

Message from the Tonic Media Network Editorial Committee*

Welcome to the end of year edition of Practice Connect for 2023. We trust that you and your team found the content this year to be timely, beneficial and interesting.

Tonic TV

For those of you who have a Tonic TV installed at your practice, we can help you advertise your changes in operating hours over the holiday period on Tonic TV. We can also arrange for the TV to automatically turn off for the times when you are closed.

You can also let us know if you would like Tonic TV installed at your practice. Please contact our team by emailing customercare@tonicmedianetwork.com.au

Effects of day and night light exposures on mental health

According to the Black Dog Institute, one in five (20%) Australians aged 16-85 experience a mental illness in any year. The importance of seeking out a healthy (and non-sunburning) level of sunlight in the day is well known, with multiple studies showing those who get a dose of daylight regularly seem to be healthier. But light exposure at night is less understood. It is becoming ever more relevant particularly with a multitude of devices keeping us bathed in light well into the night. In a <u>new study</u> researchers have quantified the effect of day and night light exposure on peoples' mental health and mood – and the effects are significant.

They used data from the UK Biobank, a group of more than 500,000 people. A subset had a seven-day assessment of their light exposure, and compared that to data on their mental health and general wellbeing. They split participants into quartiles of daytime and nighttime light exposure and were testing two hypotheses – that daytime light exposure is linked to decreased likelihood of mental health disorders and low mood, and that nighttime exposure is linked to increased likelihood.

In the more than 100,000 people analysed, researchers found that their hypotheses were correct. Higher daytime light exposure was connected to lower odds of major depressive disorder and self-harm. Being exposed to more night light was linked to about 30 per cent higher odds of the same, and those with high night light exposure were also more likely to experience anxiety and post-traumatic stress disorder. This held even when researchers adjusted for sex, ethnicity, employment and level of physical activity – and whether or not shift workers were included in the sample. There wasn't a lot of interaction between day and night light (so even those with the greatest exposure to light in the day had an increased risk of depression if their night-light

exposure was high), though they did find that being exposed to light in the day helped to moderate the impact of high night-light exposure on overall wellbeing.

Researchers believe this all ties back to our natural circadian rhythms – and affirms that we should be getting a good dose of bright daytime light while restricting night-time light to support robust mental health. This may also be one of several reasons why other studies looking at physical exercise and time in nature see people get a boost in mood from these activities (often as they come with exposure to natural light) and why high screen time can have a harmful effect on mood.

More information

Day and night light exposure are associated with psychiatric disorders: an objective light study in >85,000 people: Nature Mental Health <u>https://www.nature.com/articles/s44220-023-00135-8</u>

Facts & figures about mental health <u>https://www.blackdoginstitute.org.au/wp-content/uploads/2020/04/1-facts_figures.pdf</u>

Vitamin C deficiency more widespread than we think among certain groups

The human body cannot make vitamin C – we need to get it from food. This key vitamin helps us fight infections, form collagen, absorb iron and is a useful antioxidant when taken in modest doses in food. In severe cases of deficiency, you can get scurvy and while rare, it can still happen. The incidence of vitamin C deficiency isn't well understood, which led Australian researchers to investigate.

In <u>this study</u> of patients at Sydney's Royal Prince Alfred Hospital, researchers analysed tests of vitamin C that had been collected from 13,000 patients over a four-year period from 2017 to 2021.

The results showed vitamin C levels seemed to be significantly connected to geography and likely socio-economic status. 45.6% of tests showed normal vitamin C levels, while 29.9% indicated hypovitaminosis C (a lower level of vitamin C than the ideal) and 24.5% showed significant deficiency (which comes with risk of harm). The deficiency was more prevalent in areas with higher socio-economic disadvantage and in men, older individuals, and those from remote areas. In particular, the study found higher deficiency rates in certain areas of Sydney and regional NSW – like Liverpool in southwestern Sydney which had the highest overall rate of vitamin C deficiency and regional areas Coffs Harbour, Tamworth and Lithgow which also had high rates of deficiency.

These results show vitamin C deficiency may be under-recognised in New South Wales (and by implication, other parts of Australia). Researchers suggest the need for public health interventions to address vitamin C deficiency, particularly in socio-economically disadvantaged areas – saying strategies could include promoting the consumption of vitamin C-rich foods, re-emphasising national dietary guidelines, and making fresh fruits and vegetables more affordable. It would also be useful to do more work identifying specific sub-groups of people who may be at risk and for whom a targeted intervention could be warranted. High dose vitamin C supplements are unlikely to be the answer as in high doses by itself, vitamin C can be a pro-oxidant.

More information

Serum vitamin C status of people in New South Wales: retrospective analysis of findings at a public referral hospital: Medical Journal of Australia <u>https://www.mja.com.au/journal/2023/219/10/serum-vitamin-c-status-people-new-south-wales-retrospective-analysis-findings</u>

Scurvy returns to Australia due to poor diet: myDr.com.au <u>https://mydr.com.au/news/scurvy-returns-to-australia-due-to-poor-diet/</u>

Does tracing relatives help predict coeliac disease?

Many people with <u>coeliac disease</u> are thought to be undiagnosed or diagnosed late, especially children. It can be a challenging disease to detect, which means researchers are looking for innovative ways of picking it up.

In <u>this study</u>, researchers in Brisbane wanted to determine how prevalent coeliac disease was among direct relatives – children, siblings and parents – of people who were diagnosed as having coeliac disease. These relatives underwent genetic tests to detect if they had particular genes relating to coeliac disease risk, plus evaluated their level of antibodies associated with the disease. In all, 202 relatives were screened between 2017 and 2019 (81 males and 121 females, with a median age of 37).

The study found that 86% of relatives had genetic mutations that made them susceptible to coeliac disease. 16 people (mainly children) had positive serology results and after further testing, coeliac disease was confirmed in seven children and two adults by means of small bowel biopsy. This meant that among relatives of people with confirmed coeliac disease, the prevalence of coeliac disease was 11 per cent among child relatives and 1.4 per cent among adult relatives.

Authors say these findings show the importance of active case finding among first-degree relatives of people diagnosed with coeliac disease and that there is likely a delay in diagnosis of this disease given the difference in prevalence detected between children and adults. The high prevalence observed in children, but not adults, may suggest a delay in diagnosis in Australia. This study is the first in Australia to estimate coeliac disease prevalence in first-degree relatives through active case finding, highlighting the need for increased awareness and testing among atrisk groups.

More information

Undiagnosed coeliac disease identified by active case finding in first degree relatives of people with coeliac disease in Australia: a prospective observational study: Medical Journal of Australia <u>https://www.mja.com.au/journal/2023/219/8/undiagnosed-coeliac-disease-identified-active-case-finding-first-degree</u>

Coeliac disease: myDr.com.au <u>https://mydr.com.au/gastrointestinal-health/coeliac-</u> disease/#:~:text=Coeliac%20disease%20is%20an%20immune,or%20both%20of%20these%20g enes

Delays in breast cancer treatment

According to the Breast Cancer Network Australia, the risk of being diagnosed with breast cancer over a lifetime is 1 in 7 for women and 1 in 542 for men. Breast cancer, behind lung cancer, is the most frequent cancer-related cause of death for Australian women. Timely diagnosis and treatment are important since delays may reduce survival rates. Researchers wanted to quantify those issues using high-quality registry data.

The <u>Breast Cancer Outcomes Study</u>, was a population-based cohort analysis of women in Queensland diagnosed with invasive breast cancer between 2010 and 2013, as recorded in the Queensland Cancer Register. Survival data were tracked to the end of 2020. Researchers gathered information through telephone interviews and manual extraction from medical records. They compared the actual treatment intervals experienced by the women against the 2020 guidelines. These intervals included the time from diagnosis to the start of various treatments (such as surgery, chemotherapy, and radiotherapy). They also checked whether these intervals fell within or were later than the recommended durations.

More than 3000 women were included in the study. About 45 per cent experienced noncompliance with the guideline-recommended intervals. The study's key finding was that women who received treatment within the guideline-recommended timeframes had significantly better survival rates compared to those who did not. Specifically, the risk of death from breast cancer was higher in the overall non-compliance group. The study also identified optimal cut-points for treatment intervals, beyond which the risk of death increased significantly.

The study highlights the importance of timely breast cancer treatment and underscores the need for healthcare systems to ensure prompt and efficient treatment pathways for breast cancer patients. The study advocates for more personalised, integrated healthcare approaches to reduce the diagnosis-to-treatment window.

More information

Treatment intervals and survival for women diagnosed with early breast cancer in Queensland the Breast Cancer Outcomes Study: Medical Journal of Australia <u>https://www.mja.com.au/journal/2023/219/9/treatment-intervals-and-survival-women-diagnosedearly-breast-cancer-queensland</u>

Breast Cancer Network Australia: https://www.bcna.org.au/

COVID-19 vaccine booster push as cases surge across Australia

COVID-19 is now one of Australia's leading causes of death according to data from the Bureau of Statistics.

In recent months there has been a significant surge in the number of COVID cases across the country.

Many Australians are under-vaccinated and need to protect themselves against COVID.

Australia's Federal Health Minister, Mark Butler recently said that "Vaccination reduces the risk of serious illness and death from COVID-19, particularly for older adults and those who are immunocompromised."

"While we are no longer in the emergency phase of this pandemic, COVID-19 is still present, and people should continue to follow the advice of the experts from ATAGI, including getting vaccines as required," Mr Butler added.

In September, <u>ATAGI recommended that all adults over the age of 75 receive an additional</u> <u>COVID-19 vaccine dose</u> if at least six months have passed since their previous dose.

New vaccines available in Australia

The Therapeutic Goods Administration has approved new Pfizer and Moderna vaccines which became available in Australia from 11 December 2023. These new Omicron XBB.1.5 subvariant COVID vaccines will provide better protection against the subvariants currently circulating in Australia.

According to the Department of Health, Pfizer's monovalent XBB.1.5 vaccine will be available for use in eligible people aged 5 years and older, while the Moderna monovalent XBB.1.5 vaccine can be used for those aged 12 years and older.

For people who have already had their 2023 vaccines, ATAGI does not recommend any extra doses with the XBB.1.5-containing formula.

ATAGI will provide further COVID-19 vaccination advice early in 2024.

More information

ATAGI recommended COVID-19 vaccine doses: Department of Health

Additional COVID-19 vaccine now recommended for vulnerable Australians Practice Connect

On behalf of the entire Tonic Media Network team, thank you for your ongoing support in 2023. We wish you, your practice team and families, a very happy and healthy festive season. We look forward to working with you in 2024.

*Drs Norman Swan AM and John Aloizos AM