

# AGEING CLINICAL AND EXPERIMENTAL RESEARCH TEAM

## DEPARTMENT OF MEDICINE FOR THE ELDERLY

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### ANNUAL REPORT 2020



UNIVERSITY OF  
ABERDEEN





## WHY ARE WE ACER TEAM? (AGEING CLINICAL AND EXPERIMENTAL RESEARCH)

ACER is commonly known as a Maple tree. Many of ACER families are renowned for their autumn leaf colours. While they are mainly found in Northern hemisphere, some ACER trees grow in tropical regions as evergreen trees. We hope that this branding inspires us to celebrate the diversity and different valuable contribution of team members which we always embrace and the resilience we need to possess in the current challenging time for UK academia.

## CONTACT US

Enquiries may be directed to **Professor Phyo Kyaw Myint** | [phyo.myint@abdn.ac.uk](mailto:phyo.myint@abdn.ac.uk) | Tel: +44 (0) 1224 437841

## SUPPORT US

You can support our research in the following areas by donating through the University's Development Trust quoting: **"Ageing Clinical & Experimental Research Endowment Funds"** <http://www.abdn.ac.uk/giving/>

- Capital projects/Infrastructure support
- **Academic posts:** Research Fellow, Endowed Lectureship/ Senior Lectureship and Endowed Chair
- Scholarships such as clinical and non-clinical PhD scholarships and medical student bursaries
- Project support: Research Fellow and project costs
- General contribution to support any of the above areas and other activities such as dissemination activities e.g. attending conferences and public engagement events

We welcome engagement from potential donors who are considering supporting specific piece of ageing related research which falls within the remit of ACER objectives.

If you wish to donate to support our research and have any questions regarding how this may help to deliver our objectives, please do not hesitate to contact: **Professor Phyo Myint** | [phyo.myint@abdn.ac.uk](mailto:phyo.myint@abdn.ac.uk) | [acer@abdn.ac.uk](mailto:acer@abdn.ac.uk)

## FOREWORD

The year 2020 has been an extra-ordinary year with COVID-19 pandemic. This 2020 ACER Annual Report is the proof of the resilience we demonstrated during this challenging time.

Since we moved to online working, we had kept in touch through our weekly coffee break zoom meetings and hope it has helped to maintain staff and students morale throughout 2020. Dr Roy Soiza has pretty much become a COVID vaccine expert with sharp rise in cited work (congratulations Roy) while some junior clinical academics benefited from being part of the consortium COPE study with its landmark paper published in Lancet Public Health in November 2020.

Our continued success despite challenging circumstances during 2020 was the result of the team's collective effort and support we received from our internal and external collaborators.

I would like to gratefully acknowledge the excellent contribution of our research, administrative and professional services team members and external affiliates, and collaborators who contributed to this success and achievements in 2020.



A handwritten signature in green ink, appearing to read 'Phyo Kyaw Myint', positioned below the portrait.

**Professor Phyo Kyaw Myint**  
Lead Academic

## LOOKING BACK 2020

2020 has been an incredible year – most part of the year being occupied by COVID-19 pandemic in UK, one of the most severely affected countries. It is the resilience of ACER team members in the face of such an adversity which has kept us going in furthering our goals and ambitions for the better health of older people through relevant research. Proof is in the pudding, the team has broken its previous year's publication track records, not just in numbers but also the standard of research by publishing high-quality papers in top peer review journals. This is indeed an incredible achievement as our team is made up mostly of clinical academics and trainees- all of whom have pull their weight in delivering patient care, perhaps more than their fair share for some of us.

Despite this adversity 2020 saw further expansion in ACER research activities. Unfortunately we had to cancel all summer research scholarship activities. Despite this we have some volunteer summer research students who were being supervised online virtually with Autumn Scholarships (funded by the Autumn Project) and ACTRA Scholarship in Autumn 2020! Congratulations to Kai Ewers, Euan Ramsay, Mansi Tolia, Catriona Young, Georgios Kounidas (Autumn Lifespan Scholarship), Thais Abud (Autumn Lifespan Scholarship), Sarah Perrott (ACTRA Scholarship), and Ria Minar Sanghavi (INSPIRE National Scholarship Volunteer).

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## WELCOME



**Dr Loulwah Serri** MBChB, MPH is a new PhD student joining ACER in October.

Loulwah is a General First Practitioner in Geriatric Clinic, Adan Specialized Polyclinic, Ministry of Health, Kuwait. She received funding from Kuwait Government.

Congratulations Loulwah!

**“Understanding the Epidemiology of Older People from Physical and Mental Health Aspects in Kuwait”**

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**Dr Roy Rillera Marzo** was successful to be enrolled his PhD study with Monash University Malaysia.

**“Determinants of Active Ageing in Malaysia: Evidence from two rounds of South East Asia Community Observatory (SEACO) Data”**

Roy will be co-supervised by Phyto as second co-supervisor.

Primary Supervisor: Prof. Tin Tin Su, Co-supervisor: Dr Devi Mohan (Monash University, Malaysia)

He is an Associate Professor and Deputy Dean, MBBS Programme of Asia Metropolitan University, Malaysia.

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**Ms. Nur Fazidah Binti Asmuje**

Blood Pressure Variability and Cognitive Performance

**“Cognitive impairment and blood pressure variability in the Malaysian Elders Longitudinal Research (MELoR) Prospective Cohort Study”**

Fazidah's primary supervisor is Professor Maw Pin Tan, from the Department of Medicine, University of Malaya, Malaysia.

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**Dr David Gamble** has been successful in securing a research fellow work funded by the British Heart Foundation “**Physical exercise and mental wellbeing rehabilitation for acute Stress-induced Takotsubo cardiomyopathy : the PLEASE study**”. His PhD will be primarily supervised by Professor Dana Dawson with Phyoe and Dr Duncan Hogg as co-supervisors.

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Former ACER external affiliate, **Dr Stephen McCall MSc, DPhil** has been appointed as Honorary Senior Research Fellow with ACER team in 2020. He currently works at American University of Beirut as an Assistant Professor of Practice, Center for Research on Population and Health (CRPH), Epidemiology and Population Health (EPH).

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## NEW ROLE



**Dr Carrie Stewart** has moved to Health Services Research Unit as the post-Doctoral Research Fellow but will continue to lead ACER PPI Group which has gained momentum since its inception in late 2019.

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## AWARDS AND GRANTS

**Alison Donaldson** won the Best Paper Award from the Journal of the Royal College of Physician of Edinburgh for her work entitled “**Variation in acute and community service provision of care of the elderly services across Scotland: findings from the Scottish Care of Older People (SCoOP) initial scoping survey**” published in 2019 and presented her work in Manchester in February 2020.



◀ **Dr Alison Donaldson** took her youngest daughter Sophie along to the award ceremony

Grant award to **Phyo** as co-applicant from Digital Health and Care Institute for ARMED Evaluation Services led by **Professor Kay Cooper** (RGU).

## TRIALS



We are delighted the **CHIPPS** trial was completed in Autumn 2020 – the results are expected to be out in late 2021. The trial was delayed due to COVID-19 restrictions but we are fortunate that we were able to continue using virtual means as the recruitment was completed.



This is a **NIHR HTA** study led by the Chief Investigator: Professor Mohamed Abdel-Fattah. Covid-19 has significant impact on the study and it is expected that the study duration will be prolonged depending on the COVID-19 circumstances.

## RESEARCH SYNTHESIS

Research synthesis work during 2020 focused around completing further systematic reviews and evidence synthesis of anticholinergic burden related work and COVID-19 related systematic reviews.

## PUBLIC HEALTH RESEARCH

We continue to collaborate with cohort studies particularly EPIC-Norfolk, and MELoR (Malaysian Elders Longitudinal Research), Malaysia relating to anticholinergic burden from medications and relevant health outcomes in older people and in relation to hypertensive disorders of pregnancy and cancer outcomes.

## DATABASE RESEARCH

We continued our collaboration with various national and international colleagues in database/registry driven research during 2020. These included continued collaboration with Thai National Stroke Database team with colleagues from Thailand, VISTA Collaborators <http://www.virtualtrialsarchives.org/vista/>, Aberdeen Maternity Neonatal Databank (AMND) and the Norfolk and Norwich Stroke and TIA Register. We have continued success with established collaborations with Professor Mamas' Group at Keele using MINAP and NIS work.

## EXPERIMENTAL/FUNDAMENTAL RESEARCH

**CAPE (Cardiovascular Health in Women with history of Pre-eclampsia) Study.** With COVID, the study was halted during 2020 without much progress made during the whole year. It is hoped that we can re-start the study once COVID situation improved in the future.

## NATIONAL AUDITS

### Scottish Care of Older People Audit

Due to COVID-19 and dramatic changes in health services provided by Geriatric Medicine Departments across the Scotland, the focus during 2020 was the analysis of 2019 Audit of Comprehensive Geriatrics Assessment and papers relating to work we have carried out in 2019.



### Emergency Laparotomy and Laparoscopy Scottish Audit (ELLSA)

This is new collaboration set up in 2019. Current ongoing collaboration has two main focuses (1) the role of frailty assessment in prognostication of outcomes for surgical patients and (2) process of care and outcome variations. The work continued during 2020 with expected outputs in late 2021/early 2022.





IN MEMORY OF LADY MAC

whose sons Alasdair Roderic and

1938-19



## NEW STUDIES

In collaboration with the Robert Gordon University and NHS Grampian, we were successful in a bid commissioned by Digital Health and Care Institute to evaluate ARMED Falls Prevention Technology. We hope to complete the project in time but the pragmatic aspects of data availability to perform evaluation remained challenging.

## PUBLICATION LIST 2020

1. **Long-term effects of gestational diabetes on bone mineral density and fracture risk: Analysis of the Norfolk cohort of the European Prospective Investigation into Cancer (EPIC-Norfolk) population-based study.** Ahmeidat A, Bhattacharya S, Luben RN, Khaw KT, Myint PK. *Maturitas*. 2021 Feb;144:68-73.
2. **Increased care at discharge from COVID-19: The association between pre-admission frailty and increased care needs after hospital discharge; a multicentre European observational cohort study.** Vilches-Moraga A, Price A, Braude P, Pearce L, Short R, Verduri A, Stechman M, Collins JT, Mitchell E, Einarsson AG, Moug SJ, Quinn TJ, Stubbs B, McCarthy K, Myint PK, Hewitt J, Carter B; COPE Study. *BMC Med*. 2020 Dec 18;18(1):408.
3. **Impact of Surgery on Older Patients Hospitalized With an Acute Abdomen: Findings From the Older Persons Surgical Outcome Collaborative.** Tay HS, Wood AD, Carter B, Pearce L, McCarthy K, Stechman MJ, Myint PK, Hewitt J. *Front Surg*. 2020 Nov 16;7:583653.
4. **Anticholinergic medication exposure predicts poor physical capability: Findings from a large prospective cohort study in England.** Yrjana KR, Keevil VL, Soiza RL, Luben RN, Wareham NJ, Khaw KT, Myint PK. *Maturitas*. 2020 Dec;142:55-63.
5. **Frailty and mortality in patients with COVID-19 - Authors' reply.** McCarthy K, Hewitt J, Myint PK, Quinn T, Carter B. *Lancet Public Health*. 2020 Nov;5(11):e582.
6. **Hypertensive Disorders of Pregnancy (HDP) and the Risk of Common Cancers in Women: Evidence from the European Prospective Investigation into Cancer (EPIC) - Norfolk Prospective Population-Based Study.** Pasdar Z, Gamble DT, Myint PK, Luben RN, Wareham NJ, Khaw KT, Bhattacharya S. *Cancers (Basel)*. 2020 Oct 23;12(11):3100.

7. **Seasonality of stroke: Winter admissions and mortality excess: A Thailand National Stroke population database study.** Lorking N, Wood AD, Tiamkao S, Clark AB, Kongbunkiat K, Bettencourt-Silva JH, Sawanyawisuth K, Kasemsap N, Mamas MA, Myint PK. Clin Neurol Neurosurg. 2020 Dec;199:106261.
8. **The influence of ACE inhibitors and ARBs on hospital length of stay and survival in people with COVID-19.** Braude P, Carter B, Short R, Vilches-Moraga A, Verduri A, Pearce L, Price A, Quinn TJ, Stechman M, Collins J, Bruce E, Einarsson A, Rickard F, Mitchell E, Holloway M, Hesford J, Barlow-Pay F, Clini E, Myint PK, Moug S, McCarthy K, Hewitt J. Int J Cardiol Heart Vasc. 2020 Dec;31:100660.
9. **Variations in Rates of Discharges to Nursing Homes after Acute Hospitalization for Stroke and the Influence of Service Heterogeneity: An Anglia Stroke Clinical Network Evaluation Study.** Tørnes M, McLernon D, Bachmann MO, Musgrave SD, Day DJ, Warburton EA, Potter JF, Myint PK. Healthcare (Basel). 2020 Oct 9;8(4):390.
10. **Study protocol for the COPE study: COVID-19 in Older PEople: the influence of frailty and multimorbidity on survival. A multicentre, European observational study.** Price A, Barlow-Pay F, Duffy S, Pearce L, Vilches-Moraga A, Moug S, Quinn T, Stechman M, Braude P, Mitchell E, Myint PK, Verduri A, McCarthy K, Carter B, Hewitt J; COPE Study Collaborators. BMJ Open. 2020 Sep 29;10(9):e040569.
11. **The Clinical Frailty Scale: Estimating the Prevalence of Frailty in Older Patients Hospitalised with COVID-19.** The COPE Study. Collins JT, Short R, Carter B, Verduri A, Myint PK, Quinn TJ, Vilches-Moraga A, Stechman MJ, Moug S, McCarthy K, Hewitt J. Geriatrics (Basel). 2020 Sep 21;5(3):58.
12. **Can cardiovascular risk management be improved by shared care with general practice to prevent cognitive decline following stroke/TIA? A feasibility randomised controlled trial (SERVED memory).** Davison WJ, Myint PK, Loke YK, Ravenhill G, Turner D, Fox C, Shepstone L, Potter JF. BMC Geriatr. 2020 Sep 17;20(1):353.



13. **Prior Routine Use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and Important Outcomes in Hospitalised Patients with COVID-19.** Bruce E, Barlow-Pay F, Short R, Vilches-Moraga A, Price A, McGovern A, Braude P, Stechman MJ, Moug S, McCarthy K, Hewitt J, Carter B, Myint PK. J Clin Med. 2020 Aug 10;9(8):2586.
14. **Temporal Trends in Pregnancy-Associated Stroke and Its Outcomes Among Women With Hypertensive Disorders of Pregnancy.** Wu P, Jordan KP, Chew-Graham CA, Coutinho T, Lundberg GP, Park KE, Chappell LC, Myint PK, Maas AHEM, Mamas MA. J Am Heart Assoc. 2020 Aug 4;9(15):e016182.
15. **Increasing prevalence of anticholinergic medication use in older people in England over 20 years: cognitive function and ageing study I and II.** Grossi CM, Richardson K, Savva GM, Fox C, Arthur A, Loke YK, Steel N, Brayne C, Matthews FE, Robinson L, Myint PK, Maidment ID. BMC Geriatr. 2020 Jul 31;20(1):267.
16. **Resumption of elective colorectal surgery during COVID-19 and risk of death.** McCarthy K, Myint PK, Moug S, Pearce L, Braude P, Vilches-Moraga A, Hewitt J, Carter B; OPSOC group. Colorectal Dis. 2020 Sep;22(9):1026-1027.
17. **Nosocomial COVID-19 infection: examining the risk of mortality. The COPE-Nosocomial Study (COVID in Older PEople).** Carter B, Collins JT, Barlow-Pay F, Rickard F, Bruce E, Verduri A, Quinn TJ, Mitchell E, Price A, Vilches-Moraga A, Stechman MJ, Short R, Einarsson A, Braude P, Moug S, Myint PK, Hewitt J, Pearce L, McCarthy K; COPE Study Collaborators. J Hosp Infect. 2020 Oct;106(2):376-384.
18. **Infective endocarditis is associated with worse outcomes in stroke: A Thailand National Database Study.** Reid KA, Barlas RS, Mamas MA, Clark AB, Kwok CS, Wong CW, Kongbunkiat K, Bettencourt-Silva JH, Sawanyawisuth K, Kasemsap N, Tiamkao S, Myint PK. Int J Clin Pract. 2020 Nov;74(11):e13614.
19. **The effect of frailty on survival in patients with COVID-19 (COPE): a multicentre, European, observational cohort study.** Hewitt J, Carter B, Vilches-Moraga A, Quinn TJ, Braude P, Verduri A, Pearce L, Stechman M, Short R, Price A, Collins JT, Bruce E, Einarsson A, Rickard F, Mitchell E, Holloway M, Hesford J, Barlow-Pay F, Clini E, Myint PK, Moug SJ, McCarthy K; COPE Study Collaborators. Lancet Public Health. 2020 Aug;5(8):e444-e451.

20. **Anticholinergic drugs and incident dementia, mild cognitive impairment and cognitive decline: a meta-analysis.** Pieper NT, Grossi CM, Chan WY, Loke YK, Savva GM, Haroulis C, Steel N, Fox C, Maidment ID, Arthur AJ, Myint PK, Smith TO, Robinson L, Matthews FE, Brayne C, Richardson K. Age Ageing. 2020 Oct 23;49(6):939-947.
21. **An overview of prevalence, determinants and health outcomes of polypharmacy.** Khezrian M, McNeil CJ, Murray AD, Myint PK. Ther Adv Drug Saf. 2020 Jun 12;11:2042098620933741.
22. **Anticholinergic burden in middle-aged women and recurrent falls in later life: findings from the Aberdeen prospective osteoporosis screening study (APOSS).** Neal SR, Wood AD, Ablett AD, Gregory JS, Guillot J, Macdonald HM, Reid DM, Myint PK. Ther Adv Drug Saf. 2020 May 27;11:2042098620929852.
23. **Impact of Diabetes on Complications, Long Term Mortality and Recurrence in 608,890 Hospitalised Patients with Stroke.** Szlachetka WA, Pana TA, Tiamkao S, Clark AB, Kongbunkiat K, Sawanyawisuth K, Bettencourt-Silva JH, Kasemap N, Mamas MA, Myint PK. Glob Heart. 2020 Feb 6;15(1):2.
24. **Older patients are more likely to breach the 4-hour target in Scotland.** Quinn J, Buchanan S, Myint PK, Ellis G. Emerg Med J. 2020 Dec;37(12):807-810.
25. **Protocol for the process evaluation of a cluster randomised controlled trial to determine the effectiveness and cost-effectiveness of independent pharmacist prescribing in care home: the CHIPPS study.** Bond CM, Holland R, Alldred DP, Arthur A, Barton G, Birt L, Blyth A, Desborough J, Ford J, Handford C, Hill H, Hughes CM, Maskrey V, Massey K, Myint PK, Norris N, Poland FM, Shepstone L, Zermansky A, Wright D; CHIPPS Team. Trials. 2020 May 29;21(1):439.
26. **The Prognostic Value of Anticholinergic Burden Measures in Relation to Mortality in Older Individuals: A Systematic Review and Meta-Analysis.** Graves-Morris K, Stewart C, Soiza RL, Taylor-Rowan M, Quinn TJ, Loke YK, Myint PK. Front Pharmacol. 2020 Apr 29;11:570.
27. **Parkinson's disease and patient related outcomes in stroke: A matched cohort study.** Perdomo-Lampignano JA, Pana TA, Sleeman I, Clark AB, Sawanyawisuth K, Tiamkao S, Myint PK. J Stroke Cerebrovasc Dis. 2020 Jul;29(7):104826.

28. **Decision-Making in COVID-19 and Frailty.** Moug S, Carter B, Myint PK, Hewitt J, McCarthy K, Pearce L. *Geriatrics (Basel)*. 2020 May 6;5(2):30.
29. **Managing heart failure with preserved ejection fraction.** Davidson A, Raviendran N, Murali CN, Myint PK. *Ann Transl Med*. 2020 Mar;8(6):395.
30. **How to develop clinical reasoning in medical students and interns based on illness script theory: An experimental study.** Delavari S, Monajemi A, Baradaran HR, Myint PK, Yaghmaei M, Soltani Arabshahi SK. *Med J Islam Repub Iran*. 2020 Feb 20;34:9.
31. **Does quality of care in hip fracture vary by day of admission?** Farrow L, Hall A, Aucott L, Holt G, Myint PK. *Arch Osteoporos*. 2020 Mar 20;15(1):52.
32. **Assessing Risks of Polypharmacy Involving Medications With Anticholinergic Properties.** Hanlon P, Quinn TJ, Gallacher KI, Myint PK, Jani BD, Nicholl BI, Lowrie R, Soiza RL, Neal SR, Lee D, Mair FS. *Ann Fam Med*. 2020 Mar;18(2):148-155.
33. **Association Between Hospital Cardiac Catheter Laboratory Status, Use of an Invasive Strategy, and Outcomes After NSTEMI.** Rashid M, Kontopantelis E, Kinnaird T, Curzen N, Gale CP, Mohamed MO, Shoaib A, Kwok CS, Myint PK, Nolan J, Zaman MJ, Timmis A, Mamas M. *Can J Cardiol*. 2020 Jun;36(6):868-877.
34. **Self-Reported Fatigue Predicts Incident Stroke in a General Population: EPIC-Norfolk Prospective Population-Based Study.** Barlas G, Luben RL, Neal SR, Wareham NJ, Khaw KT, Myint PK. *Stroke*. 2020 Apr;51(4):1077-1084.
35. **Neuropathological Correlates of Cumulative Benzodiazepine and Anticholinergic Drug Use.** Richardson K, Wharton SB, Grossi CM, Matthews FE, Fox C, Maidment I, Loke YK, Steel N, Arthur A, Myint PK, Boustani M, Campbell N, Robinson L, Brayne C, Savva GM. *J Alzheimers Dis*. 2020;74(3):999-1009.
36. **Self-Monitoring and Management of Blood Pressure in Patients with Stroke or TIA: An Economic Evaluation of TEST-BP, A Randomised Controlled Trial.** Kim LG, Wilson ECF, Davison WJ, Clark AB, Myint PK, Potter JF. *Pharmacoecon Open*. 2020 Sep;4(3): 511-517.
37. **Aspirin moderates the association between cardiovascular risk, brain white matter hyperintensity total lesion volume and processing speed in normal ageing.** Khezrian M, Waymont JMJ, Myint PK, McNeil CJ, Whalley LJ, Staff R, Murray AD, Maturitas. 2020 Mar; 133:49-53.



38. **Anaemia and incidence of post stroke dementia.** Myint PK, Macleod MJ, Clark AB, Smith TO, Bettencourt-Silva JH, Metcalf AK, Potter JF. Clin Neurol Neurosurg. 2020 Apr;191:105688.
39. **Association between different methods of assessing blood pressure variability and incident cardiovascular disease, cardiovascular mortality and all-cause mortality: a systematic review.** Smith TO, Sillito JA, Goh CH, Abdel-Fattah AR, Einarsson A, Soiza RL, Mamas MA, Tan MP, Potter JF, Loke YK, Myint PK. Age Ageing. 2020 Feb 27;49(2):184-192.
40. **Protocol for a cluster randomised controlled trial to determine the effectiveness and cost-effectiveness of independent pharmacist prescribing in care homes: the CHIPPS study.** Bond CM, Holland R, Alldred DP, Arthur A, Barton G, Blyth A, Desborough J, Ford J, Handford C, Hill H, Hughes CM, Maskrey V, Massey K, Myint PK, Norris N, Poland FM, Shepstone L, Turner D, Zermansky A, Wright D; CHIPPS Team. Trials. 2020 Jan 21;21(1):103.
41. **Comprehensive 5P framework for active aging using the ecological approach: an iterative systematic review.** Lak A, Rashidghalam P, Myint PK, Baradaran HR. BMC Public Health. 2020 Jan 9;20(1):33.
42. **Baseline risk, timing of invasive strategy and guideline compliance in NSTEMI: Nationwide analysis from MINAP.** Rashid M, Curzen N, Kinnaird T, Lawson CA, Myint PK, Kontopantelis E, Mohamed MO, Shoaib A, Gale CP, Timmis A, Mamas MA. Int J Cardiol. 2020 Feb 15;301:7-13.
43. **Use of Medications with Anticholinergic Properties and the Long-Term Risk of Hospitalization for Falls and Fractures in the EPIC-Norfolk Longitudinal Cohort Study.** Tan MP, Tan GJ, Mat S, Luben RN, Wareham NJ, Khaw KT, Myint PK. Drugs Aging. 2020 Feb;37(2):105-114.
44. **Does prior antithrombotic therapy influence recurrence and bleeding risk in stroke patients with atrial fibrillation or atrial flutter?** Gamble DT, Buono R, Mamas MA, Leslie S, Bettencourt-Silva JH, Clark AB, Bowles KM, Metcalf AK, Potter JF, Myint PK. Eur J Prev Cardiol. 2020 May; 27(7):729-737.
45. **Interventions to Reduce Anticholinergic Burden in Adults Aged 65 and Older: A Systematic Review.** Nakham A, Myint PK, Bond CM, Newlands R, Loke YK, Cruickshank MJ. Am Med Dir Assoc. 2020 Feb;21(2):172-180.e5.

46. **Global pandemic-the true incidence of adverse drug reactions.** Soiza RL. Age Ageing. 2020 Oct 23;49(6):934-935.
47. **Sodium bicarbonate to improve physical function in patients over 60 years with advanced chronic kidney disease: the BiCARB RCT.** Witham MD, Band M, Chong H, Donnan PT, Hampson G, Hu MK, Littleford R, Lamb E, Kalra PA, Kennedy G, McNamee P, Plews D, Rauchhaus P, Soiza RL, Sumukadas D, Warwick G, Avenell A. Health Technol Assess. 2020 Jun;24(27):1-90.
48. **Prevention of adverse drug reactions in hospitalized older patients with multi-morbidity and polypharmacy: the SENATOR\* randomized controlled clinical trial.** O'Mahony D, Gudmundsson A, Soiza RL, Petrovic M, Jose Cruz-Jentoft A, Cherubini A, Fordham R, Byrne S, Dahly D, Gallagher P, Lavan A, Curtin D, Dalton K, Cullinan S, Flanagan E, Shiely F, Samuelsson O, Sverrisdottir A, Subbarayan S, Vandaele L, Meireson E, Montero-Erasquin B, Rexach-Cano A, Correa Perez A, Lozano-Montoya I, Vélez-Díaz-Pallarés M, Cerenzia A, Corradi S, Soledad Cotorruelo Ferreiro M, Dimitri F, Marinelli P, Martelli G, Fong Soe Khioe R, Eustace J. Age Ageing. 2020 Jul 1;49(4):605-614.
49. **Clinical and cost-effectiveness of oral sodium bicarbonate therapy for older patients with chronic kidney disease and low-grade acidosis (BiCARB): a pragmatic randomised, double-blind, placebo-controlled trial.** BiCARB study group. BMC Med. 2020 Apr 9;18(1):91.
50. **Non-pharmacological, non-surgical interventions for urinary incontinence in older persons: A systematic review of systematic reviews. The SENATOR project ONTOP series.** Kilpatrick KA, Paton P, Subbarayan S, Stewart C, Abraha I, Cruz-Jentoft AJ, O'Mahony D, Cherubini A, Soiza RL. Maturitas. 2020 Mar;133:42-48.
51. **Association of antibiotics therapy during pregnancy with spontaneous miscarriage: a systematic review and meta-analysis.** Omranipoor A, Kashanian M, Dehghani M, Sadeghi M, Baradaran HR. Arch Gynecol Obstet. 2020 Jul;302(1):5-22.

## ONLINE AHEAD OF PRINT

52. **Calcium intake, calcium supplementation and cardiovascular disease and mortality in the British population: EPIC-norfolk prospective cohort study and meta-analysis.** Pana TA, Dehghani M, Baradaran HR, Neal SR, Wood AD, Kwok CS, Loke YK, Luben RN, Mamas MA, Khaw KT, Myint PK. *Eur J Epidemiol.* 2020 Dec 31. doi: 10.1007/s10654-020-00710-8.
53. **Trial of Dexamethasone for Chronic Subdural Hematoma.** Hutchinson PJ, Edlmann E, Bulters D, Zolnourian A, Holton P, Suttner N, Agyemang K, Thomson S, Anderson IA, Al-Tamimi YZ, Henderson D, Whitfield PC, Gherle M, Brennan PM, Allison A, Thelin EP, Tarantino S, Pantaleo B, Caldwell K, Davis-Wilkie C, Mee H, Warburton EA, Barton G, Chari A, Marcus HJ, King AT, Belli A, Myint PK, Wilkinson I, Santarius T, Turner C, Bond S, Kolia AG; British Neurosurgical Trainee Research Collaborative and Dex-CSDH Trial Collaborators. *N Engl J Med.* 2020 Dec 16. doi: 10.1056/NEJMoa2020473.
54. **Efficacy and safety of COVID-19 vaccines in older people.** Soiza RL, Scicluna C, Thomson EC. *Age Ageing.* 2020 Dec 2:afaa274. doi: 10.1093/ageing/afaa274.
55. **Association of Circulating Monocyte Chemoattractant Protein-1 Levels With Cardiovascular Mortality: A Meta-analysis of Population-Based Studies.** Georgakis MK, de Lemos JA, Ayers C, Wang B, Björkbacka H, Pana TA, Thorand B, Sun C, Fani L, Malik R, Dupuis J, Engström G, Orholm-Melander M, Melander O, Boekholdt SM, Zierer A, Elhadad MA, Koenig W, Herder C, Hoogeveen RC, Kavousi M, Ballantyne CM, Peters A, Myint PK, Nilsson J, Benjamin EJ, Dichgans M. *JAMA Cardiol.* 2020 Nov 4. doi: 10.1001/jamacardio.2020.5392.
56. **Acute Myocardial Infarction in Autoimmune Rheumatologic Disease: A Nationwide Analysis of Clinical Outcomes and Predictors of Management Strategy.** Mohamed MO, Roddy E, Ya'qoub L, Myint PK, Al Alasnag M, Alraies C, Clarson L, Helliwell T, Mallen C, Fischman D, Al Shaibi K, Abhishek A, Mamas MA. *Mayo Clin Proc.* 2020 Nov 25:S0025-6196(20)30829-6. doi: 10.1016/j.mayocp.2020.04.044.
57. **Trends, management and outcomes of acute myocardial infarction in chronic liver disease.** Matetic A, Contractor T, Mohamed MO, Bhardwaj R, Aneja A, Myint PK, Rakoski MO, Zieroth S, Paul TK, Mamas MA. *Int J Clin Pract.* 2020 Nov 21:e13841. doi: 10.1111/ijcp.13841.



58. **Anticholinergic Burden Measures Predict Older People's Physical Function and Quality of Life: A Systematic Review.** Stewart C, Yrjana K, Kishor M, Soiza RL, Taylor-Rowan M, Quinn TJ, Loke YK, Myint PK. *J Am Med Dir Assoc.* 2021 Jan;22(1):56-64.
59. **Revascularisation therapies improve the outcomes of ischemic stroke patients with atrial fibrillation and heart failure.** Pana TA, Mohamed MO, Clark AB, Fahy E, Mamas MA, Myint PK. *Int J Cardiol.* 2020 Oct 3:S0167-5273(20)33906-1. doi: 0.1016/j.ijcard.2020.09.076.
60. **Can soy isoflavones plus soy protein change serum levels of interleukin-6? A systematic review and meta-analysis of randomized controlled trials.** Gholami A, Baradaran HR, Hariri M. *Phytother Res.* 2020 Oct 12. doi: 10.1002/ptr.6881.
61. **Baseline anticholinergic burden from medications predicts poorer baseline and long-term health-related quality of life in 16 675 men and women of EPIC-Norfolk prospective population-based cohort study.** Yrjana KR, Neal SR, Soiza RL, Keevil V, Luben RN, Wareham NJ, Khaw KT, Myint PK. *Pharmacoepidemiol Drug Saf.* 2020 Aug 5. doi: 10.1002/pds.5085.
62. **Association of chronic kidney disease with outcomes in acute stroke.** Tung IM, Barlas RS, Vart P, Bettencourt-Silva JH, Clark AB, Sawanyawisuth K, Kongbunkiat K, Kasemsap N, Tiamkao S, Myint PK. *Acta Neurol Belg.* 2020 Jul 13. doi: 10.1007/s13760-020-01416-0.
63. **Circulating asymmetric dimethylarginine and cognitive decline: A 4-year follow-up study of the 1936 Aberdeen Birth Cohort.** Malden DE, Mangoni AA, Woodman RJ, Thies F, McNeil C, Murray AD, Soiza RL. *Int J Geriatr Psychiatry.* 2020 May 25. doi: 10.1002/gps.5355.

## PAPERS PUBLISHED AS COLLABORATOR/CONTRIBUTOR

64. **Dexamethasone in Hospitalized Patients with Covid-19 - Preliminary Report.** The RECOVERY Collaborative Group. N Engl J Med. July 17, 2020. DOI: 10.1056/NEJMoa2021436.
65. **Effect of Hydroxychloroquine in Hospitalized Patients with Covid-19.** RECOVERY Collaborative Group, Horby P, Mafham M, Linsell L, Bell JL, Staplin N, Emberson JR, Wiselka M, Ustianowski A, Elmahi E, Prudon B, Whitehouse T, Felton T, Williams J, Faccenda J, Underwood J, Baillie JK, Chappell LC, Faust SN, Jaki T, Jeffery K, Lim WS, Montgomery A, Rowan K, Tarning J, Watson JA, White NJ, Juszczak E, Haynes R, Landray MJ. N Engl J Med. 2020 Nov 19;383(21):2030-2040.
66. **Lopinavir–ritonavir in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial.** RECOVERY Collaborative Group. Lancet 2020; 396: 1345–52.

67. **Development of a European consensus from dentists, dental hygienists and physicians on a standard for oral health care in care-dependent older people: An e-Delphi study.** Charadram N, Maniewicz S, Maggi S, Petrovic M, Kossioni A, Srinivasan M, Schimmel M, Mojon P, Müller F; e-Delphi working group. Gerodontology. 2020 Oct 18. doi: 10.1111/ger.12501.

## ONLINE AHEAD OF PRINT

68. **Validation of a UPDRS-/MDS-UPDRS-based definition of functional dependency for Parkinson's disease.** Ramsay N, Macleod AD, Alves G, Camacho M, Forsgren L, Lawson RA, Maple-Grødem J, Tysnes OB, Williams-Gray CH, Yarnall AJ, Counsell CE; Parkinson's Incidence Cohorts Collaboration; PINE Study; CamPaIGN study; PICNICS study; NYPUM Study; ParkWest Study: ParkWest Principal investigators; Study personnel; ICICLE-PD Study. Parkinsonism Relat Disord. 2020 Jul;76:49-53.

## POSTER PRESENTATIONS

ASiT (association of surgeons in training)  
Virtual Conference 17 Oct 2020

**Clinical Frailty Score (CFS) vs antibiotics, time to surgery and time to computerised tomography (CT) scan in an emergency surgical population.** S Palaniappan, R L Soiza, S J Moug, P K Myint on behalf of the Older People's Surgical Outcomes Collaborative (OPSOC) and The Emergency Laparoscopic and Laparotomy Scottish Audit (ELLSA).

ESC Heart & Stroke 2020 Conference, 24-25 January 2020, Barcelona, Spain

**Development and internal validation of a prediction score for 10-year ischaemic stroke mortality.** Weronika Szlachetka, McLernon DJ, Pana T, Bettencourt-Silva JH, Metcalf AK, Mamas MA, Potter JF, Myint PK.

**Heart Failure, Atrial Fibrillation and Acute Ischaemic Stroke Outcomes:** A Nationwide Inpatient Sample Study. Pana TA, Mohamed MO, Fahy E, Mamas MA, Myint PK.

## ORAL PRESENTATIONS

Society of Academic Primary Care 49th Annual Conference, 15-17 July 2020, University of Leeds.

**What do the public, patients and health professionals think about the design of an intervention trial to reduce anticholinergic burden?** Yvonne Cunningham, Frances S Mair, Katie Gallacher, Terry Quinn, Karen Wood, Richard Lowrie, Graham Ellis, Christine Bond, Phyo K Myint.

Society for Social Medicine & Population Health 64th Annual Scientific meeting: 9-11 September 2020

**Predictors of cardiovascular disease in women with hypertensive disorders of pregnancy.** Pasdar Z, Gamble DT, Myint PK, Luben RN, Wareham NJ, Khaw KT, Bhattacharya S.

British Orthopaedic Association Virtual Congress 2020 (15-18, 21-25 September 2020)

**The influence of hospital level variables on hip fracture outcomes.** Farrow L, Hall A, Ablett A, Aucott L, Myint PK. (best of best abstract).



**The Association of Surgeons of Great Britain and Ireland,  
12 Aug 2020 Glasgow**

**Validation of the Clinical Frailty Score (CFS) in another emergency surgical population.** S Palaniappan, R L Soiza, S Duffy, K McCarthy, S J Moug, P K Myint on behalf of the Older People's Surgical Outcomes Collaborative (OPSOC) and The Emergency Laparoscopic and Laparotomy Scottish Audit (ELLSA).

**48th North American Primary Care Research Group  
NAPCRG Annual Meeting, (virtual)  
20-24 November 2020**

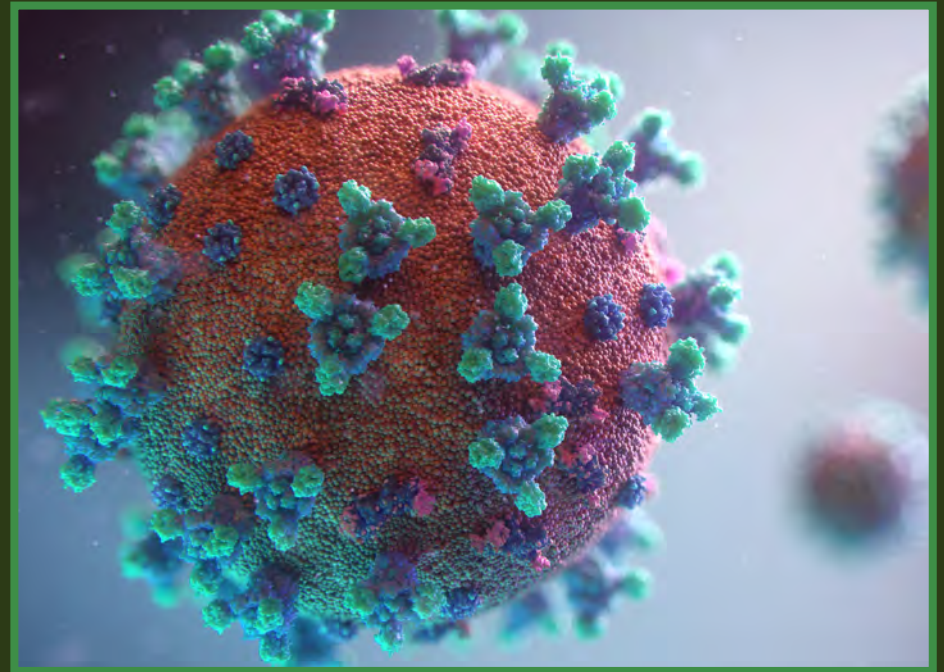
**Public, patient and health professional views about the design of an intervention trial to reduce anticholinergic burden.** Cunningham Y, Myint PK, Gallacher K, Nakham A, Quinn T.

**21st International Falls & Postural Stability Conference  
(online) 25 September, 2020**

**The Influence of Body Mass Index on Falls and Other Health Outcomes- MELoR Five-Year Follow-Up Data.** Nabilah Hashim, Sumaiyah Mat, Phyo Kyaw Myint, Sheng Hui Kioh, Maw Pin Tan.

## **PRESS RELEASES/IN THE NEWS**

Our activities and research outputs have been the University's highlights in 2020 and attracted some press and media coverage.



**Frailty as important as age or underlying health issues in Covid-19 death risk** <https://www.abdn.ac.uk/news/14138/>

The study showed that patients who were considered to be severely frail were 2.4 times more likely to die from Covid-19 than those who weren't assessed as frail, after accounting for age, other health problems and the severity of illness when patients were admitted to hospital.



Coronavirus: One in eight hospital cases were 'caught on-site'  
<https://www.bbc.co.uk/news/health-53895891>



UK study finds ibuprofen does not increase risk of death from Covid-19  
<https://www.abdn.ac.uk/news/14267/>

A new study conducted during the height of UK hospital admissions from Covid-19 has found that the regular use of painkillers including ibuprofen, naproxen and diclofenac did not increase the risk of death from the disease.

## CONGRATULATIONS

Ms. Sheng Hui Kioh (Melissa) successfully submitted her Thesis “Obesity and falls among older adults” and awaiting viva.

Congratulations to Dr Jesus Perdomo-Lampignano who has made great contributions to ACER activities over last 4 years. He has been successful in securing Academic Foundation Programme (2020-2022), Medicine Rotation, in North of Scotland. We hope to continue to collaborate with him for many years to come.

Triple congratulations to Dr Eilidh Bruce for:

1. Being appointed as a run-through specialty trainee in Surgery in North of Scotland
2. Being appointed as an Early Career Academic Trainee with the University of Aberdeen;
3. Successful track record of publications with the COPE team on Epidemiology of COVID-19!

Many congratulations to Dr Subbramanian Palaniappan who has been appointed as specialty trainee in Surgery, and also being appointed as Early Career Academic Trainee with the University of Aberdeen.

## CONGRATULATIONS



**Mrs Mina Khezrian** passed her PhD viva with minor corrections in November 2020.

**The Prevalence, Determinants and Outcomes of Polypharmacy in Three Cohort Studies in Aberdeen**



**Dr Selvarani Subbarayan** defended her Thesis in March 2020 and was recommended for the award of PhD after major corrections. She is due to re-submit in end Feb 2021.

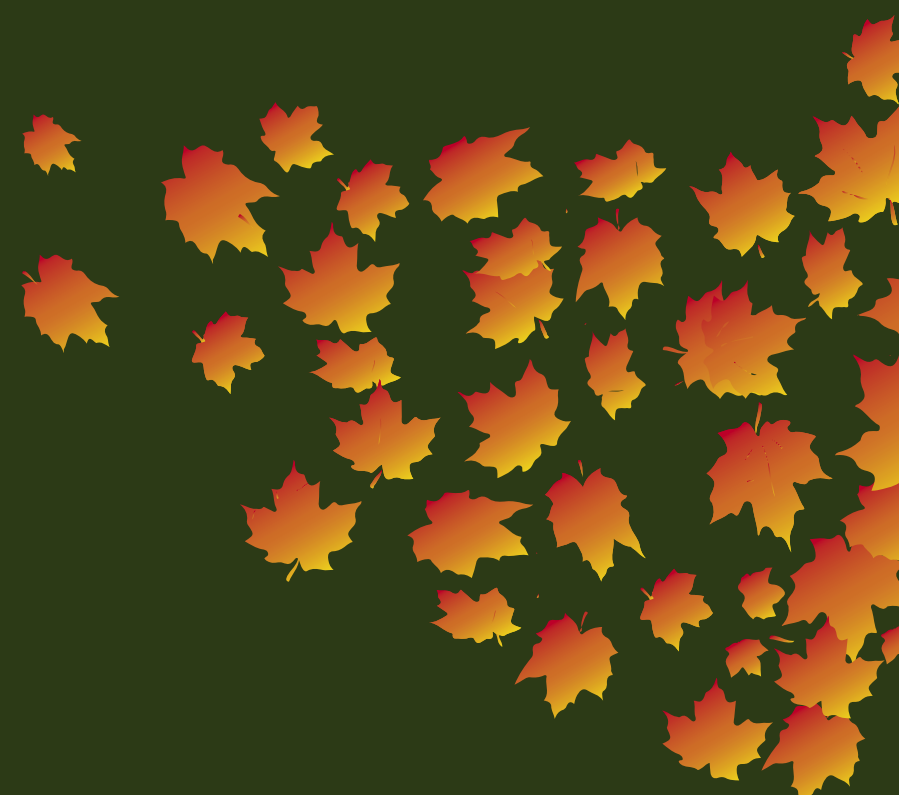
**Orthostatic Hypotension and Hyponatraemia in the Elderly**



Congratulations to **Mr Luke Farrow** who was former ECAP trainee has been successful as SCREDS Clinical Lecturer in Trauma and Orthopaedics.

## LOOKING AHEAD 2021

2020 has been a very challenging for everyone. We were able to work flexibly and productively evident by our research output and success of our team members. We aim to continue our excellence in fostering ageing clinical and experimental research together with our collaborators, staff and students. We hoped that situation will be better in 2021 with regard to COVID.









## 2019 AUTUMN: Some of the ACER Team Members in the Autumn sunshine



**From left to right:** Roy Soiza, Weronika Szlachetka, Alison Donaldson, Mouna Sawan, Selvarani Subbarayan, Pamela Paton, Tiberiu Pana, Sirjana Devkota, Alexander Davidson, Kirsty Hudson, Ross Lilley, Katherine Graves-Morris, Liam Lennox, Zahra Pashar, Athagran Nakham (Toney), Michelle Tørnes, Carrie Stewart, Phyo Myint, Mina Khezrian

## MEMBERS - DECEMBER 2020

### LEAD CLINICAL ACADEMICS

Professor Phyo Kyaw Myint

### HONORARY SENIOR CLINICAL ACADEMIC STAFF (NHS GRAMPIAN)

Dr Roy L Soiza  
Honorary Clinical Reader

Dr Robert Caslake  
Honorary Senior Clinical Lecturer

### CLINICAL LECTURERS

Dr Alison I C Donaldson  
SCREDS Clinical Lecturer

Dr Isobel Sleeman  
SCREDS Clinical Lecturer

### RESEARCH AND RELATED STAFF

Dr Carrie Stewart  
Postdoctoral Research Fellow/PPI Lead

Mrs Bolanle Brikinn  
NHS Research Scotland Research Fellow

### POSTGRADUATE RESEARCH STUDENTS

Mr Athagran Nakham  
PhD Candidate

Dr Selvarani Subbarayan  
PhD Candidate

Dr Loulwah Serri  
PhD Candidate

Miss Shen Hui Kioh (Melissa)  
PhD Candidate (University of Malaya/Malaysia)

Dr Roy Marzo (Roy)  
PhD Candidate (Monash University, Malaysia)

Nur Fazidah Binti Asmuje  
PhD Candidate (University of Malaya/Malaysia)

### HONORARY CLINICAL RESEARCH FELLOWS

Dr Alexander Davidson  
Honorary Research Fellow/STR

Mr Iain Rankin  
Honorary Teaching Fellow/STR

Dr David Gamble  
Honorary Research Fellow/CMT

Dr Adrian D Wood  
Honorary Research Fellow/AFP

Dr Raphae Barlas  
Honorary Research Fellow/AFP

## MEMBERS - DECEMBER 2020

### UoA STAFF/STUDENT AFFILIATES

Mr Luke Farrow

Honorary Research Fellow/STR

Mr Tiberiu A Pana

Intercalating MRes Student

Mr Jesus A Permodo-Lampignano

Final Year MBChB

Mr Andrew Ablett

Final Year MBChB

Miss Weronika Szlachetka

3rd Year MBChB

Mr Abdelrahman Abdel-Fattah

3rd Year MBChB

Miss Zarah Pasdar

3rd Year MBChB

### VISITING STAFF/STUDENTS/EXTERNAL AFFILIATES

Dr Stephen Makin

Senior Clinical Lecturer, Centre for Rural Health, IAHS

Dr Stephen McCall

Assistant Professor, American University of Beirut

Dr Mohannad Kafri

Assistant Professor, Birzeit University

Dr Joao H Bettencourt

Silva, IBM

Dr Andrew Hall

Honorary Research Fellow

Dr Chun Shing Kwok

Honorary Research Fellow and Clinical Lecturer in Cardiology (Keele University)

Dr Emma Law

Honorary Research Associated (RINH) (NHS Tayside)

Professor Hamid Baradaran

Honorary Visiting Professorial Fellow

Dr Mouna Sawan

Honorary Research Fellow (University of Sydney)

### ADMINISTRATOR

Mrs Morag McConnell





**AGEING CLINICAL AND EXPERIMENTAL RESEARCH TEAM**  
**DEPARTMENT OF MEDICINE FOR THE ELDERLY**  
**ANNUAL REPORT 2020**