Trying to quit smoking? E-cigarettes may make things worse

Not only can e-cigarettes cause as much harm as normal cigarettes, research shows there is no conclusive or strong evidence for any beneficial outcome from e-cigarettes, say two academics.

SYDNEY: A major review on the health effects of e-cigarettes reflects what public health advocates have feared: Escalating use of e-cigarettes in school-aged children, early warning signs of increased smoking rates in young Australians and direct health harms of vaping in all ages.

The review, which was released was commissioned by the federal health department and conducted by researchers at the Australian National University. Overall, it found that the health risks from e-cigarettes significantly outweighed any potential benefits. The review should silence lobbyists, who have long used data selectively to promote the sale of e-cigarettes. This is despite the fact that previous reports, none as comprehensive and rigorous as this latest review, have delivered similar findings. The review looked at the evidence behind the health impacts of e-cigarettes or "vapes" – a diverse group of devices that aerosolise a liquid for inhalation. These are touted as a safer alternative to cigarettes and an aid to quit smoking.

USING E-CIGARETTES INCREASES LIKELIHOOD OF SMOKING

The review found conclusive clinical evidence that e-cigarettes cause acute (short-term) lung injury, poisoning, burns, seizures, and their use leads to addiction. They can also cause less serious harm, such as throat irritation and nausea. Evidence that e-cigarettes produce airborne particles in indoor environments (potentially harming non-users) was also conclusive. Among the evidence ranked as strong, the review confirms what has worried tobacco control experts since patterns of e-cigarette use first emerged: People who have never smoked or are non-smokers are three times as likely to smoke if they use e-cigarettes, compared with people who have never used e-cigarettes. This is a dream for tobacco companies and their retail allies.

LIMITED EVIDENCE OF HELPING PEOPLE QUIT SMOKING The review found limited evidence that e-cigarettes assist individuals to stop smoking. But this is no stronger than evidence showing that e-cigarette use might also cause former smokers to relapse and revert to tobacco. There is no conclusive or strong evidence in the review for any beneficial outcome from e-cigarettes. E-cigarettes might help some individuals stop smoking. So they should only be available via a prescription from authorised medical professionals trained in helping people to quit. Any access beyond this risks serious harm for no benefit. Australian Institute of Health and Welfare data shows that the age group most likely to use e-cigarettes in their lifetime are 18 to 24-year-olds. This has risen from 19 per cent in 2016 to 26 per cent in 2019. Of e-cigarette users who identify as smokers, the second largest user group is 14 to 17-year-olds. Dual-use is starting young, from the limited Australian Institute of Health and Welfare data we have. The Australian Institute of Health and Welfare data precedes increasingly visible use of e-cigarettes in Australian schools, as reported in the media. The review also shows young males are the leading e-cigarette user group by age and sex. Australian males aged 18 to 24 are also the only age group that, on the latest Australian Institute of Health and Welfare data, is smoking at greater rates than they were three years earlier. Whatever benefits might be delivered by e-cigarettes, such as helping people to quit smoking, would, according to the review, be modest compared with the harms they are likely to cause.

LAWS TO LIMIT ACCESS NEED STRICTER ENFORCEMENT: Federal, state and territory governments have enacted policies aimed at providing e-cigarette access to individuals who might benefit from them to quit smoking while protecting everyone else. But the evidence on how widely e-cigarettes are used shows these policies need to be more tightly enforced.

It's still easy to buy e-cigarettes online, they are available without prescription from petrol stations, tobacconists and speciality "vape" stores, and are resold by entrepreneurs – all of them acting unlawfully. Heavy fines will end their cash incentive. The review shows that the risks to public health posed by e-cigarettes will only grow unless governments enforce their laws. This is to protect young Australians from becoming the first generation since trend data was collected to smoke and use nicotine at higher rates than their predecessors. **—CNA**

Low salt diet and heart failure: Surprising findings on life quality, hospitalisation

It is unclear what the full benefits of maintaining a low salt diet are for people with heart failure. A new study has found that low salt diets may improve the quality of life and some symptoms in people with heart failure.

However, the research also suggests that low salt diets might not reduce hospitalizations related to cardiovascular problems.

Doctors have long recommended decreased salt intake for heart failure or other cardiac problems. However, research is still ongoing about how effective low sodium intake is in reducing events of hospitalization or emergency room visits. A recent studyTrusted Source published in The Lancet found that while low sodium diets might help improve the quality of life for people with heart failure, they did not reduce clinical events like hospitalization or emergency room visits. Heart failure and low salt diet recommendations Heart failureTrusted Source is when the heart cannot effectively pump blood to meet the body's demands. As a result, the body cannot get the nutrients and oxygen it needs. Heart failure is chronic. People with heart failure can experience a variety of symptomsTrusted Source, including the following: Shortness of breath, persistent coughing or wheezing Swelling because of the buildup of excess fluid Feeling tired or fatigued Increased heart rate, feeling heart palpitations The New York Heart Association (NYHA) Functional ClassificationTrusted Source is one standard used to classify heart failure. This system places people in one of four categories based on how much their heart failure interferes with their ability to do things and their symptoms brought on by activity.

Many organizations and doctors encourage people who have heart failure to reduce the amount of salt in their diets. In theory, reducing the amount of sodium Trusted Sourcehelps to prevent fluid overload in people with heart failure. Dr. Edo Paz, cardiologist and vice president of Medical at K Health, who wasn't involved in the study, explained to Medical News Today: "We have long instructed patients with congestive heart failure to limit consumption of sodium, as sodium can lead to fluid retention, which can result in heart failure exacerbations." Researchers in the current study found that reducing sodium intake can benefit people with heart failure. However, they found it might not help prevent hospitalizations and other adverse clinical outcomes. Their findings offer more insight into the recommendation for sodium intake for people with heart failure. **—AFP**

Anxiety prescriptions on the rise among young adults

Researchers explored trends in prescribing treatments for anxiety in the United Kingdom primary care between 2003 and 2018.

Prescriptions for anxiety increased sharply between 2008 and 2018, particularly among young adults. The authors say that some prescribing contradicts guidelines and may cause unintended harm. Feelings of worry or nervousness are a part of life for many people. However, when feelings of worry become persistent, distressing, and interfere with daily life, anxiety may require treatment.

This is not uncommon; anxiety disorders are the most common group of mental health conditions in the United States, affecting approximately 40 million people. Medications for anxiety – known as anxiolytics – include benzodiazepines, beta-blockers, antipsychotics, and anticonvulsants. Antidepressants, including selective serotonin reuptake inhibitors (SSRIs), may also be prescribed for anxiety.

Recent research has shown an increase in prescriptions for depression, with one study in England finding a tripling of prescriptions for antidepressants in 20 years. However, prescribing patterns for anxiety are less well understood. To investigate this, a team of researchers from the University of Bristol, U.K. evaluated prescriptions for anxiety in U.K. primary care. Their results, now published in the British Journal of General Practice, show a steep rise in prescribing for anxiety between 2008 and 2018, particularly among young adults. Data from 2.5 million people

The researchers used data from an anonymized database of electronic health records in the U.K. This included data from more than 2.5 million people registered at 176 primary care practices across the U.K.

The results showed a significant increase in prescribing for anxiety. Prevalence of prescriptions of all drugs, excluding benzodiazepines, increased over the study period, with a marked increase from 2008 to 2018. Over the complete study period (2003–2018), the prevalence of prescriptions for anxiolytic drugs increased by almost a factor of two. This trend was driven by increases in new patients beginning treatment for anxiety and in particular among young adults (ages 18–35).

This mirrors an increase in the number of people being diagnosed with anxiety, Prof.Thalia Eley, Professor of Developmental Behavioural Genetics at King's College London, told Medical News Today. **—AFP**

Can some anti-nausea drugs increase stroke risk?

A new study of participants aged 71.9 years, on average, found a link between the use of anti-nausea medication and increased stroke risk. A recent study found that certain anti-nausea and vomiting medications tripled the risk for ischemic stroke. The risk was highest for metopimazine, followed by metoclopramide, and then domperidone. More studies are needed to confirm the findings. Providers may use antipsychotic medicationsTrusted Source to treat conditions such as schizophreniaTrusted Source, psychotic depressionTrusted Source, bipolar disorderTrusted Source, and dementia, which cause symptoms of psychosis or losing touch with reality. Excess dopamine may play a role in psychosis. DopamineTrusted Source is a chemical messenger or neurotransmitter that influences mood, feelings of reward, and movement. Antipsychotics Trusted Sourcework by blocking dopamine receptors in the brain, which causes a decrease in dopamine levels.

Antipsychotic stroke risk There is an associationTrusted Source between antipsychotic use and dementia in older adults and an increased risk for ischemic strokeTrusted Source or a blood clot blocking blood flow in the brain. Data from these studies led the United States Food and Drug Administration (FDA) to issue a black box warningTrusted Source to warn older people with dementia of the increased risk of death with antipsychotic use. Other medications to treat nausea and vomiting associated with chemotherapy or migraine also block dopamine receptors or antidopaminergic antiemetics (ADA). ADAs block dopamine transmission to the intestines and the chemoreceptor trigger zoneTrusted Source in the brain, responsible for relaying signals causing vomiting. **—Agencies**

Voice characteristics may predict coronary heart disease risk

A new study shows that voice analysis, including characteristics such as pitch and amplitude, can predict the risk of coronary heart disease and its complications. This novel approach involves the use of artificial intelligence algorithms to analyze voice samples collected with the help of a mobile application. This voice analysis technology could serve as a cost-effective and convenient approach for screening individuals at risk of coronary artery disease. Coronary artery diseaseTrusted Source, the most common form of heart disease, affects Trusted Source18.2 million individuals ages 20 years and older in the United States. Researchers at the Mayo Clinic in Rochester, MN, in collaboration with a researcher from the University of Tel Aviv, Israel, have shown that the analysis of voice samples using artificial intelligence can help predict the risk of coronary artery disease and its complications, such as a heart attack or chest pain. The early detection of coronary artery disease using this voice analysis approach could potentially improve patient outcomes. This approach relies on the collection of voice samples using a mobile application and could serve as a cost-effective and noninvasive method to remotely screen individuals at risk of coronary artery disease. Voice samples analysis could be used as a preliminary tool for identifying patients in need of closer attention for coronary artery disease events. The study's co-author, Dr. Jaskanwal Deep Singh Sara, a research fellow at Mayo Clinic, says, "We're not suggesting that voice analysis technology would replace doctors or replace existing methods of healthcare delivery, but we think there's a huge opportunity for voice technology to act as an adjunct to existing strategies. **—Agencies**