Statins not associated with cognitive decline or dementia

The use of statin therapy in adults aged 65 years or older is not associated with incident dementia, mild cognitive impairment (MCI) or decline in individual cognition domains, according to Australian research **published in the *Journal of the American College of Cardiology***. Researchers from the Menzies Institute for Medical Research, Monash University and Curtin University analysed data from the ASPirin in Reducing Events in the Elderly (ASPREE) trial. ASPREE was a large prospective, randomised placebo-controlled trial of daily low-dose aspirin, which included 19 114 participants aged 65 years or older with no previous cardiovascular event, dementia or major physical disability, between 2010 and 2014 from Australia and the United States. After exclusions for missing values for cognitive test scores and/or covariates at baseline, 18 846 participants were grouped by their baseline statin use versus non-statin use, with 5898 (31.3%) of participants taking statins. After a median of 4.7 years of follow-up, researchers found 566 incident cases of dementia (including probable Alzheimer disease [AD] and mixed presentations). Compared with no statin use, statin use was not associated with risk of all-cause dementia, probable AD or mixed presentations of dementia. There were 380 incident cases of myocardial infarction (MI) found (including MI consistent with AD and MI-other). Compared with no statin use, statin use was not associated with risk of MI, MI consistent with AD, or other MI. There was no statistically significant difference in the change of composite cognition and any individual cognitive domains between statin users compared with non-statin users. No significant differences were found in any of the outcomes of interest between users of hydrophilic and lipophilic statins. However, researchers did find interaction effects between baseline cognitive ability and statin therapy for all dementia outcomes.

https://www.sciencedirect.com/science/article/abs/pii/S0735109721049615

Gender-diverse teens have more mental health problems than cis peers

US scientists looked at medical records of 200 adolescents who participated in a 2-week acute residential treatment program for psychiatric disorders, including 35 transgender and gender diverse (TGD) youths, to compare

mental health issues between LGBTQI teens and their cis-gendered peers. Compared with the cis-gendered teens, LGBTQI youths were more likely to have developed depression at an earlier age, were more likely to have suicidal thoughts and impulses, were more likely to self-harm, and were more likely to have been traumatised or abused during childhood, the researchers reported. Following the program, both groups' symptoms of depression and anxiety had improved, and all participants were better at regulating their emotions. "As the rate of TGD adolescents seeking mental health care is increasing, it is encouraging that even nonspecialised treatment (ie, those not tailored to needs of gender minority populations), such as a general, acute residential treatment program, can be successful in reducing clinical symptoms in TGD youth," the authors concluded. "Importantly, there is a call to action for health care clinicians to more thoroughly screen and sensitively assess youth who identify as a gender minority, in an effort to provide the most effective treatment for this vulnerable psychiatric population." The research was **published in *JAMA Network Open***.

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781114

doi:10.5694/mja2.51171

CHRISTMAS IS COMING!

MJA
The Medical Journal of Australia

The *Medical Journal of Australia*, Australia's premier medical journal, is calling for submissions for our 2021 Christmas issue, including entries for our famous Christmas Competition.

- ✓ **MJA Christmas Competition:** Submit your quirky stories, wacky research, amazing images and other eclectica suitable for our festive season issue. This is your chance to be published in the *MJA* and win a Christmas gourmet food hamper!
- ✓ **Medical history:** We're looking for scholarly essays on the highways and byways of medical history.
- ✓ **Reflections:** Share your personal experiences of medicine or your thoughts on the humanities with respect to medicine.

Final deadline for submissions: **Monday 23 August 2021**

Visit the *MJA* website for further details:

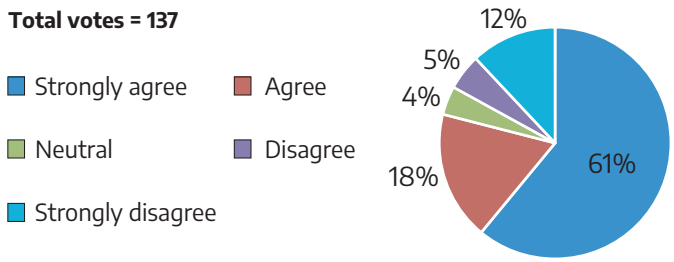
Christmas Competition: www.mja.com.au/author-centre/awards/mja-christmas-competition
Medical history and reflections: www.mja.com.au/journal/mja-instructions-authors-typesarticles-published-mja#Reflections
Submit entries via our online submissions system: www.mja.com.au/submissions

Questions? Email: mja@mja.com.au

InSight+ Poll
Empowered by AMPCo

Children must be included in the COVID-19 vaccine rollout

Total votes = 137



Take part in next week's poll on: https://insightplus.mja.com.au/

MJA PODCASTS

Guilherme Franco is a biostatistician and **Dr Rae-Anne Hardie** is a Research Fellow at the Australian Institute of Health Innovation at Macquarie University. They discuss prostate-specific antigen testing of asymptomatic men in Australia, to accompany their co-authored research letter published online on 12 July 2021.

Professor Henry Brodaty is Director of the Dementia Centre for Research Collaboration at UNSW Sydney. **Heidi Welberry** is a PhD candidate at the Centre for Big Data Research in Health, also at UNSW Sydney. They talk about the influence of changing GPs on the use of psychotropic medicines in people with dementia entering residential aged care, to accompany their co-authored research published on 19 July 2021.

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Harvey and Dwyer; https://insightplus.mja.com.au/2021/21/tga-lists-first-aust-la-herbal-product-but-wheres-the-evidence/

3. *Views:* Doctor, your patient has a spiritual side
Ramachenderan; https://insightplus.mja.com.au/2021/21/doctor-your-patient-has-a-spiritual-side/

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Robson et al; https://insightplus.mja.com.au/2021/21/whos-afraid-of-the-deficit-what-it-means-for-health-care/

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JULY

19 *Podcast:* Professor Henry Brodaty is Director of the Dementia Centre for Research Collaboration at UNSW Sydney. Heidi Welberry is a PhD candidate at the Centre for Big Data Research in Health, also at UNSW Sydney.

19 *Research:* Psychotropic medicine prescribing and polypharmacy for people with dementia entering residential aged care: the influence of changing general practitioners
Welberry et al; https://doi.org/10.5694/mja2.51153

12 *Podcast:* Guilherme Franco is a biostatistician and Dr Rae-Anne Hardie is a Research Fellow at the Australian Institute of Health Innovation at Macquarie University.

12 *Research letter:* Prostate-specific antigen testing of asymptomatic men in Australia: an observational study based on electronic general practice data
Franco et al; https://doi.org/10.5694/mja2.51147

12 *Research letter:* Redefining the dengue-receptive area of Queensland after the 2019 dengue outbreak in Rockhampton
Walker et al; https://doi.org/10.5694/mja2.51151

12 *Perspective:* An Australian glossary to aid multisectoral research and collaborations to address health and climate change
Breth-Petersen et al; https://doi.org/10.5694/mja2.51161

5 *Podcast:* Professor Anthony Scott leads the Health and Healthcare theme at the Melbourne Institute: Applied Economic and Social Research at the University of Melbourne. Professor Jennifer May is Director of the Department of Rural Health at the University of Newcastle. They talk about how we can support physicians to work rurally.

5 *Research:* Trajectories of functional performance recovery after in-patient geriatric rehabilitation: an observational study
Soh et al; https://doi.org/10.5694/mja2.51138

5 *Research:* Cardiac arrests in general practice clinics or witnessed by emergency medical services: a 20-year retrospective study
Haskins et al; https://doi.org/10.5694/mja2.51139

5 *Narrative review:* Persistent pathology of the patent foramen ovale: a review of the literature
Cho et al; https://doi.org/10.5694/mja2.51139

JUNE

28 *Podcast:* Associate Professor Julia Brotherton is Medical Director of the VCS Foundation and is Honorary Principal Fellow at the Centre for Health Policy at the University of Melbourne. Claire Zammit is a Research Officer at the VCS Foundation. They discuss self-collection cervical screening in the renewed National Cervical Screening Program.

28 *Research:* Self-collection cervical screening in the renewed National Cervical Screening Program: a qualitative study
Creagh et al; https://doi.org/10.5694/mja2.51137

28 *Research letter:* Opioid medication prescribing in Queensland,1997–2018: a population study
Adewumi et al; https://doi.org/10.5694/mja2.51115