Welcome to 2022: the Year of the Tiger!

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We need strength and courage to live with COVID-19, and still more to overcome chronic social and planetary neglect



elcome to 2022! According to the Chinese zodiac, we are entering the Year of the Tiger, a symbol of strength — and danger. Despite nearly two years of the coronavirus disease 2019 (COVID-19) pandemic, there is much to celebrate, including the huge uptake of vaccination by Australians that has saved many lives and made the return to a more open

lifestyle possible. However, the pandemic has not yet passed, and health and medical professionals will need both strength and resilience during the coming year as we navigate the post-pandemic recovery phase. But as I write this editorial (December 2021), it is clear that Europe and the United States will have tough COVID-19 winters, and the implications of the new Omicron variant of the virus are unclear. We too need to prepare for the possibility of more difficult months ahead as winter approaches. So please get your booster dose of the vaccine when it is due (I have!), celebrate, rest up, re-charge, and gear up for the year ahead!

MIA milestones

We continue to pursue excellence in new formats at the *MJA*, and you can expect to see further enhancements of your *MJA* e-journal experience in 2022. In November 2021, I chaired the highly successful *MJA*-hosted webinar on "how to save lives in the first few days of COVID-19 symptoms", with Associate Professors Lucy Morgan (Concord and Nepean Hospitals) and James Branley (Nepean Hospital) as our expert panellists (https://www.youtube.com/watch?v=VQj6SVEsa6M). Our weekly podcasts featuring *MJA* article authors (https://www.mja.com.au/podcasts) are also very popular, and are widely circulated on social media. The Journal thanks everyone who has contributed to our online offerings, and we plan more webinars this year.

In 2022, we will again publish themed issues in important areas of clinical practice and public health (Box). I am pleased that one will be devoted to surgery, a field in which the *MJA* plans to expand its coverage. We commission articles for our themed issues, but we also welcome spontaneous submissions of perspectives, reflections, narrative and systematic reviews, and research articles. All manuscripts will be subject to our usual rigorous internal and external peer review, and we look forward to bringing readers the latest thinking and advances in these important areas of clinical practice and public health.

We expanded the Editorial Advisory Group in 2021, and I am pleased to announce the list of distinguished researchers, academics, and doctors who have agreed to serve on the panel in 2022 (https://www.mja.com.au/journal/staff/mja-editorial-advisory-committee). In addition to providing strategic advice and expert opinion, the panel advises the Editor-in-Chief on difficult decisions, including complaints, appeals,



and article retractions. I thank all of members of the Editorial Advisory Group for their service.

Open access in the MJA from 2022, at no direct cost to authors

The MJA is a strong advocate of free access to the latest medical findings, which is why our original research articles are available without cost on our website (mja.com.au), as are all articles on Aboriginal and Torres Strait Islander health and health care and articles on COVID-19. However, formal open access (with a Creative Commons licence) provides further major advantages to authors in terms of being able to fully share and archive their work, and open access articles are generally read and cited more frequently. We are therefore very pleased that our publishing partner, Wiley, has negotiated a 3-year open access agreement for the MJA and other Wiley journals with the Council of Australian University Librarians (CAUL), which represents 52 universities and research institutions across Australia and New Zealand.² Authors affiliated with one of the participating institutions (please check with your institution to confirm eligibility) who wish to publish their article with full open access will be able to do so under a Creative Commons licence at no direct cost to the authors. Authors who are not covered under this agreement through their institutions can still purchase gold open access in the MJA (https://www.mja.com.au/journal/mja-instructionsauthors-open-access), which many funders now encourage or require. Overall, this new arrangement is a huge change, and is excellent news for MJA readers and authors, as well as for Australian and New Zealand researchers and funders.

Supporting First Nations education and scholarship

Physical exercise of all types promotes wellbeing, and it is an effective but underused health intervention. I am therefore pleased to report that the *MJA* team has been supporting the Cathy Freeman Foundation Stride for Education virtual runs and walks during November 2021, providing and raising money for this worthy charity (https://www.cathyfreemanfoundation.org. au/strideforeducation). And we got fitter, physically and mentally, to boot! We look forward to when we can again run for the Foundation in the Sydney City-to-Surf, hopefully later this year.

Date	Theme
18 April	Respiratory
16 May	General practice
6 June	Brain and mind
7 July	Indigenous health
1 August	Sex, gender, and sexuality
5 September	Surgery
3 October	Critical care
7 November	Planetary health

Our best original research articles in 2021

Each year we celebrate the high quality original research published in the MJA (impact factor 2020: 7.74). All research manuscripts are rigorously reviewed both internally and externally, and more than 90% are rejected. Publication in our Journal is therefore never easy. We are again pleased to announce the top ten research articles published in the MJA during the past year, as selected by our Editorial team. Our Editorial Advisory Group will use our selection to vote for the winner of the prestigious MJA Award for Excellence in Medical Research. Last year, Professor Mike Catton (Victorian Infectious Diseases Reference Laboratory) and his colleagues were recognised for their article "Isolation and rapid sharing of the 2019 novel coronavirus (SARS-CoV-2) from the first patient diagnosed with COVID-19 in Australia", one of the most important articles on COVID-19 we published in 2020 (and which we had initially published as a preprint to accelerate awareness of these findings).

So let's review the best research published in the MJA during 2021. Since the early days of the COVID-19 pandemic, public health and medical experts have been concerned about the short and long term impact of COVID-19 on mental health, but the initial research was of mixed quality: small or unrepresentative samples, highly selected study populations, cross-sectional designs, and outcomes of varying clinical relevance were typical.⁴ The study by Philip Batterham (Centre for Mental Health Research, Australian National University, Canberra) and colleagues was one of the first longitudinal studies to assess the effect of the pandemic on mental health in a nationally representative sample. From late March to mid-June 2020, 1296 Australian adults were surveyed fortnightly to assess symptoms of depression (Patient Health Questionnaire, PHQ-9) and anxiety (Generalised Anxiety Disorder questionnaire, GAD-7). Mental disorder diagnoses, COVID-19-related financial distress and social and work impairment, younger age, being female, and other recent adversity were all associated with poorer trajectories of mood. These findings underscored the importance of identifying and supporting people who are particularly vulnerable to mental health problems during crises.

Aidan Burrell (Australian and New Zealand Intensive Care Research Centre, Monash University and the Alfred Hospital, Melbourne) and colleagues reported their analysis of data from the Short PeRiod IncideNce sTudy of Severe Acute Respiratory Infection (SPRINT-SARI) Australia, a prospective, observational study of outcomes for patients with COVID-19 admitted to intensive care units (ICUs) during the first four months of the pandemic in Australia. Between 27 February and 30 June 2020,

204 patients were admitted to 44 of 77 participating ICUs, 119 of whom required invasive ventilation (58%); median peak ICU bed occupancy was 14% (interquartile range [IQR], 9–16%). It is notable that for invasively ventilated patients mortality was considerably lower (22%; 95% confidence interval [CI], 15–31%) and length of stay longer (16 days; IQR, 9–28 days) than reported in many other countries. The capacity of the Australian healthcare system was not overwhelmed, reflecting local excellence and the adequacy of ICU resources.⁶

Shared spaces and the lack of appropriate ventilation render urban guarantine hotels less secure than purpose-built quarantine facilities, and the consequences of virus leaking into the community (eg, via infected facility workers) can be more serious in major population centres. In their observational study of overseas travellers returning to Australia and New Zealand during the COVID-19 pandemic, Leah Grout (University of Otago, Wellington, New Zealand) and colleagues estimated the failure risk of quarantine systems in terms of the escape of SARS-CoV-2 into the community. A total of 32 quarantine system-related failures were documented to 15 June 2021 (22 in Australia, ten in New Zealand), triggering nine lockdowns; one failure in Victoria resulted in an outbreak that caused about 800 deaths. The estimated risk was 5.0 failures per 100 000 travellers transiting through quarantine and 6.1 failures (95% CI, 4.0-8.3) per 1000 SARS-CoV-2-positive cases. While these figures are low, the public health outcomes have been significant.⁷

Youth suicide remains a problem in Australia. A retrospective analysis of National Coronial Information System data by Nicole Hill (Telethon Kids Institute, Perth, and Orygen Centre for Youth Mental Health, University of Melbourne) and colleagues explored the social and clinical characteristics of 3365 young people aged 10-24 years who died by suicide during 2006-2015; 2473 were boys or young men (74%), 484 were Indigenous Australians (14%). Prior self-harm or attempted suicide were documented in 31% of cases, and possible or diagnosed mental health disorders in 75% (most frequently: depression); in 28% of cases, illicit substance use was reported, and 38% involved people living in the socio-economically most disadvantaged areas of Australia. More than one-quarter of these young people (27%) left suicide notes and more than one-third (37%) had expressed thoughts about suicide to friends or family. The authors recommended improving access to quality mental health care and financial security as priorities for reducing suicide rates among young Australians.

Australian gun ownership laws are relatively strict, but a large number of people are nevertheless injured by firearms, causing pain, disability, and psychological distress. Most studies of gun-related violence have focused on deaths to the exclusion of non-fatal injuries, despite their significant implications for health care. In a population-based record linkage cohort study, Joel Negin (Sydney School of Public Health, University of Sydney) and colleagues found that 2390 people had sustained firearm-related injuries in New South Wales during 2002–2016, fewer than half of which were fatal. The rate of self-harm using firearms was stable during 2002–2016, while those of injuries caused by assaults and accidental events declined. Rates of self-harm injury and death were highest among older people, men, and residents of outer regional and remote areas, while assault injury rates were highest in major cities and among men and for people aged 19-30 years. Many people with selfinflicted firearm injuries, in particular, had sought medical care (often mental health-related care) before and after their

sustaining their injuries. Strategies for preventing gun-related injury and death should focus on people at particular risk.⁹

In Australia, integrating pharmacists into general practices to provide medicine management in a collaborative manner is a model that is slowly gaining traction. The Reducing Medical Admissions and Presentations Into Hospital through Optimising Medicines (REMAIN HOME) stepped wedge, cluster randomised trial, reported by Christopher Freeman (University of Queensland, Brisbane) and colleagues, assessed whether integrating pharmacists into 14 general practices in southeast Oueensland reduced hospital use by people recently discharged from hospital. The participants had been prescribed five or more medicines or discharged with a primary diagnosis of congestive heart failure or exacerbation of chronic obstructive pulmonary disease. Each intervention group participant, in addition to standard care, had a comprehensive medicine management consultation with a practice pharmacist within seven days of discharge, followed by a consultation with their general practitioner, and further pharmacist consultations if needed. The intervention did not significantly influence the number of unplanned hospital readmissions during the 12 months following discharge, but reduced the number of emergency department presentations by 54% (95% CI, 6-78%), at an estimated incremental net cost benefit of \$5072 per patient (benefit-cost ratio, 31:1). As most of the benefit was achieved during the 30 days following discharge, however, further intervention may be required to sustain the effect. 10

Bogda Koczwara (Flinders Medical Centre and Flinders University, Adelaide) and colleagues reported a large South Australian study of long term mortality for people with cancer (ie, among those still living five years after diagnosis). After median follow-up of 17 years (IQR, 11–21 years), mortality was higher among people who had cancer than for the general population (adjusted standardised mortality ratio, 1.24; 95% CI, 1.22–1.25), and 55% of deaths in this group were attributed to causes other than cancer. Cardiovascular disease was responsible for 27% of all deaths and 56% of non-cancer deaths of people with cancer; by 13 years after cancer diagnosis, the number of cardiovascular deaths exceeded those caused by cancer. Cardiovascular mortality in people with cancer may be linked with the toxic effects of cancer treatment or reflect a higher background cardiovascular risk that should be considered during routine cancer care. ¹¹

Screening and optimal treatment for men with prostate cancer continues to be controversial. ¹² Mei Ling Yap (Collaboration for Cancer Outcomes, Research and Evaluation, Ingham Institute, UNSW; Cancer Council NSW; University of Sydney) and colleagues conducted a data linkage study that included 4003 New South Wales men diagnosed with prostate cancer during 2006-2013. As primary treatment, 40% underwent radical prostatectomy, 22% external beam radiotherapy, 5% brachytherapy, and 2% chemotherapy; 21% received no active treatment, and 9% androgen deprivation therapy alone. Only 13% of those who underwent radical prostatectomy had consulted radiation oncologists prior to surgery. For men with localised prostate cancer, in particular, the evidence with respect to clinical outcomes and survival favours neither surgery or radiotherapy over the alternative, and financial considerations and access to treatment probably influence choice of therapy.¹³ In an accompanying editorial, Henry Woo (Sydney Adventist Hospital Clinical School, University of Sydney; Chris O'Brien Lifehouse, Sydney) and Amy Teh (Icon Cancer Centre, Sydney) argued that men with prostate cancer should be comprehensively informed about all treatment options, to facilitate an informed personal decision and to avert later decision regret, and that the treatment model most likely to achieve best outcomes is multidisciplinary in nature. 14

Until 2019, a finding at colonoscopy of non-advanced adenoma (one or two small lesions with low grade dysplasia) was typically followed in Australia by a follow-up colonoscopy five years later, but the recommended surveillance interval is now ten years. Zaki Hamarneh (Flinders Medical Centre, Adelaide) and colleagues undertook a retrospective review of surveillance colonoscopy outcomes for people enrolled in a South Australian surveillance colonoscopy program in whom non-advanced or low risk adenoma had been identified during 1999–2016. As the incidence of advanced neoplasia after removal of non-advanced adenoma was 19% at five years but 30% at ten years, doubling the colonoscopy surveillance interval would increase the detection of advanced neoplasia at follow-up surveillance by 60%. This suggests that the current surveillance interval recommendation may need to be reviewed. ¹⁵

Finally, Bora Nadlacki (Flinders University, Adelaide) and colleagues analysed data from Australian admitted patient data collections and the New Zealand national minimum dataset to assess long term survival after admission to hospital with acute myocardial infarction. A total of 239 402 initial admissions were recorded during 2009-2015 (64% were men): 27% with ST elevation myocardial infarction (STEMI), 73% with non-ST elevation myocardial infarction (NSTEMI). Seven-year survival was higher for people with STEMI than those with NSTEMI (71% v 59%) and for those who underwent revascularisation (greater than 80% *v* lower than 45% for both infarction types). Long term mortality was greater for older people (85 years or older v 18-54 years: adjusted hazard ratio [aHR], 10.6; 95% CI, 10.1-11.1), women (aHR, 1.15; 95% CI, 1.13-1.17), and patients who reported prior heart failure (aHR, 1.79; 95% CI, 1.76–1.83) or any of a number of other comorbid conditions. Strategies for improving survival after myocardial infarction should target older patients with NSTEMI, for whom multimorbidity is common and revascularisation rates are low. 16

A big year ahead

The value of quality biomedical research has shone brightly during the COVID-19 pandemic, and we are pleased that publications in the *MJA* have contributed to changes in public policy and clinical practice. However, we also acknowledge the serious challenges that we all still face. We will need all the strength and courage of the Tiger to exorcise the demons of the past two years, and even more to overcome the more intransigent problems of social and planetary neglect.¹⁷ As a leading medical journal, we will do all in our power to support and help authors publish research, reviews, and commentaries of the highest quality. We thank all our readers, authors, and reviewers for your support during 2021, and look forward to your submissions and feedback as we strive to increase the success of the *MJA*!

Competing interests: A complete list of disclosures is available at https://www.mja.com.au/journal/staff/editor-chief-professor-nick-talley ■

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