Aims. Despite considerable preclinical evidence, clinical trials assessing the effects of probiotics on individuals with major depressive disorder (MDD) are scarce. This study aimed to provide further evidence of the acceptability, tolerability and putative efficacy of probiotics in this patient group and to improve our understanding of the underlying mechanisms of action.

Methods. This double-blind randomised placebo-controlled pilot and mechanistic trial investigated the effects of an 8-week adjunctive multi-strain probiotic intervention in adults with MDD taking antidepressants. Psychiatric data and stool and blood samples were collected at baseline, week 4 and week 8. A computer-based emotion recognition task was also administered. Stool samples from 25 matched healthy controls were also obtained.

Results. 49 participants, randomised to probiotic (n = 24) or placebo (n = 25), were included in intent-to-treat analyses. Standardised effect sizes (SES) from linear mixed models demonstrated that the probiotic group attained greater improvements in depressive (HAMD week 4: SES [95%CI] = 0.70[0.01, 0.98]; IDS week 8: SES [95%CI] = 0.64 [0.03, 0.87]) and anxiety symptoms (HAMA week 4: SES [95%CI] = 0.67 [0.00, 0.95]; week 8: SES [95%CI] = 0.79 [0.06, 1.05]), compared to the placebo group. Attrition was 8% (n = 3 placebo, n = 1 probiotic), adherence was 97.2% and there were no serious adverse reactions. The probiotic modified the composition of the faecal microbiota by normalising richness and diversity towards healthy control levels. The probiotic also increased levels of specific taxa, including Bacillaceae (FDR p < 0.05), which correlated with reductions in anxiety scores (FDR p < 0.05). There was no impact of treatment on levels of inflammatory cytokines (CRP, TNFα, IL-1β, IL-6, IL-17) or BDNF. However, probiotics showed a tendency to increase positive affective bias and improved the accuracy of recognition of all emotions, except sadness.

Conclusion. Compared to placebo, the probiotic group had greater improvement in depressive and anxiety scores, from as early as 4 weeks. The acceptability, tolerability and estimated effect sizes on key clinical outcomes are promising and encourage further investigation of this probiotic as add-on treatment in MDD. The beneficial effects of probiotics in this patient group may be partially mediated by modification of the composition of the gut microbiota and improvement of affective biases, inherent to depressive disorders.

Monitoring of Inter-Dose Intervals for Long-Acting Injectable Antipsychotics: A Proposed Protocol for the MIDILIA Trial

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Aims. Service users taking long-acting injectable antipsychotics (LIAs) may experience recurrence of symptoms as they approach trough levels within a steady-state cycle. Limited research exists around symptom variation between peak-to-trough plasma concentrations of LIA inter-dose intervals. Different LIAs have variable rates of change in dopamine receptor occupancy during this peak-to-trough variation due to differing elimination half-lifes. It is unclear what rate of change in D_2 blockade is tolerated by patients at present, which this trial aims to determine through observing symptom severity differences during peak-to-trough variation.

Methods. A real-world observational longitudinal cohort study is proposed. Inclusion criteria would be working-age adults (18–65 years) who have received five consecutive and timely LIA administrations of a consistent drug and dose. The study would exclude anyone with significant hepatic or renal impairment, anyone on concurrent oral antipsychotic medication or anyone deemed not to yet be within steady-state plasma levels of their LIA medication.

Serum assays for drug level will be obtained at both peak and trough concentrations during an LIA cycle. Expected timings for peak levels will be determined by derived tmax values from existing pharmacokinetic literature for individual drugs. Trough levels will be taken within 24 hours of the next LIA administration being due. Plasma drug concentrations will then be used to calculate expected striatal D_2 blockade using EC_{50} values and maximal occupancy for individual drugs derived from existing PET scan data.

Symptom severity will be assessed by completing Positive and Negative Symptom Scores (PANSS) questionnaires with service users at the time of both peak and trough plasma concentrations of LIA. The difference in these scores will then be plotted alongside the difference in expected D_2 blockade derived from plasma drug concentrations.

Results. We hypothesize that the rate of D_2 occupancy change would correlate with symptom severity differences in an exponential manner, in that drugs with shorter elimination half-life would have greater difference in symptom severity between peak and trough. We expect that service users would be able to tolerate such change to a degree without significant emergence of symptoms; the trial aims to determine the threshold for what most service users can tolerate, which may then assist in guiding how to effectively reduce and discontinue medications.

Conclusion. This outlines a research protocol to monitor response to pharmacokinetic variation within inter-dose intervals of LIA medication, which may ultimately aid service users in reducing and discontinuing antipsychotics.

Psychometric Properties of the 7-Item Generalized Anxiety Disorder (Gad-7) in Nigerian Pregnant Women Attending Primary Health Care

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Aims. Maternal mental health is an integral component of services that should be rendered to pregnant women in addition to their physical health during their antenatal care. Mental health conditions are screened for during these visits. There is a high prevalence of anxiety disorders among this group of women. A common questionnaire used to screen for anxiety is the 7-item generalized anxiety disorder (GAD-7). However, this instrument has not been validated among pregnant women in Nigeria. We conducted research among pregnant women in Southwest Nigeria to demonstrate the psychometric properties of

GAD-7 using the anxiety modules of the Mini International Neuropsychiatric Interview (MINI) as a gold standard.

Methods. We administered both GAD-7 and the anxiety module of MINI among 203 pregnant women who attended 4 randomly selected primary health centres in Southwest Nigeria. The data collected from these questionnaires were analysed using the Statistical Package for Social Sciences (SPSS).

The reliability of GAD-7 was assessed with Cronbach's alpha to estimate its internal consistency. The validity of GAD-7 was examined with an assessment of its concurrent validity, sensitivity, and specificity analysis and a receiver operator characteristic curve.Using Pearson correlations, we evaluated the concurrent validity of GAD-7 and the anxiety modules of the M.I.N.I. The sensitivity, specificity, positive predictive, and negative predictive values of GAD-7 were determined with the MINI as a gold standard. The predictive accuracy was further determined from receiver operating curve analysis using the area under the curve as a standard measure.

Results. The internal consistency value measured by Cronbach's alpha for GAD-7 was 0.709. GAD-7 correlated minimally with the anxiety modules of MINI with a coefficient score (r) of 0.393 at a p-value of 0.01. GAD-7 has a low sensitivity & negative predictive value of 14.1% and 57.8% respectively and a high specificity & positive predictive value of 97.3% and 81.2% respectively. The area under the curve using receiver operating curve analysis was above the chance line of 0.5 with a value of 0.0557 at $p < 0.05$.

Conclusion. GAD-7 is a reliable and moderately valid instrument to screen anxiety among pregnant women in Southwest Nigeria.

Integrating Cultural Awareness to Improve Mental Health Services in the Multi-Ethnic Community: A Systematic Literature Review

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Aims. The challenges in providing mental healthcare in an ethnically diverse society exist within the limited frameworks of psychopathologies. Ethnocultural communities suggest relative syndrome of beliefs and practices so that experiences of mental illness differ and may not fit into the concept of colonial psychiatry. This review examines the necessity to recognise these trends as social determinants in the effectiveness and accessibility of healthcare and in preventing disparities.

Methods. According to the Centre for Reviews and Dissemination (CRD), this abstract adopted the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Standards using a search strategy of major online databases. The published studies selected were based on inclusion and exclusion criteria surrounding cultural competency in clinical practice in the context of global mental health. The studies were analysed and synthesised with quality appraisal tools and reported in a narrative approach.

Results. The outcome from the pool of studies revealed the following common themes.

Culturally informed clinical practice/transcultural psychiatry: Integrating the perspectives of the client's explanatory model with the clinician lens in a shared narrative through ethnographic principles. The cultural consultation service (CCS) recommendations increased knowledge of the specific issues of the patient's background and improved empathy and communication.

The improvement of therapeutic alliance: A focus on the aspects of religiosity/spirituality on human life experiences and the implication in healing and psychotherapy for better positive clinical outcomes.

The impact of psychosocial stressors: The clinician highlights the significant contributing factor to the mental distress of the patient, which may include cultural stressors, to provide tailored care and solutions within a multidisciplinary team.

Conclusion. The research on cultural competency in the mental health setting is multifaceted. The ongoing discussion on transcultural psychiatry, integrating biomedical and traditional practices and specialised clinical formulations, can improve mental health service delivery in a global society.

Evaluation of Films That Depict People With Dementia

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Aims. Films are known to influence the public's perception about mental health conditions. Dementia's prevalence in society has been increasing due to the ageing population. Cinema has long struggled with its depiction of mental health as seen with the depiction of schizophrenia, autism and psychosis in many blockbusters and award winning films. However, the depiction of dementia in films has not been as widely explored. The aim of this paper is to evaluate the depiction of dementia in films to assess its clinically accuracy.

Methods. A systematic search of keywords related to dementia was completed on the Internet Movie Database. The search was conducted in May 2022. Non-foreign language feature films were used in this paper. Films from 2000 and onwards were used. The films were analysed on the type of dementia they portrayed. 8 themes and tropes were assessed for each film. The portrayal of healthcare was also assessed. Each film was measured against the Neuropsychiatric Inventory-Questionnaire.

Results. 42 films were used from an initial sample of 1,320. Alzheimer's was found to be the most frequently portrayed cause of dementia. Time-shifting was the most common theme. There was a predominantly negative portrayal of care homes with a positive portrayal of carers. The films, measured against the NPI-Q, produced on average a lower severity of neuropsychiatric symptom score and carer distress score.

Conclusion. The depiction of dementia was mild in comparison to dementia's clinical manifestation. Films showed a positive portrayal of healthcare workers which can be considered rare when looking at cinema's history with psychiatry. Overall, films did not accurately portray the clinical aspect of dementia as they tended to focus more on the early stages of the diagnosis. However, films were realistic in their depiction of the emotional challenges that comes with a diagnosis of dementia. Film's powerful role in influencing the public's perception could be used to help reduce stigma and misunderstanding. Filmmakers could work with clinicians to help produce accurate portrayals of dementia. Patients experience the emotive aspect of their