

and Maudsley NHS Foundation Trust, London, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.87

Aims. To compare people with diabetes developing severe mental illness (SMI) to those with diabetes alone with respect to risk status, diabetes care receipt, and diabetes-relevant outcomes in primary care.

Methods. Data from mental health care (Clinical Record Interactive Search; CRIS) linked to primary care (Lambeth DataNet; LDN) were used. From patients with a type 2 diabetes mellitus (T2DM) diagnosis in primary care, those with a new SMI diagnosis were matched (by age, gender, and practice) with up to five randomly selected controls. Mixed models were used to estimate associations with trajectories of recorded HbA1c levels; Poisson regression models compared total and cardiovascular comorbidity levels and number of diabetes complications; linear regression models compared BMI and total cholesterol levels; conditional logistic regression models investigated microalbuminuria, receipt of a foot or retinal examination, use of statins and receipt of insulin; Cox proportional hazards were used to model incident microvascular and macrovascular events, foot morbidity and mortality.

Results. In a cohort of 693 cases with SMI (122 bipolar disorder, 571 schizophrenia and related) and T2DM compared to 3366 controls, all-cause mortality was increased substantially in the cohort with SMI (adjusted hazard ratio 4.52, 95% CI 3.73–5.47; for bipolar 5.59, 3.37–9.28; for schizophrenia 4.42, 3.60–5.44). However, for all the other outcome comparisons, the only significant findings were of reduced foot examination (adjusted odds ratio 0.75, 0.54–0.98) and reduced retinal screening (0.77, 0.61–0.96).

Conclusion. Higher mortality suggests increased risk of adverse outcomes for people with pre-existing T2DM who develop SMI, and reduced foot/retinal examinations suggest disadvantaged healthcare receipt. However, other potential explanations for the mortality difference could not be identified from the outcomes analysed, so further investigation is needed into underlying causal pathways.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Service Provider Views on Mental Healthcare Access for UK Asylum Seekers Residing in Home Office Contingency Accommodation: A Qualitative Research Study

Dr Rachael Brookes^{1,2*}, Dr Nicky Longley^{1,2}, Dr Sarah Eisen¹ and Professor Bayard Roberts²

¹University College London Hospitals NHS Foundation Trust, London, United Kingdom and ²London School of Hygiene and Tropical Medicine, London, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.88

Aims. Since 2020, the number of asylum-seekers residing in hotels sourced by the UK Home Office, termed Contingency Accommodation, has increased by over 20,000. Reports suggest that the risk of poor mental health in this population is high. The aim of this study was to help inform improvements to mental healthcare provision for UK asylum-seekers living in contingency accommodation by gaining a greater understanding of perceived barriers and facilitators to accessing care.

Methods. Seventeen semi-structured interviews were conducted remotely with Healthcare Service Providers between June and August 2022. Study Participants were recruited using purposive

and snowball sampling to include stakeholders from primary care, secondary care, and third sector organisations. Data were analysed initially using deductive analysis based on the Levesque et al Conceptual Framework. Further emergent themes were identified using inductive analysis conducted sequentially on the data.

Results. Twelve themes relating to barriers and three to facilitators to mental healthcare access were identified. The most dominant themes were language barriers and long referral wait times, particularly to access specialist services for torture survivors. Other emergent themes included differing explanatory models of mental distress between Service Users and Providers and fear of authorities and data sharing. Within hotels, there was a lack of standardisation to facilitate mental healthcare access and a reliance on outreach organisations to explain the structure of the health system. Digital exclusion was described in the form of poor reception in hotel rooms and lack of privacy for remote consultations. Perceived mental health complexity was found to act as a barrier to referrals for low intensity psychological therapies such as IAPT being made and accepted. There was a lack of consensus amongst stakeholders about the appropriate time in the asylum journey to refer for trauma-focused therapy. Voluntary and community services (VCS) were described as plugging gaps in mental healthcare, but their role was ill-defined and concerns were expressed about sustainability.

Conclusion. This study identified complex and intersecting barriers at individual, community, health-system, and structural levels which, if addressed, could improve access to mental healthcare. Further work is required to quantify the burden of mental ill health amongst this group and to triangulate findings from this study with views of the asylum-seeking population. Specifically, this study highlights the need to establish exactly how VCS are meeting mental healthcare needs and how they can be better integrated into the healthcare system. Further research exploring the timing of trauma-focused therapy is also warranted.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Providing the Right Support at the Right Time for People With Learning Disabilities: A Mixed-Methods Study to Identify Change Goals for a Demand, Capacity and Flow Quality Improvement Project

Dr James Cai^{1*}, Dr Joshua Barnett¹, Ms Kirsty Haberland¹, Ms Melanie Clarke¹, Ms Grace Fysh¹, Dr Catriona Chaplin², Dr Ivy Lim¹, Dr Michele Martiello¹, Dr Ian Hall¹ and Dr Laura Checkley¹

¹East London NHS Foundation Trust, London, United Kingdom and ²Homerton Healthcare NHS Foundation Trust, London, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.89

Aims. 1. To evaluate demand, capacity and flow of an integrated community learning disability service in a peri- and post-COVID-19 pandemic setting. 2. To improve flow of a community learning disability service. 3. To improve staff and service user satisfaction by engaging them and identifying common priorities.

Methods. We collected demand and capacity data of all disciplines in a community learning disability service for 2021–2022.

We carried out focus groups with service users and their carers (N = 5) and surveyed them with a questionnaire consisting of 6 quantitative and 2 qualitative questions (N = 63), investigating the impact of waiting times on service user experience.

We surveyed staff from all disciplines (N = 20) with a questionnaire consisting of 3 qualitative questions, to identify their views on waiting times and areas to optimise.

We performed thematic analysis on all qualitative responses. We analysed quantitative data with descriptive statistics.

Results. From 2021–22, the number of accepted referrals to individual disciplines increased: for example referrals to psychiatry increased by 51.6% and referrals to OT increased by 32%.

With regard to flow, the ratio of discharges to accepted referrals in the psychiatry discipline decreased from 1.5:1 to 0.6:1.

A significant proportion of service users reported waiting months (31%) or years (16%) to be seen by the learning disability team. 28% of service users reported additional problems while waiting to be seen. 31% were unaware whether they were on a waiting list or not. Quantitative data showed average waiting times for psychiatry services did not change from 2021–2022 (23.1 and 23.3 days respectively).

Thematic analysis from service users' responses revealed an anxiety about needs not being met; a feeling of problems deteriorating while waiting; and communication issues.

Staff responses revealed desires to intervene sooner to prevent unnecessary deteriorations; and to increase team working between disciplines.

Conclusion. Quantitative data analysis suggests a greatly increased demand for our service following the COVID-19 pandemic.

Our thematic analysis identifies concern of deterioration secondary to prolonged waiting times. It also highlights that communication could be improved.

As a result of this mixed-methods approach, the following change ideas were generated and are now being tested:

1. Improve communication with patients on waiting lists by testing an accessible customisable letter.
2. Organise more joint assessments and reviews of service users with multiple disciplines.
3. Short-term allocation of more urgent casework via a new integrated health and social care duty system.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

A Peer-Supported, Recovery-Focused Illness Management Programme for People With Early Psychosis

Professor Wai Tong Chien*

Nethersole School of Nursing, Faculty of Medicine, The Chinese University of Hong Kong, and Shatin, Hong Kong

*Corresponding author.

doi: 10.1192/bjo.2023.90

Aims. To examine the effects of a peer-supported recovery-focused self-management of Psychosis (PRSP) modified from the Crisis-resolution-team Optimisation and Relapse Prevention (CORE) programme (Johnson et al. 2018) for psychotic patients' recovery, mental state, problem solving ability and other patient outcomes over 18 months follow-up, compared with either a psychoeducation/treatment-as-usual group.

Methods. A assessor-blinded, three-arm multicentre RCT was conducted. A list of 198 Chinese patients with recent-onset psychosis randomly selected from four Community Centers for Mental Wellness in Hong Kong (2021–2022) and randomly assigned into one of the three study groups (PRSP, psychoeducation or

treatment-as-usual group) by matching with computerized random numbers. After four-month interventions, the patient outcomes were measured at immediately, 9 months and 18 months post-intervention, and analysed on intention-to-treat basis using Generalised Estimating Equation test.

Results. Significant interaction (Group × Time) treatment effects of the PRSP were found on six outcomes (recovery, psychotic symptoms, functioning, problem-solving, and service satisfaction) between three groups at post-test, Wald $\chi^2 = 7.05–21.87$, $p = 0.02–0.001$, with moderate to large effect sizes (η^2) of 0.12–0.24, compared to treatment-as-usual. Level of recovery, problem-solving and service satisfaction of the PRSP were also significantly greater improved than psychoeducation group at 9 and 18 months follow-ups with moderate effect sizes (0.07–0.10).

Conclusion. The findings can provide evidence about the long-term effectiveness of the peer-facilitated, recovery-based self-management programme in early psychosis on improving patients' recovery and mental condition, functioning, and service satisfaction. Self-learning of illness management through effective problem-solving strategies, together with peer-support, are increasingly useful in recovery-focused intervention for early psychosis in views of inadequate healthcare resources/staffs.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

Effects of Transauricular Vagus Nerve Stimulation on Heart Rate Variability: Wearable Sensor Data in Healthy Volunteers

Dr Tiago Costa^{1,2,3*}, Mr Billy Smith⁴, Ms Hannah Cave^{1,2,3}, Ms Sharmin Ahmed¹, Dr Yujiang Wang⁴, Dr Mark R Baker^{1,5}, Dr Stuart Watson^{1,2,3} and Professor R Hamish McAllister-Williams^{1,2,3}

¹Translational and Clinical Research Institute, Faculty of Medical Sciences, Newcastle University, Newcastle upon Tyne, United Kingdom; ²Northern Centre for Mood Disorders, Newcastle University, Newcastle upon Tyne, United Kingdom; ³Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust, Newcastle upon Tyne, United Kingdom; ⁴Interdisciplinary Computing and Complex BioSystems Group, School of Computing Science, Newcastle University, Newcastle upon Tyne, United Kingdom and ⁵Department of Clinical Neurophysiology, Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.91

Aims. Surgically implanted vagus nerve stimulation (VNS) is a recognised treatment for depression. The vagus nerve can also be stimulated non-invasively via its auricular branch, using transauricular vagus nerve stimulation (taVNS). Heart rate variability (HRV) is a putative biomarker of autonomic nervous system (ANS) engagement. We aimed to test the impact of taVNS on the ANS of healthy volunteers by measuring HRV using a double-blind, sham-controlled, longitudinal design to acquire data over 7 days using wearable cardiac sensors.

Methods. taVNS was delivered to the left ear of healthy volunteers using a transcutaneous electrical nerve stimulation (TENS) device via a custom clip electrode (developed at Newcastle University). All participants were stimulated at 10 Hz, with pulse widths of 300 ms and variable current outputs, depending on perceptual thresholds. We delivered double-blinded active and sham taVNS for hour-long periods, in the morning and