

Newsletter Autumn 2023

CaHRU study on the effect of specific learning difficulties on general practice written and clinical assessments highly commended in RCGP Research Paper of the Year awards 2023

A study on, '[The effect of specific learning difficulties on general practice written and clinical assessments](#)' published in the journal Medical Education was highly commended in the RCGP Research Paper of the Year awards this year for papers published in 2022. The study, led by Dr Vanessa Botan, with Profs Niro Siriwardena and Graham Law from CaHRU and Dr Nicki Williams from the GP National Recruitment Office, in collaboration with the Royal College of General Practitioners.

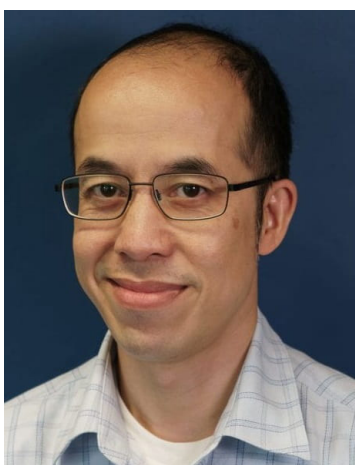


The paper studied doctors with specific learning difficulties and differences, most commonly dyslexia, affecting 10-20% of GP trainees and found that they, with reasonable adjustments in place, performed no differently in the computer marked multiple choice Applied Knowledge Test or the Recorded Consultation Assessment, but did significantly worse in the Clinical Skills Assessment and Workplace Based Assessment, which together constitute the MRCGP licensing test for general practice.



The study concluded that candidates with specific learning difficulties do encounter challenges in multiple domains of the GP licencing tests and during their training, suggesting that more adjustments tailored to their needs should be put in place for the applied clinical skills tests and during their training. This has been the subject of a further interview study that has just been completed and is in peer review. Dr Botan was promoted to a lecturer in psychology post at Nottingham Trent University where she now works.

Improvement Science and Research Methods Seminar given by Dr Viet-Hai Phung: Methodological reflections on doing a PhD



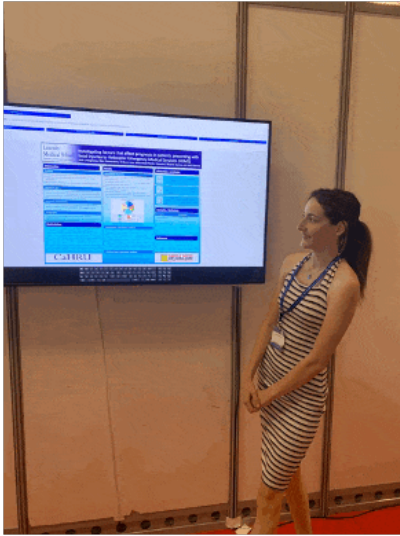
On Wednesday 18th October, Dr Viet-Hai Phung gave the October seminar: 'Methodological reflections on doing a PhD' in which he discussed the methods used in his doctoral research exploring, 'Eastern European migrants in Lincolnshire: what are their experiences of ambulance care and what are the barriers and facilitators of accessing such care? A stakeholder informed study.'

The methods included a systematic scoping review and an interview study which involved recruiting and interviewing people from Eastern Europe living in Lincolnshire, including interviews conducted with a translator.

CaHRU seminars are open to everyone, if you would like a link to join or to attend in person, please contact Sue Bower sbowler@lincoln.ac.uk.

Barcelona EUSEM presentations given by Lincoln Medical School students Jade Livingstone and Jasmine Kirk

CaHRU staff supervised two University of Nottingham Lincoln Medical School students, Jade Livingstone and Jasmine Kirk, to successfully complete their BMedSci research projects. Over the past year, CaHRU, Jade and Jasmine have collaborated with Lincolnshire & Nottinghamshire Air Ambulance (LNAA) to produce two pieces of research into outcomes for trauma patients attended by the helicopter emergency medical service. Their abstracts were accepted for presentation at the European Congress for Emergency Medicine 2023. This annual conference hosts over 3,000 professionals, sharing new and ground-breaking developments in the field of emergency medicine. The EUSEM conference facilitates networking between delegates from around the world. This year, the congress was hosted in Barcelona.



Jasmine spoke about factors that increase risk of mortality in trauma patients attended by the air ambulance in her oral presentation. “Presenting my research abstract at the EUSEM conference was a fantastic experience. I am so grateful for the opportunity to share my findings to other professionals and researchers in the field of Emergency Medicine. This is a specialty I am very interested in, particularly Paediatric EM. I was able to network with other medical students and junior doctors which was inspiring and enlightening. Beyond the conference, I had a wonderful time in Barcelona, exploring the local cuisine and immersing myself in the vibrant culture. This was an unforgettable trip that combined professional growth with personal enjoyment.”

Jade gave a poster presentation on factors affecting mortality in head trauma patients in LNAA. “I was delighted to have the chance to present my research at the EUSEM conference in Barcelona. It was an amazing opportunity to network with academics and professionals working within Emergency Medicine and it allowed me to delve deeper into a specialty that I am particularly fascinated by. Additionally, attending presentations from other academics gave me an insight into the intricacies and the broad variety available in multiple fields of research. I’d like to thank CaHRU and the team at the Lincolnshire & Nottinghamshire Air Ambulance for all their support for making this possible and for assisting me with the publication of my work in the Emergency Medicine Journal.”



The conference has been a fantastic educational opportunity for our medical students and will further their professional development for the future.

Improvement Science and Research Methods seminar given by Professor Graham Law: The design of clinical trials: what do the names mean?



On 22nd November 2023 Professor Graham Law gave the November Seminar entitled: The design of Clinical Trials: What do the names mean? If you missed Graham's talk, the link to the recording is on the CaHRU website [Improvement Science and Research Methods seminar given by Professor Graham Law: The design of clinical trials: what do the names mean? – Community and Health Research Unit \(cahru.org.uk\)](https://www.cahru.org.uk/improvement-science-and-research-methods-seminar-given-by-professor-graham-law-the-design-of-clinical-trials-what-do-the-names-mean/) .

You may have heard that Clinical Trials are typically conducted in phases. Graham explained some of these.

The phase, 1 to 4, indicates the stage of development and testing a drug or treatment has reached. These include Phase I (safety and dosage), Phase II (effectiveness and side effects), Phase III (large-scale effectiveness and monitoring of side effects), and Phase IV (post-marketing surveillance).

But we have found, an essential component of trial design has been the 'Feasibility clinical trial'. This may be similar to, but often confused with, the 'Pilot trial'. I will try to explain these also.

Graham Law is Professor in Medical Statistics in College of Social Science. He has published extensively in epidemiology and medical statistics. He has worked on many different diseases, particularly diabetes. He is co-Director of the Lincoln Clinical Trials Unit <https://linctu.lincoln.ac.uk/>

Graham is also the School Senior Leadership Team Chair, a member of the College Inclusion Committee and the Leads University Research Data Management Group.

His subject specialisms are Diabetes, Trials, Sleep, Metabolic and Cardiovascular health, Ambulance services.

CaHRU presents at the Association for Medical Education in Europe (AMEE) conference 2023

Professor Niro Siriwardena attended and presented a research paper at The Association for Medical Education in Europe (AMEE) conference 26-30 August 2023 which took place at the SEC, Glasgow, UK.



The theme of this year's conference was, "Inclusive Learning Environments to Transform the Future", which provided an excellent opportunity to present work from CaHRU's programme of research on reliability, validity and fairness of the MRCGP. The paper reporting on, 'Academic performance comparing ethnic minority and White doctors in the UK GP licensing assessment' showed that ethnicity did not reduce the chance of passing GP licensing tests once sex, place of primary medical qualification, declared disability and selection scores were taken into account. Co-authors were Dr Vanessa Botan and Prof Graham Law from CaHRU, Nicki Williams from the GP National Recruitment Office, and Drs Kim Emerson, Fi Kameen, Lindsay Pope, Adrian Freeman from the MRCGP examinations.

The paper concluded by suggesting that selection test scores should be taken into account when comparing candidate performance and that doctors with low selection test scores may need additional support during training to maximise their chances of achieving licensing regardless of their ethnicity or other demographic characteristics. The study was published in the [British Journal of General Practice](https://www.bjgp.org/) this spring.



Funding

Routine screening for gambling disorder and gambling-related harm within mental health and drug and alcohol services: A feasibility and pilot study. National Institute for Health Research £380,000.

Probation evaluation of commissioned rehabilitative services. Ministry of Justice

Exploring experiences of doctors in training undertaking the new workplace-based assessments for general practice licensing. Royal College of General Practitioners £10,000.

Methane Early Warning Network (ME-NET). Wellcome Trust, £100,000.

NIHR East Midlands Partners Research Support Service, £186,000.

Co-production of a Caregivers intervention around Responsive Infant feeding Behaviours to prevent childhood obesity (CRIB). NIHR Research for Patient Benefit, July 2022, £149,900.

Publications

Kyle SD, Siriwardena AN, Espie C, Yang Y, Petrou S, Ogburn E, Begum N, Maurer L, Robinson B, Gardner C, Lee V, Armstrong S, Pattinson J, Mort S, Temple E, Harris V, Yu L-M, Bower P, Aveyard P (2023). Clinical and cost-effectiveness of nurse-delivered sleep restriction therapy for insomnia in primary care: a pragmatic randomised controlled trial. *Lancet*; 401; 975–87.

Armstrong S, Pattinson J, Siriwardena AN, Kyle SD, Bower P, Yu L-M, Yang Y, Ogburn E, Begum N, Maurer L, Robinson B, Gardner C, Lee V, Gavrilloff D, Espie C, Aveyard P (2023). Nurse delivered Sleep Restriction Therapy for adults with Insomnia Disorder: process evaluation. *British Journal of General Practice* (in press).

Siriwardena AN, Patel G, Botan V, Smith MD, Phung VH, Pattinson J, Trueman I, Ridyard C, Hosseini SMP, Asghar Z, Orner R, Brewster A, Mountain P, Rowan E, Spaight R (2023). Community First Responders' role in the current and future rural health and care workforce: a mixed methods study. *Health and Social Care Delivery Research* (in press).

Agarwal G, Siriwardena AN, McLeod B, Spaight R, Whitley GA, Ferron R, Pirrie M, Angeles R, Moore H, Gussy M, EDGE Consortium (2023). Development of indicators for avoidable emergency medical service calls by mapping paramedic clinical impression codes to ambulatory care sensitive conditions and mental health conditions in the UK and Canada. *BMJ Open* 13:e073520.

Kyle SD, Bower P, Yu LM, Siriwardena AN, Yang Y, Ogburn E, Begum N, Maurer L, Robinson B, Gardner C, Armstrong S, Pattinson J, Espie CA, Aveyard P (2023). Nurse-delivered sleep restriction therapy to improve insomnia disorder in primary care: the HABIT RCT. *Health Technol Assess* (in press).

Davies F, Edwards M, Price D, Anderson P, Berridge D, Carson-Stevens A, Choudhry M, Cooke M, Dale J, Donaldson L, Evans B, Fitzsimmons D, Harrington B, Harris S, Hepburn J, Hibbert P, Hughes T, Hussain F, Islam S, Pockett R, Porter A, Rainer T, Siriwardena AN, Snooks S, Watkins A, Edwards A (2023). The effectiveness, safety, patient experience, and system implications of different models of general practitioners working in or alongside emergency departments. *Health and Social Care Delivery Research* 2023 (in press).

Moore H, Nelson D, Gussy M, Siriwardena AN, Hill B, Tanser F, Spaight R (2023). Exploring mental health emergencies attended by ambulances in rural England during the COVID-19 pandemic. *Journal of Rural Mental Health* (in press).

Sumera K, Ilczak T, Bakkerud M, Lane JD, Pallas J, Martorell SO, Sumera A, Quinn T, Webster CA, Sandars J, Siriwardena AN (2023). CPR Quality Officer Role to improve CPR quality: a multi-centred international simulation randomised control trial. *Resuscitation Plus* (in press).

Abbott I, Whitley GA (2023). What are ambulance personnel experiences of sexual harassment and sexual assault in the workplace? A rapid evidence review. *International Emergency Nursing*; 71: 101376.

McManamny T, Ortega M, Munro S, Jennings P, Whitley GA (2023). A pre-hospital mixed methods systematic review protocol. *Br Paramed J*; 8: 38-43.

McKenzie JWB, Horne E, Smith B, Tapson ER, Whitley GA (2023). Novel moving, handling and extraction simulation for students in a soft play area. *Journal of Paramedic Practice*; 15: 10.

- Pattinson J, Laparidou D, Akanuwe J, Scott A, Sima C, Lewis C, Siriwardena AN (2023). Volunteering on Heritage at Risk sites and wellbeing: a qualitative interview study. *Health Expectations* 26:2485–2499.
- Dixon M, Appleton JP, Siriwardena AN, Williams J, Bath PM (2023). A systematic review of ambulance service based randomised controlled trials in stroke. *Neurological Sciences* 44: 4363–4378.
- Woodhouse LJ, Appleton JP, Ankolekar S, England TJ, Mair G, Muir K, Price CI, Pocock S, Randall M, Robinson TG, Roffe C, Sandset EC, Saver JL, Siriwardena AN, Sprigg N, Wardlaw JM, Bath PM (2023). Pre-hospital transdermal glyceryl trinitrate in patients with ultra-acute presumed stroke (RIGHT-2): effects on outcomes at day 365 in a randomised, sham-controlled, blinded, phase III, superiority ambulance-based trial. *BMJ Neurology Open* 5: e000424.
- Appleton JP, Woodhouse LJ, Anderson CS, Ankolekar S, Cala L, Dixon M, England TJ, Krishnan K, Mair G, Muir KW, Potter J, Price CI, Randall M, Robinson TG, Roffe C, Sandset EC, Saver JL, Shone A, Siriwardena AN, Wardlaw JM, Sprigg N, Bath PM on behalf of the RIGHT-2 Investigators (2023). Pre-hospital transdermal glyceryl trinitrate for ultra-acute ischaemic stroke: data from the RIGHT-2 randomised sham-controlled ambulance trial. *Stroke and Vascular Neurology*; svn-2022-001634.
- Alghamdi A, Hann M, Carlton E, Cooper JG, Cook E, Foulkes A, Siriwardena AN, Phillips J, Thompson A, Bell S, Kirby K, Rosser A, Body R. (2023). Diagnostic accuracy of clinical pathways for suspected acute myocardial infarction in the out-of-hospital environment. *Annals of Emergency Medicine* (online first)
- Alotaibi A, Alghamdi A, Martin GP, Carlton E, Cooper JG, Cook E, Siriwardena AN, Phillips J, Thompson A, Bell S, Kirby K, Rosser A, Pennington E, Body R (2023). External validation of The Manchester Acute Coronary Syndromes ECG risk model within a pre-hospital setting. *Emergency Medical Journal* (online first).
- Moore H, Siriwardena AN, Gussy M, Spaight R (2023). Mental health emergencies attended by ambulances in the United Kingdom, and the implications for health service delivery: a cross-sectional study. *Journal of Health Services Research & Policy* (online first).
- Fernandes DCR, Nelson D, Siriwardena AN, Law G, Andreyev HJN (2023). Understanding colorectal cancer patient follow up: a qualitative interview study. *Supportive Care in Cancer* 31:634.
- Nanyonjo A, Nelson D, Sayers E, Lall P, Vernon-Wilson E, Tetui M, Grindrod K, Kane R, Gussy M, Siriwardena AN (2023). Community efforts to promote vaccine uptake in a rural setting: a qualitative interview study. *Health Promotion International* 38: 4, daad088.