

Ageing and Aged Care publication list February 2021

(MACH Care of the Ageing Committee members' **bolded**)

1. Assessment tools and factors used to predict discharge from acute general medical wards: a systematic review. *Disability and Rehabilitation, 2021. Published online February 2021.*

D'Souza A.N., **Said C.M.**, Leggett N.E., Tomkins M.S., Kay J.E., Granger C.L.

About the Research: To identify assessment tools and patient factors statistically associated with discharge destination in general medical inpatients.

[Link to Publication](#)

2. Health Literacy: An Interactive Outcome Among Secondary Students in Beijing. *Health literacy research and practice, Volume 5, Issue 1, 11 January 2021, Pages e1-e14*

Guo S., Yu X., Davis E., Armstrong R., **Naccarella L.**

About the Research: Health literacy enables a person to make good decisions regarding health care, disease prevention, and health promotion to maintain and improve health. Although health literacy research in China has gained increasing attention in recent years, most existing studies focus on adults rather than adolescents. In addition, little theory-driven empirical research has been conducted to fully understand the relationship among health literacy, its influencing factors, and health outcomes scored on a skills-based health literacy instrument.

[Link to Publication](#)

3. Sarcopenia, Low Handgrip Strength, and Low Absolute Muscle Mass Predict Long-Term Mortality in Older Hospitalized Patients: An Observational Inception Cohort Study. *Journal of the American Medical Directors Association, 2021. Published online February 2021.*

Scheerman K., Meskers C.G.M., Verlaan S., **Maier A.B.**

About this Research: Sarcopenia is highly prevalent in hospitalized older patients and associated with short-term mortality. This study aimed to investigate whether sarcopenia and its measures handgrip strength (HGS) and muscle mass at hospital admission were associated with long-term mortality in a cohort of hospitalized older patients.

[Link to Publication](#)

4. Insulin resistance in transgender individuals correlates with android fat mass. Therapeutic Advances in Endocrinology and Metabolism, Volume 12, 2021.

Bretherton I., Spanos C., Leemaqz S.Y., Premaratne G., Grossmann M., **Zajac J.D.**, Cheung A.S.

About the Research: Transgender individuals receiving gender-affirming hormone therapy (GAHT) are at increased risk of adverse cardiovascular outcomes. This may be related to effects on body composition and insulin resistance.

[Link to Publication](#)

5. Regional brain iron associated with deterioration in Alzheimer's disease: A large cohort study and theoretical significance. Alzheimer's and Dementia, 2021. Published online February 2021.

Ayton S., Portbury S., Kalinowski P., Agarwal P., Diouf I., Schneider J.A., Morris M.C., **Bush A.I.**

About the Research: This paper is a proposal for an update of the iron hypothesis of Alzheimer's disease (AD), based on large-scale emerging evidence.

[Link to Publication](#)

6. Factors associated with improved walking in older people during hospital rehabilitation: secondary analysis of a randomized controlled trial. BMC Geriatrics, Volume 21, Issue 1, December 2021, Article number 90.

Said C.M., McGinley J.L., **Szoeke C.**, Workman B., Hill K.D., Wittwer J.E., Woodward M., Liew D., Churilov L., Bernhardt J., **Morris M.E.**

About the Research: Older people are often admitted for rehabilitation to improve walking, yet not everyone improves. The aim of this study was to determine key factors associated with a positive response to hospital-based rehabilitation in older people.

[Link to Publication](#)

7. Asymmetric thinning of the cerebral cortex across the adult lifespan is accelerated in Alzheimer's disease. *Nature Communications, Volume 12, Issue 1, December 2021, Article number 721.*

Roe J.M., Vidal-Piñeiro D., Sørensen Ø., Brandmaier A.M., Düzel S., Gonzalez H.A., Kievit R.A., Knights E., Kühn S., Lindenberger U., Mowinckel A.M., Nyberg L., Park D.C., Pudas S., Rundle M.M., Walhovd K.B., Fjell A.M., Westerhausen R., Masters C.L., **Bush A.I.**, Fowler C., Darby D., Pertile K., Restrepo C., Roberts B., Robertson J., Rumble R., Ryan T., Collins S., Thai C., Trounson B., Lennon K., Li Q.-X., Ugarte F.Y., Volitakis I., Vovos M., Williams R., Baker J., Russell A., Peretti M., Milicic L., Lim L., Rodrigues M., Taddei K., Taddei T., Hone E., Lim F., Fernandez S., Rainey-Smith S., Pedrini S., Martins R., Doecke J., Bourgeat P., Fripp J., Gibson S., Leroux H., Hanson D., Dore V., Zhang P., Burnham S., Rowe C.C., Villemagne V.L., Yates P., Pejoska S.B., Jones G., Ames D., Cyarto E., Lautenschlager N., Barnham K., Cheng L., Hill A., Killeen N., Maruff P., Silbert B., Brown B., Sohrabi H., Savage G., Vacher M., The Australian Imaging Biomarkers and Lifestyle Flagship Study of Ageing.

About the Research: Aging and Alzheimer's disease (AD) are associated with progressive brain disorganization. Although structural asymmetry is an organizing feature of the cerebral cortex it is unknown whether continuous age- and AD-related cortical degradation alters cortical asymmetry. Here, in multiple longitudinal adult lifespan cohorts we show that higher-order cortical regions exhibiting pronounced asymmetry at age ~20 also show progressive asymmetry-loss across the adult lifespan. Hence, accelerated thinning of the (previously) thicker homotopic hemisphere is a feature of aging.

[Link to Publication](#)

8. Feasibility trial of metformin XR in people with pre-diabetes and stroke (MIPPS)-randomised open blinded endpoint controlled trial. *Journal of Clinical Neuroscience Volume 86, April 2021, Pages 103-109.*

Tabesh M., Hachem M., Lau L.-H., Borschmann K., Churilov L., Price S.A.L., Sumithran P., Donnan G., **Zajac J.**, Thijs V., Ekinci E.I.

About the Research: Pre-diabetes is a common condition that affects about 16.4% of Australian adults. Hyperglycaemia is a strong risk factor for the development of stroke. Metformin XR is an approved medication to treat type 2 diabetes in Australia but not pre-diabetes. Additionally, whether it is tolerated following a stroke is unclear. In this pilot study, we aimed to assess the feasibility of Metformin XR in people with stroke and pre-diabetes.

[Link to Publication](#)

9. Improving hospital falls screening and mitigation using a health professional education framework. *Nurse Education Today*. Volume 98, March 2021, Article number 104695.

Shaw L.K., Kiegaldie D., **Morris M.E.**, Jones C.

About the Research: Although health professional education has the potential to mitigate hospital falls risk, the best methods to develop, deliver and evaluate health professional education remain unclear. This study applied evidence-based approaches to education design to improve falls risk mitigation.

[Link to Publication](#)

10. Frailty, MRI, and FDG-PET Measures in an Australian Memory Clinic Cohort. *Frontiers in Medicine*, Volume 7, 14 January 2021, Article number 578243.

Jordan N., Gvalda M., Cody R., Galante O., Haywood C., **Yates P.**

About the Research: Given that the global population is aging, the number of age-related syndromes, such as frailty, is expected to rise in conjunction. Frailty is characterized by the loss of homeostatic reserve, rendering the individual vulnerable to poor health outcomes. Many biological mechanisms have been proposed to contribute to frailty. However, few studies have assessed the associations between frailty and brain diseases or neuroimaging biomarkers.

[Link to Publication](#)

11. Peripheral Immune Cell Ratios and Clinical Outcomes in Seropositive Autoimmune Encephalitis: A Study by the Australian Autoimmune Encephalitis Consortium. *Frontiers in Immunology Open Access* Volume 11, 14 January 2021, Article number 597858.

Broadley J., Wesselingh R., Seneviratne U., Kyndt C., Beech P., Buzzard K., Nesbitt C., D'Souza W., **Brodthmann A.**, Kalincik T., Butzkueven H., O'Brien T.J., Monif M., Griffiths S., Fielding J., Clough M., Tan T., Velakoulis D., Malpas C., Alpitsis R., Macdonell R., Tarlinton D., Reddel S., Hardy T., Taylor B., Long B., Wijeratne T., White O., Ligtermoet M., Tan M., Kulkarni J., Bourke R., Butler E., Australian Autoimmune Encephalitis Consortium.

About the Research: To examine the utility of the peripheral blood neutrophil-to-lymphocyte ratio (NLR) and monocyte-to-lymphocyte ratio (MLR) as biomarkers of prognosis in seropositive autoimmune encephalitis (AE).

[Link to Publication](#)

12. The association of comorbidity measures and mortality in geriatric rehabilitation inpatients by cancer status: RESORT. *Supportive Care in Cancer*, 2021. Published online February 2021.

Chan C.H., Maddison C., Reijnierse E.M., Lim W.K., **Maier A.B.**

About the Research: Multimorbidity is highly prevalent in older adults, both those with and without cancer, and is associated with an increased risk of mortality. The aim of this study was to investigate if multimorbidity measures in geriatric rehabilitation inpatients differ in their association with mortality, dependent on a diagnosis of cancer.

[Link to Publication](#)

13. The Effect of Intimate Partner Violence on the Physical Health and Health-Related Behaviors of Women: A Systematic Review of the Literature. *Trauma, Violence, and Abuse*, 2021. Published online February 2021.

Stubbs A., **Szoeke C.**

About the Research: The long-term effects of intimate partner violence (IPV) on physical health outcomes and health-related behaviors are underresearched in comparison to the effects on mental health and pregnancy. This systematic review examines the recent research in this area from 2012 through 2019.

[Link to Publication](#)

14. Managing low-risk febrile neutropenia in children in the time of COVID-19: What matters to parents and clinicians. *Journal of Paediatrics and Child Health*, 2021. Published online February 2021.

Haeusler G.M., De Abreu Lourenco R., Bakos C., O'Brien T., Slavin M.A., Clark J.E., McMullan B., Borland M.L., Babl F.E., **Krishnasamy M.**, Vanevski M., Thursky K.A., Hall L.

About the Research: The Australian 'There is no place like home' project is implementing a paediatric low-risk febrile neutropenia (FN) programme across eight paediatric hospitals. We sought to identify the impact of the coronavirus disease 2019 (COVID-19) pandemic on programme implementation.

[Link to Publication](#)

15. Advancing Stroke Recovery Through Improved Articulation of Nonpharmacological Intervention Dose. *Stroke, Volume 52, Issue 2, 1 January 2021, Pages 761-769.*

Hayward K.S., Churilov L., Dalton E.J., **Brodthmann A.**, Campbell B.C.V., Copland D., Dancause N., Godecke E., Hoffmann T.C., Lannin N.A., McDonald M.W., Corbett D., Bernhardt J.

About the Research: Dose articulation is a universal issue of intervention development and testing. In stroke recovery, dose of a nonpharmaceutical intervention appears to influence outcome but is often poorly reported. The challenges of articulating dose in nonpharmacological stroke recovery research include: (1) the absence of specific internationally agreed dose reporting guidelines; (2) inadequate conceptualization of dose, which is multidimensional; and (3) unclear and inconsistent terminology that incorporates the multiple dose dimensions. To address these challenges, we need a well-conceptualized and consistent approach to dose articulation that can be applied across stroke recovery domains to stimulate critical thinking about dose during intervention development, as well as promote reporting of planned intervention dose versus actually delivered dose.

[Link to Publication](#)

16. Transforming UNICEF’s approach to health system strengthening: what place can a blended learning course play? *Human Resources for Health, Volume 19, Issue 1, December 2021, Article number 17.*

Naccarella L., McPake B., Dayal P., Gikonyo W., Torrealba C.V., Morgan A.

About the Research: The United Nations Children’s Fund (UNICEF) published their Health Systems Strengthening (HSS) approach to meet its strategic goals of ending preventable maternal, newborn and child deaths and promoting the health and development of all children and reducing inequities in health in 2016. UNICEF commissioned the University of Melbourne’s Nossal Institute for Global Health to develop and deliver a pilot blended HSS program, involving 60 hours of online learning and 2 weeks of face-to-face teaching over a 6-month period. To assess the extent to which the HSS program had built the first 83 UNICEF 2017 graduates’ capabilities to apply HSS actions by 2017, UNICEF funded an independent evaluator from the University of Melbourne.

[Link to Publication](#)

17. Intergenerational Programmes bringing together community dwelling non-familial older adults and children: A Systematic Review. *Archives of Gerontology and Geriatrics, Volume 94, 1 May 2021, Article number 104356.*

Peters R., Ee N., Ward S.A., Kenning G., Radford K., Goldwater M., Dodge H.H., Lewis E., Xu Y., Kudrna G., Hamilton M., Peters J., Anstey K.J., **Lautenschlager N.T.**, Fitzgerald A., Rockwood K.

About the Research: Social isolation is associated with an increased risk of adverse health outcomes, including functional decline, cognitive decline, and dementia. Intergenerational engagement, i.e. structured or semi structured interactions between non-familial older adults and younger generations is emerging as a tool to reduce social isolation in older adults and to benefit children and adults alike. This has great potential for our communities, however, the strength and breadth of the evidence for this is unclear. We undertook a systematic review to summarise the existing evidence for intergenerational interventions with community dwelling non-familial older adults and children, to identify the gaps and to make recommendations for the next steps.

[Link to Publication](#)

18. Assessment of the DTI-ALPS Parameter Along the Perivascular Space in Older Adults at Risk of Dementia. *Journal of Neuroimaging 2021. Published online February 2021.*

Steward C.E., Venkatraman V.K., Lui E., Malpas C.B., Ellis K.A., Cyarto E.V., Vivash L., O'Brien T.J., Velakoulis D., Ames D., Masters C.L., **Lautenschlager N.T.**, Bammer R., Desmond P.M.

About the Research: Recently, there has been growing interest in the glymphatic system (the functional waste clearance pathway for the central nervous system and its role in flushing solutes (such as amyloid β and tau), metabolic, and other cellular waste products in the brain. Herein, we investigate a recent potential biomarker for glymphatic activity (the diffusion tensor imaging along the perivascular space [DTI-ALPS] parameter) using diffusion MRI imaging in an elderly cohort comprising 10 cognitively normal, 10 mild cognitive impairment (MCI), and 16 Alzheimer's disease (AD).

[Link to Publication](#)

19. Breast cancer chemoprevention: Use and views of Australian women and their clinicians.

Cancer Prevention Research, Volume 14, Issue 1, 1 January 2021, Pages 131-144.

Macdonald C., Saunders C.M., Keogh L.A., Hunter M., Mazza D., McLachlan S.-A., Jones S.C., Nesci S., Friedlander M.L., Hopper J.L., Emery J.D., **Hickey M.**, Milne R.L., Phillips K.-A., The Kathleen Cuninghame Consortium for Research Into Familial Breast Cancer

About the Research: Guidelines endorse the use of chemoprevention for breast cancer risk reduction. This study examined the barriers and facilitators to chemoprevention use for Australian women at increased risk of breast cancer, and their clinicians. Surveys, based on the Theoretical Domains Framework, were mailed to 1,113 women at $\geq 16\%$ lifetime risk of breast cancer who were enrolled in the Kathleen Cuninghame Foundation Consortium for Research into Familial Breast Cancer cohort study (kCon-Fab), and their 524 treating clinicians. Seven hundred twentyfive women (65%) and 221 (42%) clinicians responded.

[Link to Publication](#)

20. Prognostic value of acute cerebrospinal fluid abnormalities in antibody-positive autoimmune encephalitis. *Journal of Neuroimmunology, Volume 353, 15 April 2021, Article number 577508.*

Broadley J., Wesselingh R., Seneviratne U., Kyndt C., Beech P., Buzzard K., Nesbitt C., D'souza W., **Brodthmann A.**, Macdonell R., Kalincik T., Butzkueven H., O'Brien T.J., Monif M., on behalf of the Australian Autoimmune Encephalitis Consortium

About the Research: To examine the prognostic value of CSF abnormalities in seropositive autoimmune encephalitis (AE).

[Link to Publication](#)

21. Who is managing menopausal symptoms, sexual problems, mood and sleep disturbance after breast cancer and is it working? Findings from a large community-based survey of breast cancer survivors. *Breast Cancer Research and Treatment, 2021. Published online February 2021.*

Peate M., Saunders C., Cohen P., **Hickey M.**

About the Research: To determine the nature and severity of vasomotor symptoms, sexual problems, mood and sleep disturbance in community-dwelling breast cancer patients, whether and where they received treatment for these symptoms and their satisfaction with treatment received.

[Link to Publication](#)

22. What happens after menopause? (WHAM): A prospective controlled study of depression and anxiety up to 12 months after premenopausal risk-reducing bilateral salpingo-oophorectomy. *Gynecologic Oncology*, 2021. Published online February 2021.

Hickey M., Moss K.M., Brand A., Wrede C.D., Domchek S.M., Meiser B., Mishra G.D., Joffe H.

About the Research: Risk-reducing bilateral salpingo-oophorectomy (RRBSO) substantially reduces ovarian cancer risk in women with pathogenic gene variants and is generally recommended by age 34-45 years. Natural menopause is a vulnerable period for mood disturbance, but the risk of depression and anxiety in the first 12 months after RRBSO and potential modifying effect of hormone therapy are uncertain.

[Link to Publication](#)

23. Dementia risk reduction in practice: The knowledge, opinions and perspectives of Australian healthcare providers. *Australian Journal of Primary Health*, 2021. Published online February 2021.

Zheng L., Godbee K., Steiner G.Z., Daylight G., Ee C., Hill T.Y., Hohenberg M.I., **Lautenschlager N.T.**, McDonald K., Pond D., Radford K., Anstey K.J., Peters R.

About the Research: This study examined Australian primary healthcare providers' knowledge about dementia risk factors and risk reduction and their perspectives on barriers and enablers to risk reduction in practice. Primary healthcare providers were recruited through Primary Health Networks across Australia (n = 51). Participants completed an online survey that consisted of fixed-responses and free-text components to assess their knowledge, attitudes and current practices relating to dementia risk factors and risk reduction techniques. The results showed that Australian primary healthcare providers have good knowledge about the modifiable risk factors for dementia; however, face several barriers to working with patients to reduce dementia risk.

[Link to Publication](#)