methods (interventional and observational) study. Diagnoses in most studies were psychotic illness, schizophrenia, schizoaffective disorder, bipolar affective disorder and depression with psychosis. There was a lack of studies found that included adolescents or participants with at-risk mental states for psychosis. A range of Mediterranean diet adherence scoring systems were used across studies, indicating a notable heterogeneity in the way adherence was evaluated. Most studies included other lifestyle exposures or interventions alongside the Mediterranean diet. There was a marked heterogeneity between studies in how mental health and quality of life outcomes were assessed. Although there was an overall trend towards improved mental health or quality of life outcomes in some studies, others reported no change or a negative association with the dietary/lifestyle exposure or intervention.

Conclusion. The association between Mediterranean diet adherence and mental health outcomes and quality of life in adults and adolescents with severe mental illness remains inconsistent. Lifestyle-based interventions for the treatment of mental illness are cost-effective and relatively easy to implement with less concern about side effects. Therefore, this area requires further research.

Functions, Characteristics, and Experiences of Non-Suicidal Self-Injury: A Cross-Sectional Study of Youth and Adolescents in Singapore

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Aims. Non-Suicidal Self-Injury (NSSI) occurs when direct, deliberate harm is caused to one's physical body without intention of suicide. Approximately 22.1% of youth worldwide would engage in NSSI in their lifetimes. Due to the increased risk of harm and future suicide attempts, NSSI is a behaviour that warrants attention and has been identified as a condition in need of further study. While some studies have examined the prevalence and experiences of NSSI in Singapore, there is a lack of detailed studies on the presentation and overall phenomenology of NSSI in the local context. This study aims to assess the characteristics of NSSI using the Non-Suicidal Self-Injury – Assessment Tool (NSSI-AT) in a cross-sectional design. We investigated the functions, characteristics, and personal experiences of local youths who engage in NSSI for the development and improvement of patient-centred care.

Methods. 121 youths between 12 and 25 years old were recruited from the National University Health System. The study included patients seeking treatment for mood disorders and have self-reported NSSI behaviours such as cutting, hitting, and scratching prior to or at the time of visit. Outcomes for the NSSI–AT, including the actions, functions, frequency, age of onset, initial motivations, severity, practice patterns, disclosure, and treatment experiences of self-harm, were reported using descriptive analysis. Personal reflections were analysed using thematic analysis.

Results. Participants were mostly female (n = 86, 71.1%) with a mean age of 16.2 years (*SD* = 2.33). Many participants engaged in NSSI actions such as cutting, scratching, and banging on objects, to manage high-pressure agitating and low-pressure depressive emotional states. Most participants started engaging in NSSI in early adolescence (mean = 13.0 years old, *SD* = 2.37, range = 7–23) and have hurt themselves more severely than intended (n = 79, 65.3%). When reflecting on overall NSSI experiences, participants had similar levels of ambivalence toward NSSI and growth due to NSSI. Participants also gave encouragement to others going through similar experiences and reported the negative aspects of self-harm.

Conclusion. Findings support emotional regulation as a function of NSSI in the local population, where self-harm was not generally used for social communication purposes. Findings also suggest that youths may be more vulnerable to NSSI during early adolescence, corresponding to a time of substantial life changes. This study also demonstrated the individuality of NSSI experiences among the local youth, highlighting the importance of having a person-centred approach in NSSI treatment. Taken together, this highlights the need to develop interventions that can effectively serve this age group and their specific challenges.

The Association Between Outdoor Ambient Temperature and Depression and Mania: An Ecological Momentary Assessment Study

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Aims. Heat exposure can negatively impact mental health. Evidence for the effect of temperature on mood disorders is inconsistent. Current studies exploring the link between temperature and mood disorders are limited by poor temporal and geographical resolution. We aimed to use ecological momentary assessment (EMA) to investigate the effect of real-time temperature on depressive and manic symptoms. We hypothesised higher temperatures would be associated with increased depressive and manic symptoms.

Methods. We used EMA data from the digital platform and smartphone app juli to investigate the effect of real-time mean and maximum ambient temperature on depressive and manic symptoms in adults with depression and bipolar disorder. Depressive and manic symptoms were assessed using the Patient Health Questionnaire-8 and the Altman Self Rating Mania score, respectively. Time- and location-specific temperature data were collected from participants' smartphone geolocation on a 5-by-5 km resolution grid. We analysed data using negative binomial mixed-effects regression models, controlled for demographic and weather variables, and stratified by season.

Results. We analysed data from 4,000 participants with depressive symptoms and 2,132 with manic symptoms, between July 2021 and March 2023. We found that each 1°C increase in mean daily temperature in the preceding two weeks was associated

with a 0.2% reduction in depressive symptom scores (IRR 0.998, 95%CI 0.997–0.999). This association was most pronounced in the spring (IRR 0.995, 95%CI 0.992–0.999). For manic symptoms, we found that each 1°C increase in mean temperature in the preceding two weeks was associated with a 0.4% increase in manic symptom scores (IRR 1.004, 95%CI 1.001–1.007), with the strongest association observed in the autumn (IRR 1.011, 95%CI 1.002–1.020). Associations between maximum temperature and depressive and manic symptoms followed a similar pattern.

Conclusion. We found evidence that higher temperatures were associated with decreased depressive symptoms and increased manic symptoms, indicating a complex relationship between temperature and mood disorder symptoms. With globally rising temperatures due to climate change, there is a need to understand the impact of heat on mental health symptoms to provide targeted support. This study demonstrates the potential for using novel data sources and EMA methods to inform our understanding of the link between climate and mental health, although there is a need for improved data collection to realise the potential of these methods. Clinically, our findings highlight opportunities for risk stratification and targeted interventions based on local temperature patterns.

Integrating Spirituality Into Mental Health Care

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Aims. To find how best to integrate religion/spirituality (R/S) into clinical care.

Methods. This was a qualitative study. 41 mental health patients of varying diagnoses in secondary care underwent semi-structured interviews describing their mental health and spiritual journeys and how these have interacted, before, during and after a period of acute illness. Grounded theory was used. Detailed coding was carried out and themes extracted.

Results. Preliminary results from this project have already been reported, (submitted for publication). 5 main processes by which R/S interacted positively or negatively with mental health recovery were identified:

- R/S experiences, (+ve or -ve),
- Existential crisis, (-ve),
- Influence of faith community, (+ve or -ve),
- Finding a personally meaningful faith, (+ve),
- Changing priorities to a more spiritual outlook, (+ve).

Further analysis has allowed a comparison between our different participants who were at different stages of recovery:

1. Those who described themselves most as being in recovery tended to have more positive R/S experiences, support from a faith community, a personally meaningful faith and have changed their priorities. Most have also found clinical care helpful. However, often R/S was considered more helpful both for personal recovery and symptom relief. For others in this group, R/S enables living a satisfying life despite limitations of illness partially controlled by medication.
2. Those who described themselves most as struggling with mental illness were much less likely to have a personally meaningful faith or had changed their priorities. They tended to have negative R/S experiences, persistent existential crisis and/or rejection from a faith community. Most of these people find both clinical care and R/S issues unhelpful. Some people were finding clinical care helpful but R/S barriers were blocking their recovery.

Many people at all stages of recovery said they wanted more help with R/S issues. They often regard their illness as a spiritual problem and consider positive R/S experiences a key to recovery.

Conclusion. Spiritual health may be important for recovery from many mental health problems and needs to be addressed according to the 5 themes.

- Possible R/S barriers identified, even if symptoms seem to be responding to clinical treatment.
- Positive R/S experiences and/or support from a faith community used to help overcome R/S barriers.
- Support made available to find a personally meaningful faith and change priorities.
- Referral to spiritual care offered more frequently.

Clinical care will be most effective if combined with facilitating spiritual health.

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 Comparison of the Use of Handheld KardiaMobile ECG Devices With 12-Lead ECGs in an Older Adult Psychiatric Setting

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Aims. To establish the usability and tolerability, as well as accuracy of measurements of a handheld KardiaMobile ECG device in an inpatient older adult dementia ward.

Methods. Between February 2023 and April 2023, KardiaMobile ECGs and 12-lead ECGs were taken for patients admitted within a dementia ward in Liverpool. The standard 12-lead ECGs were analysed as per current practice, by Broomwell Health Watch. The KardiaMobile ECGs were read manually, by two independent raters, for heart rate and QTc. The user-rated tolerability was measured out of 5, 5 being the most tolerable, and was measured for both KardiaMobile and 12-lead ECGs, allowing comparison. The QTc and heart rate were calculated for both methods, and then compared. QTc was calculated using Bazett's formula.

Results. 13 inpatients had a 12-lead ECG, and a KardiaMobile ECG performed. Both were tolerated by all patients, except one who tolerated neither, leaving 12 ECGs for comparison. KardiaMobile ECGs were quicker to obtain, more well tolerated, and easy to use. However, manual calculation of QTc, versus expert and computer analysis for 12-lead ECGs, led to some variability between QTc measurements. Inter-rater reliability between raters for the KardiaMobile QTc was poor, however, when both were combined, correlation with 12-lead ECG QTc was moderate. KardiaMobile ECGs were harder to obtain in those with tremors, and the lack of computerised readings made interpretation more difficult. 12-lead ECGs also offer reassurance in the form of a fully interpreted, more detailed ECG.

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