

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

evening. We also recorded an electrocardiogram (ECG) lead I using a VitalPatch for 7 consecutive days. Python scripts were developed to produce HRV timeseries and plot data. ECG frequency domain parameters – low- (LF) (0.05–0.15 Hz) and high-frequency (HF) power (0.15–0.4 Hz) – were calculated for each stimulation period. The LF/HF ratio was used as a marker of autonomic modulation. The Wilcoxon signed-rank test was used to compare LF/HF ratio distributions.

Results. Initial data from the wearable sensors were used to develop interpolation scripts to improve the processing of noise, missed R waves and ectopic beats, to reduce errors when estimating HRV from the heart rate signal. Initial results from 97 individual 1-hour long stimulation periods, from 18 participants, show that active stimulation in the morning, when compared with sham stimulation in the same period, significantly reduces the LF/HF ratio. The median and interquartile range (IQR) of the LF/HF ratio for the active and sham periods was, respectively, 1.72 (1.99) and 2.75 (2.82), a statistically significant difference ($p = 0.043$).

Conclusion. taVNS modulates HRV frequency domains, suggestive of vagal cardiac effects, and replicates findings from previous taVNS studies. Reductions in the LF/HF ratio are suggestive of increased parasympathetic tone. As the auricular branch of the vagus does not have any direct cardiac efferents, this suggests central ANS modulation using taVNS. Secondly, it suggests that cardiac ANS modulation could be used as a proxy measure of afferent vagal stimulation, which could be of clinical utility. These effects warrant exploration in a larger cohort study, including wider demographics (including age range) and improved processing pipelines.

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.

An Exploratory Evaluation of Barriers to Study Leave Application Amongst Psychiatric Trainees in the West Midlands

Dr Rebecca Cunningham^{1*}, Dr Amy Burlingham¹ and Dr Bukola Kelani²

¹Birmingham and Solihull Mental Health NHS Foundation Trust, Birmingham, United Kingdom and ²Devon Partnership NHS Trust, Devon, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.92

Aims. Between 2018–2021 there was a downward trend in study leave applications and the total spending on trainee study leave activities. There was concern that trainees may not be maximising educational opportunities. The authors were aware of anecdotal evidence indicating barriers to applying for study leave and therefore sought to objectively explore this. We aimed to evaluate qualitative and quantitative responses amongst psychiatric trainees within the West Midlands deanery regarding study leave applications. We also endeavoured to identify positive aspects and barriers, to improve knowledge and confidence in the process and identify areas for improvement in making the system more accessible.

Methods. The authors met with Health Education West Midlands to clarify current processes and gather objective data regarding study leave applications between 2018 and 2021. A survey was distributed to all Psychiatric trainees in the West Midlands in December 2021. The survey was open for three weeks and contained closed and open questions. Data were analysed and a

thematic analysis was completed independently by the authors to allow for triangulation.

Results. There were 62 responses (response rate of 27%) from trainees ranging from CT1-ST7+. 55% were unclear about the study leave application process, and of these, 79% said this had prevented them from applying. Only 37% of trainees found the process ‘very’ or ‘moderately easy’, with 23% finding it ‘very difficult’. When exploring barriers, worryingly 69% of trainees did not know where to find the list of approved courses. Other themes included too many signatures being required, long delays in forms being returned and money being reimbursed.

Conclusion. The majority of respondents were unclear about the study leave process or found it difficult. This acts as a barrier to application in the majority of cases and may have a knock-on effect on the overall quality of training. By identifying these barriers, we are now able to address these more directly.

The results were presented at a deanery wide level leading to a better understanding of the reduction in spending of study leave funding. Phase two of the project will see the introduction of an electronic application system, aiming for an easier and shorter process, in addition to creating consistency across trusts. There may have been some confounding factors, such as COVID-19 that may have contributed to the decline in study budget being utilised.

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.

The New 2022 Curriculum for Postgraduate Training in Psychiatry in the UK – Experiences of Trainees Within a London Deanery

Dr Karolos Dionelis*, Dr Ioana Varvari and Dr Gopinath Ranjith South London and Maudsley NHS Foundation Trust, London, United Kingdom

*Corresponding author.

doi: 10.1192/bjo.2023.93

Aims. The Royal College of Psychiatry introduced a new postgraduate training curriculum in August 2022. One of the main changes is the introduction of a new collaborative tool between supervisor and trainee, the placement-specific personal development plan (PSPDP). The aim of this project is to locally explore trainee’s views and experiences with the PSPDP.

Methods. We explored the views and experiences of seven psychiatry trainees within the South London and Maudsley NHS Foundation Trust in a single 60-minute focus group, co-facilitated by two authors over Microsoft Teams. The participants were purposively identified to have started core and higher training under the new curricula and a snowballing approach was used to recruit them. The data were recorded, transcribed, and analysed in line with ethical guidelines. The analysis was done by using Clarke and Braun’s approach to thematic analysis.

Results. Three overarching themes were identified:

1. Positives of using a collaborative tool with a psychiatric supervisor (PS),
2. Challenges in implementation and
3. Trainees’ perspectives on directions forward.

The most notable subtheme of theme one was the improved curricular alignment between learning opportunities, curriculum content, and assessment tools. As one participant mentioned: “When we were going through [the PSPDP], it definitely guided us, what we wanted to (...) get out of this placement in particular,