

April 2024

Research Report 2023/24

HEADLINE NEWS

In a year when we have had the highest number of researchers within our team thanks to funding from both NHS England and Innovate UK, we have:

- ⇒ Been involved in 15 research and service evaluation projects
- ⇒ Published in 6 different peer reviewed journals, demonstrating the breadth of our expertise
- ⇒ 10 papers either in review or in submission for publication
- ⇒ Signed up 10 volunteer Research Assistants
- ⇒ Supported 2 Clinical Secondments in the final stages of research
- ⇒ Strengthened our relationship with Loughborough University by co-funding 2 PhD students



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Research Team



Kieran Breen Head of Research & Development

Kristina Brenisin Senior Research Assistant

Sarrah Fatima Research Assistant

Isobel Doyle Research Assistant

Esther Gathii Research Assistant

Priscilla Maziveyi Research Assistant

Jay White Research Nurse

Charlie Staniforth Consultant Clinical Psychologist on Clinical Secondment

Inga Stewart Consultant Clinical Psychologist on Clinical Secondment

"The experience of being a research nurse has been fantastic" Jay White, Research Nurse

OUR RESEARCH NURSE'S JOURNEY



From HCA, through the Aspire programme, to deputy ward manager and to commencing her research nurse role within the Research team, Jay has done it all!

JAY WHITE, OUR RESEARCH NURSE, HAS WRITTEN A SHORT STORY ABOUT HER ST ANDREW'S JOURNEY.

"In 2010 I started working for the charity as a HCA on Fairbairn ward. I became a qualified nurse through the ASPIRE programme and progressed my role to deputy ward manager. Throughout my time at St Andrew's, I have continued my education and research experience with The University of Northampton, where I am about to complete my PhD. My aspirations to progress did not include ward management, so when a research nurse role became available in 2022 I jumped at the chance!

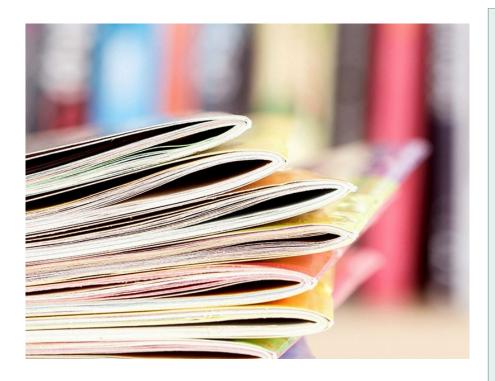
The research nurse role was new to the charity and was proposed as a seconded role with the role description being developed by the research project team. This opportunity was of great interest to me both personally and professionally, so I applied and was successful, and a new journey in research began for me

From the outset the research project, aims and required learning was detailed and I was on a steep learning curve. However, as a previous deputy ward manager, I was able to plan the project requirements based upon timescale and management of the workload of the ward routine and the general hospital-wide events. My prior university-based research experience complemented my clinical experience and time employed at St Andrew's. The secondment offered me the chance to develop this research role and still retain the opportunity to return to a clinical role once the secondment had commenced.

As a single mum, I had to manage my time effectively to ensure I met all deadlines. The research involved recruiting participants with a psychotic diagnosis to volunteer a blood sample. Control samples of no psychotic diagnosis were also taken. These samples alongside collected clinical data were sent to a lab in Cardiff for culturing and testing medication. During the data collection phase I liaised with ward colleagues in Birmingham and Northampton, building good working relationships with the Physical Healthcare team, ward managers and MDT.

The experience of being a research nurse has been fantastic. As this research nurse role was new to the charity, I was able to build and mould it to best suit the needs of the both the research study, the charity and me! It has been a fantastic learning opportunity and I have met wonderful people at both the Birmingham and Northampton sites.

Although the seconded role ends in May 2024, I am keen to seek out opportunities to continue working within research and improving patient care and the services charity wide."



OUR PUBLICATIONS

- Bayo-Idowu, E., Fatima, S., Brenisin, K., Trumm, A., Wallang, P. & Breen, K.
 (2023) Staff perceptions of patient inequalities in a UK secure mental healthcare setting Equality, Diversity and Inclusion, Vol.42 No.8, pp.1051-1068
- Skelhorn, E., Girardi, A. & Cooper-Evans, S. (2023) <u>A feasibility study to identify the presence of autism specific risk factors in secure services using an autism specific framework</u> Journal of Intellectual Disabilities and Offending Behaviour. June 2023
- Trumm, A., Lau, E.J. S., Farthing, S. & Breen, K (2023) The use of video remote interpreting (VRI) in a medium secure psychiatric setting during the COVID-19 lockdown The Journal of Forensic Practice 25(3) 263-275
- ♦ Girardi, A., Webb, E., Stewart, I., Stokes, S. & Breen, K (2023) Co-production in clinical practice: A case-study of engagement with patients with dementia and Huntington's disease to develop meaningful cognitive activities Journal of Enabling Technologies, 17(2), 54-66
- Taylor, D., Cahill. C., Wallang, P., Millard, L., Ramudo Cela, L. & Breen, K.
 (2023) Predicting clozapine does required to achieve a therapeutic plasma concentration A comparison of a population algorithm and three algorithms based on gene variant models Journal of Psychopharmacology, 1-10, September 12 2023
- Keel, T., Machaczek, K., King, J.A., Breen, K., Stubbs, B. & Kinnafick, F. (2023) Physical activity interventions for inpatients in secure mental health settings: what works, for whom, in what circumstances and why? A protocol for a realist synthesis BMJ Open Volume 12, Issue 10

A full list of all publications within the Charity can be found on our website here



FUNDED PROJECT

An update on our Innovate-UK funded project to develop a Neuronal Screening Platform For Improved Mental Health (NSP-4-IMH)

Treating mental ill-health is challenging and often requires trying multiple drugs to find an effective treatment. Our exciting project, which aimed to identify the best drugs by testing patientderived nerve cells in the lab, potentially revolutionising psychiatric treatment, is nearing completion. The project has progressed exceptionally well, delivering exciting results that look set to validate our initial hypotheses and deliver the outcomes we hoped for. Although we can't share detailed findings yet, we are thrilled with the potential applications. Plans for commercialisation are advancing smoothly, setting the stage for the next phase. We are eager to continue our partnership with MeOmics Precision Medicine Ltd as they progress towards supporting new drug discovery efforts. This collaboration has been invaluable, and we look forward to furthering our shared goals and driving innovation in the field. We would like to thank all the patients and staff who've made this possible and for their continued support and dedication.

FUNDED PROJECT

An update on the East Midlands Provider Collaborative (EMPC) Evaluation:

In 2022, St Andrew's was commissioned to carry out an evaluation of the newly established EMPC partnership. The key aim of the partnership is to create a single point of access for patients, thus streamlining the admission process and reducing delays.

The evaluation monitors the implementation of the model by obtaining the views of the key stakeholders groups (staff, patients and carers), with a biannual report to the Board with recommendations on improving the service. Key issues raised so far include communication an transition. The evaluation is due to conclude in December 2024, when results will be available.



Dr Inga Stewart



Dr Charlie Staniforth

OUR PROJECTS

Our researchers have worked on 15 projects over the past year. They have been varied in nature and include:

- ♦ Semi-automated personalised VR experience for patients with dementia within a secure psychiatric setting. Working in collaboration with Kent University
- An evaluation of head-banging among patient groups as a form of self-injurious behaviour. Assisted by Business Intelligence who extracted the data
- ♦ The impact of the peer support worker role on incidents at a ward level. Working closely with our peer support worker team
- ♦ Frailty assessment using the Edmonton frail scale in older patients at STAH. Paper due to be submitted for publication
- Evaluation of sleep in adult ASD/LD wards, Northampton, St Andrew's Healthcare: Collection of
 qualitative patient data and existing quantitative data for sleep quality, variable health parameters and current management strategies. 5 volunteers have assisted with collection and analysis
 of data
- Patient perspectives on preparations through discharge process: a service evaluation. Co produced with an expert by experience

CLINICAL SECONDMENTS

Dr Stewart

Co-producing care planning with people living with dementia within inpatient mental healthcare settings

A programme steering group, including people with living and learnt experience of dementia, worked with Inga to co-produce a toolkit to help care teams better involve people with dementia in writing their own care plans. The "St Andrew's Toolkit for Care Plan Co-production in Dementia" includes practice standard statements, checklists as markers of co-production, and tips for staff. It covers equal partnership in care planning, decision making, getting ready to start, language and approach, involvement of partnersin-care, respecting experience as expertise, goal setting, and care plan review. The programme was supported by the Alzheimer's Society Research Partnership Panel, which agreed to facilitate the involvement of people affected by dementia via the Research Network and Dementia Voice teams. It was shared within the dementia community via the 3 Nations Dementia Working Group, the Northamptonshire Dementia Action Forum, and the UCL Co-production Collective, and gained feedback from people with experience of living with, supporting or working with someone with a dementia diagnosis. The toolkit was then trialled at the St Andrew's Lowther Dementia Village as a proof of concept and to further support the development of the tool.

This completed work has formed the basis of a research grant application for a new programme which aims to build upon the evidence and learning from the initial pilot.

Dr Staniforth

Development of a Trauma Informed Sexual Health Toolkit for young people with mental health problems

Charlie has developed a trauma-informed sexual health toolkit with a steering group of professional experts and experts by experience. It was piloted with nine young people who are patients in the East Midlands Collaborative inpatient CAMHS units.

Seven clinicians who worked in CAMHS inpatient units were trained in the toolkit, administered it with the young people and then both clinicians and young people gave feedback on their experiences, highlighting areas they liked and areas for improvements.

The findings indicated that young people who access inpatient CAMHS services have unmet needs in relation to sexual relationships and sexual health. Of the nine young people interviewed a number of them were sexually active, had been made to feel unsafe in relationships and had been pressured into sexual activity/had not consented. Young people were also curious regarding contraception and sexually transmitted infections. In conclusion, it is crucially important that healthcare settings, such as psychiatric units, provide young people with an opportunity to talk about relationships and sexual health; ensuring they have a space to talk about any issues or concerns they have. The service can then support them in assessment, treatment and prevention of ongoing or future sexual health risk and poor sexual health or relationship outcomes.

LOUGHBOROUGH UNIVERSITY COLLABORATION

Our relationship with Loughborough University is going from strength to strength with Dr Kieran Breen, our Head of Research & Development, supervising on a number of projects.

- Current PhD student Toby Keel is working on a Physical Activity intervention project
 that has already resulted in a publication in the BMJ
- Or Justine Anthony, a past PhD student, is collecting further data relating to exploring the association between access to green space through grounds leave and the occurrence of incidents in CAMHS patients
- St Andrew's is co-funding PhD student Sarrah Fatima (2024-2027) Behavioural interventions to improve sleep quality in patients in secure mental healthcare
- St Andrew's is co-funding PhD student Kristina Brenisin (2024-2027) The impact of multi-component lifestyle interventions including nutrition and physical exercise on mental recovery





Dr Kieran Breen

"We are looking forward to continuing our successful partnership with St Andrews, for improving key patient outcomes for better sleep and improved wellbeing" Dr Iuliana Hartescu, Senior Lecturer in Psychology, School of Sport, Exercise and Health Sciences, Loughborough University

REFLECTIONS OF A RESEARCH ASSISTANT

Whilst studying for my MSc degree I started work as a HCA at St Andrew's. During this time I gained a good understanding of different types of mental health disorders, great experience of working with patients, confidence in building therapeutic rapports and thus delivering hope for patients. Whilst conducting my dissertation on nurses' attitudes towards borderline personality disorder I realised how much I enjoyed doing research, so I joined the Research team as a volunteer, later accepting an opportunity to be seconded as a Research Assistant. I became involved in studies exploring inequality and its impact on mental health disorder, which resulted in successfully delivering reports and co-produced training for staff and patients.

Following my maternity leave I joined the team to explore and evaluate the CAMHS Provider Collaborative in East Midlands with the aim to improve services for young people and their carers. Following promotion to Senior Research Assistant, I took a lead on the CAMHS project which was a great opportunity to challenge myself and thus for my personal and professional growth. I completed a Leadership course which helped me to gain further confidence to be a better leader for my team.

My role includes being part of the peer review panel. I really enjoy critically reviewing studies and have gained a greater knowledge of different types of studies and methodologies. I have also been given the opportunity to design my own studies that have been peer reviewed, and this has resulted in 6 publications and I have over 6 more in submission.

I am now a mother to my delightful 3 year old little girl Emma and 5 years after joining the research team, I am commencing a co-funded PhD at Loughborough University! I am looking forward to studying again — I know it will be tough, but worth it in the end.

Throughout my research journey I have been passionate and positive about what I am doing. I have had great support from St Andrews, my family, friends and supervisors which I know will lead me to success in my larger goal; being a researcher in the arena of physical mental health and improving the wellbeing of the most vulnerable.



Kristina Brenisin



Nuria Gardia Research Volunteer

VOLUNTEERING

The Research team have had 21 queries in the past year from staff, students on placement and external researchers interested in volunteering for research projects.

This has resulted in 10 being signed up to volunteer for a number of projects across the charity.

Nuria Gardia is one such volunteer. Nuria is currently studying for her Master's in Psychology She signed up with the Voluntary Service to volunteer as an Assistant Psychologist in 2023 and then showed interest in continuing her volunteering as a researcher.

Nuria has assisted on a sleep service evaluation project in the LDA division by using her expertise in interview coding and thematic analysis. She is now assisting Dr Inga Stewart on the final analysis of the Dementia project. Nuria has been of invaluable assistance in both of these projects.

"Having the opportunity to voluntarily work for the research team is proving invaluable! I have been able to apply my academic learning in practical research, further my understanding of distinct research methods, and more than ever realised the importance of the research-clinical practice relationship towards the betterment of clinical services. I am extremely grateful for this opportunity and would recommend the experience to anyone looking to become a better student, clinician, or researcher. Thank you, St Andrew's for positively shaping my professional journey."

Nuria Gardia, Research Volunteer

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WE ARE LOOKING FORWARD TO ...

- Working with a PhD student from the University of Birmingham, who will be attending our Birmingham site to focus on a research project on frailty.
- Working with a group of clinicians from all across the charity on a project:

Evaluating the effectiveness of a STEP-informed semaglutide protocol to treat patients experiencing antipsychotic induced weight gain (AIWG) in a se cure mental healthcare setting