

# My experience as a pharmacist in mental health research

Mental Health Research for ALL Career Development Fellowship

## Learning Objectives

Aim of the Mental Health ALL ARC Fellowship was:

To gain experience of working in a research setting

Develop research skills and knowledge

To develop a research network with other academics and clinical researchers with similar interests

To develop research ideas/protocol

To develop an application to apply to clinical fellowship programmes



<https://www.challengingbehaviour.org.uk/wp-content/uploads/2021/02/Home-1.jpg>

## Introduction

I work as a specialist clinical Child and Adolescent Mental Health (CAMHS) pharmacist in the NHS. The role is based within the neurodevelopmental team and involves working with families, children and adolescents (up to 17 years and 11 months). My clinical remit as an advanced clinical practitioner, is providing care to children with Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD) and Intellectual Disability (ID).

Research shows that ASD has a high occurrence (>70%) with other neurodevelopmental conditions<sup>1</sup>. ADHD is the most commonly co-occurring condition<sup>2</sup>, and ID is present in approximately 32-43% of children with ASD<sup>3</sup>.

Children with ASD and ADHD have been shown to be more likely than ASD alone to require medication<sup>4</sup>. Up to 62% of children with intellectual disability are prescribed multiple psychotropic medication<sup>5</sup> for the management of challenging behaviours (CB)<sup>6</sup>. Psychotropic prescribing has been shown to be influenced by ethnic background and socio-economic status (SES)<sup>7</sup>.

There is limited evidence evaluating the use of psychotropic medication in children with neurodevelopmental conditions and CB<sup>8</sup>. Current evidence does not reflect prescribing practices and experiences of caregivers and clinicians, in the context of ethnic diversity, SES, and children with ASD and co-morbidities ADHD, ID<sup>9</sup>.

I applied for the North Thames Mental Health ARC fellowship to help develop my research project idea. The primary research aim was develop a protocol to investigate the use of psychotropic medication in children from ethnically, socially diverse backgrounds with ASD and co-morbidities ADHD and ID for the management of CB.

<sup>1</sup> Soke GN, Maenner MJ, Christensen D, Kurzius-Spencer M, Schieve L. Prevalence of co-occurring medical and behavioral conditions/symptoms among 4-and 8-year-old children with autism spectrum disorder in selected areas of the United States in 2010. *Journal of autism and developmental disorders*. 2018; 48: 2663-76.

<sup>2</sup> Lai MC, Kasseh C, Besney R, Bonato S, Hull L, Mandy W, Szatmari P, Ameis SH. Prevalence of co-occurring mental health diagnoses in the autism population: a systematic review and meta-analysis. *The Lancet Psychiatry*. 2019 Oct 1;6(10):819-29.

<sup>3</sup> Christensen DL, Baio J, Van Naarden Braun K, et al. Prevalence and characteristics of autism spectrum disorder among children aged 8 years—autism and developmental disabilities monitoring network, 11 Sites, United States, 2012. *MMWR Surveill Summ* 2016;65:1–23.

## Experience

I found the fellowship to be an eye opening experience into the world of research and academia at UCL. I was on the fellowship programme for two days a week for a period of six months from May 2023 to November 2023. The other days I continued to work in the NHS.

The fellowship provided me with the time and resource to develop my research ideas. One of the most beneficial aspects of the programme was having the chance to network and meet academics/researchers with similar research interests. I found having the option to talk and think through the steps involved extremely useful in understanding how to write a robust protocol.

A diverse range of professionals across the NHS, community health, local authority and private sector were on the programme. Having discussions with others from the fellowship programme provided a unique insight from multiple perspectives and helped me to think about the value of the project from an external viewpoint.

The lived experiences of caregivers and children was an essential component of my research proposal. Whilst on the programme, I was able to meet with the public participation lead at North Thames ARC and present my research proposal to the public participation advisory group.

During my time on the fellowship I was also able to join research meetings, learning seminars, network events and research presentations. I was also able to complete formal learning modules on understanding the basics of research, as well as the teaching sessions run by the UCL libraries.

## Lessons Learnt

From my experience I learnt, that the environment and ethos within a research/academic environment is different in comparison to working in the health service. I found understanding the language and the way of working a challenge and it took some time to be able to feel comfortable.

Developing a research protocol requires considerable support and expertise from those work in academia and undertake research. This ensures, that although the project is reflective of practice, it meets the criteria for a research protocol.

Practical experience of working in a research environment is essential in being able to apply theoretical skills and knowledge.



<https://www.beyondautism.org.uk>

<sup>4</sup> Rong Y, Yang CJ, Jin Y, Wang Y. Prevalence of attention-deficit/hyperactivity disorder in individuals with autism spectrum disorder: A meta-analysis. *Research in Autism Spectrum Disorders*. 2021 May 1;83:101759.

<sup>5</sup> Lott IT, McGregor M, Engelman L, Touchette P, Tournay A, Sandman C, Fernandez G, Plon L, Walsh D. Longitudinal prescribing patterns for psychoactive medications in community-based individuals with developmental disabilities: utilization of pharmacy records. *Journal of Intellectual Disability Research*. 2004 Sep;48(6):563-71.

<sup>6</sup> Deb S, Kwok H, Bertelli M, Salvador-Carulla L, Bradley E, Torr J, et al. (2009) International guide to prescribing psychotropic medication for the management of problem behaviours in adults with intellectual disabilities. *World Psychiatry* 8, 181-6.

## Next Steps

Post fellowship programme, I have continued to work in clinical practice and have found opportunities within my organisation to become involved in research. To this end, I was able to advocate for the involvement of pharmacy in 'real world' clinical trials within mental health. This included a clinical pharmacist's input into ward based clinical trials evaluating the use of antipsychotic medication in an adult and CAMHS inpatient setting, as well as another research project within adult learning disabilities.

I have been a co-author on two published articles on the use of antipsychotics in CAMHS. I applied for the HARP pre-doctoral fellowship programme, and although I was unsuccessful, I was fortunate enough to be able to reach the interview stage. I have recently applied for the NIHR clinical research fellowship programme. I am also hoping to apply for pre-doctoral fellowships in the coming year.

I remain a part of the research networks built whilst on the fellowship, and continue to receive communication about research opportunities. Given what I learnt whilst on the fellowship, I have aimed to try and identify opportunities for involvement in research both as a clinician, both also the public research involvement route. Research is an ethos and I found it requires ongoing effort and initiative. Both to seek out opportunities for myself, but also promote the value of research with my colleagues, families, patients and the teams/ service with whom I work.

I aim to one day become a clinical researcher.



<https://www.ealingmenacap.org.uk/nhs-stomp-and-stamp/>

## Final Thoughts

Fellowship programmes, aimed at healthcare professionals are limited and as a result are competitive. My request to research organisations, health services and academic settings is there need to be more programmes which are accessible to healthcare professionals.

I would recommend the fellowship programme to any healthcare professional who wants to become more research active and/or develop a career into clinical research. These programmes enable the incorporation of clinical work with research and provide a great foundation for further development.

### Acknowledgements:

I would like to thank the following for their support during and post fellowship. The programme leader, Dr Fran Zanatta, project manager, Hannah Savage and PPIE lead Will Lammons. I would also like to thank my mentor, Dr Sania Shakoor (QMUL) and my line manager Chinedu Ogbuefi for supporting my application to the fellowship.

<sup>7</sup> Russell AE, Ford T, Russell G. Barriers and predictors of medication use for childhood ADHD: findings from a UK population-representative cohort. *Social Psychiatry and Psychiatric Epidemiology*. 2019 Dec;54:1555-64.

<sup>8</sup> McQuire C, Hassiotis A, Harrison B, Pilling S. Pharmacological interventions for challenging behaviour in children with intellectual disabilities: a systematic review and meta-analysis. *BMC psychiatry*. 2015 Dec;15(1):1-3.

<sup>9</sup> Simonoff E, Pickles A, Charman T, Chandler S, Loucas T, Baird G. Psychiatric disorders in children with autism spectrum disorders: prevalence, comorbidity, and associated factors in a population-derived sample. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2008 Aug 1;47(8):921-9.

*This poster describes research funded by the National Institute for Health and Care Research ARC North Thames. The views expressed in this poster are those of the author(s) and not necessarily those of the National Institute for Health and Care Research or the Department of Health and Social Care.*

**Author: Iffah Salim** (Iffah.salim@nhs.net), Specialist CAMHS Pharmacist, Neurodevelopmental Team, Newham CAMHS