integrate emotional intelligence and sustainability, while companies can offer flexible internships and wellness benefits.

Students are urged to build peer support networks and prioritise self-care. Media must promote youth-led change and reject burnout culture.

Bangladesh's future depends on empowered youth. Let us ensure their journey is not only ambitious—but supported, sustainable, and whole.

block migraine-related proteins—may be considered. As a third option, other well-studied medications can be tried when earlier treatments do not work.

Cost and personal preference matter. Some treatments are much more expensive than others, and not everyone wants to use injectables or newer drugs. The guidelines encourage doctors to consider a patient's financial situation and lifestyle when choosing the best option.

Sticking with treatment is important, as benefits might not show up right away. It can take several weeks to see real improvements, so consistency is key.

These evidence-based recommendations are designed to help doctors better manage migraine prevention in everyday clinical settings—improving care for millions of people living with this disabling condition.

Source: <https://www.acponline.org/acpnewsroom/new-acp-guideline-on-migraine-prevention-shows-new-clinically-important-advantages-for-newer>