

## ChatGPT can (almost) pass the US **Medical Licensing** Exam

The artificial intelligence (AI) software was able to achieve passing scores for the exam, which usually requires years of medical training.

 $Chat GPT can score \, at \, or \, around \, the \, approximately \,$ 60 percent passing threshold for the United States Medical Licensing Exam (USMLE), with responses that make coherent, internal sense and contain frequent insights, according to a study published February 9, 2023 in the open-access journal PLOS Digital Health by Tiffany Kung, Victor Tseng, and colleagues at AnsibleHealth.

ChatGPT is a new artificial intelligence (AI) system, known as a large language model (LLM), designed to generate human-like writing by predicting upcoming word sequences.

Kung and colleagues tested ChatGPT's performance on the USMLE which is required for medical licensure in the United States. Taken by medical students and physicians-in-training, the USMLE assesses knowledge spanning most medical disciplines, ranging from biochemistry to diagnostic reasoning, to bioethics. After screening to remove image-based questions, the authors tested the software on 350 of the 376 public questions available from the June 2022 USMLE release.

After indeterminate responses were removed, ChatGPT scored between 52.4% and 75.0% across the three USMLE exams. The passing threshold each year is approximately 60%. Notably, ChatGPT exceeded the performance of PubMedGPT, a counterpart model trained exclusively on biomedical domain literature, which scored 50.8% on an older dataset of USMLE-style questions.

The authors note their findings provide a glimpse of ChatGPT's potential to enhance medical education, and eventually, clinical practice. For example, they add, clinicians at AnsibleHealth already use ChatGPT to rewrite jargon-heavy reports for easier patient comprehension.

## BREAKING THE CHAINS

# The devastating impacts of domestic violence on mental wellness

DR NUR-A-SAFRINA RAHMAN

Domestic violence is a worldwide issue. Research shows women are more likely to be abused at home. Men are also victims of domestic violence, but they sometimes find it difficult to accept that they are being mistreated or to seek help. Kids are long-term victims of domestic violence.

#### Reasons for domestic violence:

Domestic violence has several causes. One key issue is masculinity. Research reveals that traditional and toxic masculinity, which emphasises dominance, control, and aggression, contribute to domestic violence. In such cases, men may use violence to dominate their intimate relationships. Some other key factors that contribute to the occurrence of domestic violence include:

1. Power imbalances like unequal allocation of family tasks, decisionmaking power, and financial

2. Alcohol and drug use impair judgement and increase aggression, making domestic violence more

3. Childhood trauma increases the risk of adult abuse.

4. Mental health issues like depression, anxiety, and personality disorders.

5. Societal attitudes like "the victim is at fault" can contribute to its recurrence.

Impact of domestic violence on partners:

Domestic violence can have lifelong mental health effects. Abuse can cause mental health disorders like:

1. Post-Traumatic Stress Disorder (PTSD): Abused person may have symptoms including flashbacks, nightmares, and anxiety.

can leave victims feeling hopeless and

3. Anxiety: Survivors may have panic episodes, excessive worry, and safety concerns.

4. Substance abuse: Trauma survivors may take drugs to cope. 5. Self-harm: Abuse survivors may



self-harm to cope with emotional agony.

Indirect impact of domestic violence on children:

Domestic violence has been proven in studies to have a variety of detrimental impacts on children, including different behavioural issues.

• Children who see domestic violence can be affected by trauma in their mental, emotional, and social

• They may battle with guilt, shame, uncertainty, fear, insecurity, trust, and unhealthy relationships in the future.

• Long-term consequences could include an increased likelihood of developing mental health disorders and engaging in violent behaviour later in life.

#### Preventing domestic violence:

Communication: positive, and honest communication is one of the best strategies for a marriage to prevent conflict. Learn healthy and non-violent ways to resolve conflicts.

2. Mutual respect: Respecting 2. Depression: Domestic violence each other and avoiding namecalling, criticism, and humiliation might reduce violence.

3. Seek help: If one spouse struggles to manage their anger or has a history of violence, talking to friends, relatives, a therapist, or a counsellor can lessen the risk of

4. Education and awareness: Raising people's awareness and teaching them about healthy relationships and ways to solve problems without violence can help stop violence.

5. Addressing underlying causes: Domestic violence often stems from larger societal issues, such as poverty, gender inequality, and substance abuse. Addressing these underlying causes can help prevent domestic violence.

6. Support for victims: Providing support to victims, including safe housing, counselling, and legal aid, can help them escape abusive situations and rebuild their lives.

7. Providing training and resources to professionals: Providing training and resources to professionals such as law enforcement officers, medical personnel, and social workers can help them respond appropriately and effectively to domestic violence cases.

Parents can also teach their children about respecting others' personal boundaries and asking permission in all interactions and create an environment where their children can express their feelings and feel heard and acknowledged. If a child reports abuse, parents should listen and help them find help. Thus, parents can prevent domestic violence and create a safer, more peaceful future.

The writer is a public health specialist.

### HAVE A NICE DAY The sad generation

DR RUBAIUL MURSHED

Currently, the world is transforming into an unpredictable place that no one can foresee. These turbulent times are most frightening because younger mindsets can have depression, or post-traumatic stress disorder or emotional unavailability.

Already we have developed a huge generational gap in how much they think of technology and moral values as major factors in social change. Furthermore, there is a lack of quality conversation and collapses of family values such as empathy, and a sacrificing attitude. These lead to damaged relationships in families. We

are becoming more and more unable to read their emotional needs. This type of neglect can have short and long-term consequences for the coming generation.

Understanding the power of mindsets among Generation Z or or "Gen Z" and Millennials is crucial for social scientists. Following the Silent Generation

(1925-1945) and the Baby Boomers Generation (1946-1964), Generation X (1965-1979) and Millennials (1980-1994) began. Gen Z is broadly defined as people born between 1997 and 2012. Gen Alpha (2013-2025), the latest one, may have a completely different mindsets.

According to studies, inflation is a top problem for Gen Z and Millennials. Overdependence and addiction to technology ranked second as the top problem among young people. However, racism, discrimination are still their top concerns that they are facing today. With the digital world constantly evolving, most people are spending their time online. So, how much time does Gen Z spend online? A widely quoted report found that, , Gen Z users use digital devices more than millennials.

The world has changed, and so have the needs of citizens. It is an alarming and sad time for Gen Z and Millennials because it is the most toxic time since the cold war.

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## Rehabilitation physiotherapy for bone fracture

BIBEKANANDA SARKER

Bone fracture is one of the leading causes of accidents in the age of modern mechanical work. For mechanical accidents, sports accidents, and other reasons, the number of fractured patients is increasing day by day. According to the World Health

Organisation (WHO), 3.8% of people suffer from fractures.

What is a bone fracture?

fracture a partial complete fracture of a bone interferes with the normal functioning of the bone and surrounding areas.

**Causes of bone fracture:** Fractures are more likely to be due to

accidental injuries. Example:

1. Generally, fractures happen due to direct injury.

2. Sometimes fracture can occur when people suddenly fall from a greater height.

3. Suddenly apply a strong bone twist or rotating force.

pressure on a bone.

Risk factors of bone fracture: 1. If the bone density decreases for

any reason. 2. If there is osteoarthritis in the bones.

3. If there is any pathological cause in the bones.

> c o m m o n symptoms of a broken bone are:

fractured area

will be extremely painful. 2. Most of the

fractured area will swell immediately. 3. The normal motion of the joint

near the bone will decrease. 4. Other symptoms may also occur depending on the location of

What to do if the bone is broken or what is the treatment?

1. First, obtain an X-ray of the patient with a broken bone to 4. If you suddenly put too much determine the extent and type of bone fractures. The X-ray will capture the correct bone position of the patient. It needs to be supervised by a general practitioner or orthopaedic surgeon.

2. Following proper bone positioning, the affected bone fracture area should be immobilised or bandaged. Plaster or a suitable brace should be used to re-x-ray the area of the affected bone with plaster or a suitable brace to make sure that the position of the bone is correct.

The role of physiotherapy for fractured patients:

Physiotherapy is essential to restore or rehabilitate fractured patients, as they may experience a variety of deformities, muscle spasms, and reduced joint mobility if they do not receive proper physiotherapy. For proper rehabilitation after a fracture, patients should take physiotherapy, which must be supervised by a graduate physiotherapist.

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## **UNFPA** and BRAC hosted knowledge dissemination event on COVID-19

the fracture.

STAR HEALTH REPORT

BRAC Health, Nutrition and Population Programme (HNPP) with support from the Directorate General of Health Services (DGHS), United Nations Population Fund (UNFPA), and The World Bank, has actively worked in 6 sub-districts of Cox's Bazar since 2021 through the Community Support Team (CST) initiative, with an aim to prevent COVID-19 cases, build community resilience, and reduce healthcare facility load - especially in the

remote areas. In the event jointly hosted by UNFPA and BRAC on 5 February 2023 at Amari Dhaka, the findings on COVID-19-related knowledge and practices from 6 intervention

areas of Cox's Bazar were shared. Since inception, CST Cox's but consistent approaches in



and replicating recommended behaviours. Community members were informed about mask use, hand washing, social distancing, and immunisation through direct communication, traditional and neo-media channels, and interactive exercises.

In the event, Dr. Avijit Saha, Bazar has developed innovative Senior Research Fellow, BRAC James P Grant School of Public designing and conducting social Health presented the status the effect of COVID.

of awareness about COVID-19 symptoms, mode of transmission, prevention measures (handwashing, mask-wearing, social distancing) and vaccination across all locations. According to the study, 70% of people were aware that washing their hands with soap and water reduced the possibility of being affected by coronavirus. He also highlighted that 80% of participants have known about the importance of vaccines to reduce





comprehensive management to unleash their potential

- Developmental Assessment & Therapy
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