

Results: A total of 26 participants were included. In the frequency of usage, the times and ratio of days were increased but no significant difference. The emotional symptoms were no significant difference. Positive experiences were novelty and interesting, while negative experiences were the slow rate of growth.

Table 1. Demographics (N=26)

| | Range | Mean (SD) |
|-----------------------------|----------|-------------------|
| Age | 20-62 | 37.0(11.35) |
| | n | Percentage |
| Gender | | |
| Female | 15 | 57.7 |
| Educational level | | |
| University | 14 | 53.8 |
| Employment situation | | |
| Employment | 14 | 53.8 |

Image:

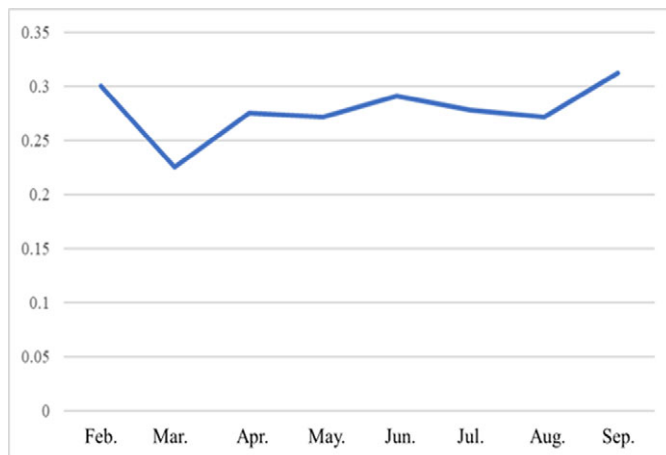


Figure 1. The trend of average using days per months

Image 2:

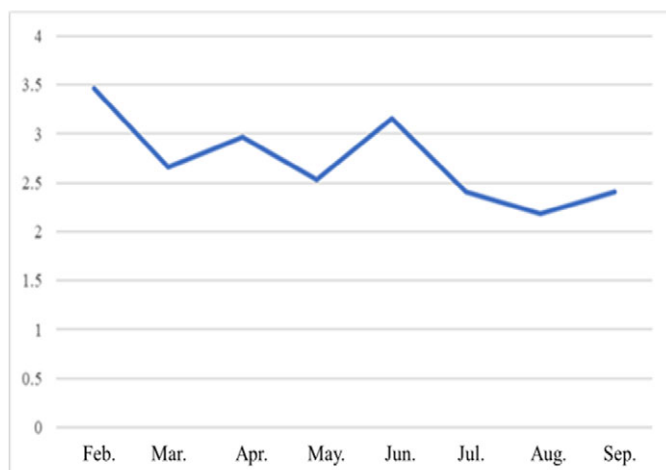


Figure 2. The trend of average using times per days

Image 3:

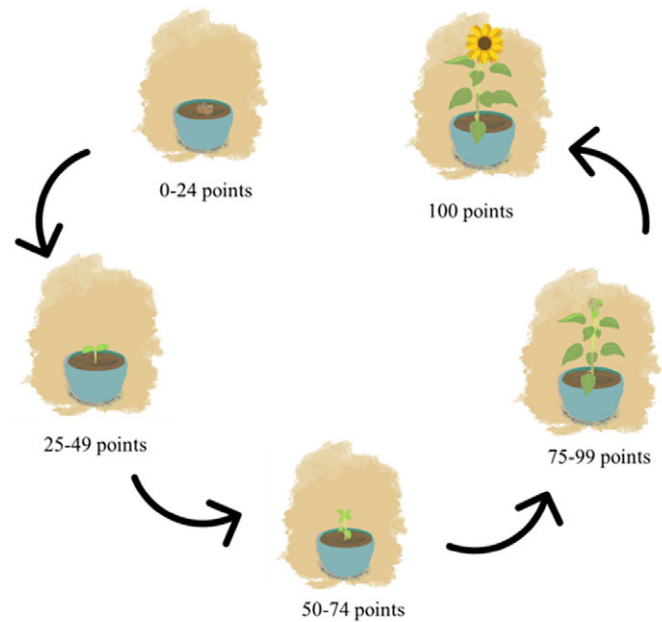


Figure 3. The growth process of the plants

Conclusions: There was a preliminary increase when adding plants-nurturing to the self-manage application, whereas the effect should be examined by further research. The more delicate elements of gamification could be included in self-manage application, considered the users' other sensory perception in the future. Meanwhile, to improve the frequency of usage and self-management in BD patients, the subjective experiences should be explored in-depth.

Disclosure of Interest: None Declared

EPP0126

Sleep disturbances in bipolar disorder with comorbid post-traumatic stress disorder

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Introduction: Sleep disturbances are frequently reported in patients with Bipolar Disorder (BD), parallel, patients with BD report significantly higher rates of exposure to major lifetime traumatic events than the general population with a high risk of developing PTSD.

Objectives: The aim of this study was to compare sleep parameters subjectively and objectively measured, in patients with BD with or without PTSD with respect to healthy control subjects.

Methods: 73 patients with BD (26 BD+ PTSD and 46 BDw/oPTSD) and 88 HC were evaluated through actigraphic monitoring to explore sleep and circadian parameters, scales exploring sleep quality (*Pittsburgh Sleep Quality Index -PSQI-*) and chronotype (*reduced Morningness-Eveningness Questionnaire -rMEQ-*) and the Trauma and Loss Spectrum Self Report (TALS-SR), for lifetime trauma and loss spectrum symptoms.

Results: Compared to age-matched HC, patients with BD reported lower sleep quality, lower rMEQ scores suggestive of delayed chronotype, longer total sleep time, higher waking after sleep onset, lower interdaily stability and lower sleep health. Patients with BD+PTSD reported significantly higher PSQI scores than BDw/oPTSD; significant correlations between the PSQI total scores and TALS-SR symptomatic domains emerged in the BD+PTSD group only.

Conclusions: Our results suggest a strong correlation between sleep disturbances, particularly evaluated by subjective measures, and PTSD symptoms in patients with BD.

Disclosure of Interest: None Declared

EPP0128

Circadian rhythm disturbances in mood disorders: characterisation and clinical impact

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Introduction: Circadian rhythms, defined as endogenous oscillations that regulate metabolism, physiology and behaviour, may be frequently disrupted in mood disorders, influencing their clinical presentation and course (Srinivasan V. *et al.* World J Biol Psychiatry. 2006;7(3):138-151).

Objectives: To characterise circadian rhythm disruptions in a population of patients with mood disorders, analysing clinical and course differences in subjects with and without clinically significant circadian rhythm alterations

Methods: Patients selected for this cross-sectional study were assessed with CGI-BP, HAM-D, MRS, and PANSS. Circadian rhythm disturbances were evaluated with BRIAN. Patients with clinically relevant circadian rhythm disturbances were defined as BRIAN > 36 (Mondin TC *et al.* J Psychiatr Res. 2017;84:98-104). Bivariate analyses were subsequently performed to compare subgroups of patients.

Results: In our study, 61 subjects with DD or DB were enrolled. The overall mean BRIAN test score was 40.08 ± 10.26. When comparing the BRIAN test scores, both total and subscales, between subjects with DB and DD, social rhythms were significantly more altered in subjects with DB (8.63 ± 2.90 VS 6.80 ± 2.11, p=0.034). Subjects with disruption of circadian rhythms displayed greater severity of depressive symptoms (mean total HAM-D test score 16.06±8.61 VS 8.94±5.85; p<0.003, mean CGI-BP severity of depression test score 3.14±1.68 VS 1.88±1.11; p<0.010) and with

a longer duration of untreated illness (6.14±8.64 VS 2.53±6.28; p= 0.040).

Conclusions: Alterations in circadian rhythms should be routinely investigated in all individuals with mood disorders, especially BD, and may represent a transdiagnostic psychopathological construct that defines a more severe disease phenotype.

Disclosure of Interest: None Declared

EPP0129

New perspectives on the role of vitamins in bipolar disorders: are there any relationships with outcomes?

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Introduction: Vitamin B12, folic acid and homocysteine play a key role in cellular functioning as part of “one-carbon metabolism”, a biochemical pathway involved in many essential biological processes, such as DNA synthesis. Therefore, imbalance involving these micronutrients might impair neurological functioning as well. Vitamin B12 has been implicated in the onset of a wide range of neuropsychiatric symptoms/disorders, like mood disorders, anxiety, hallucinations and delirium. Altered levels have been reported in mood disorders (MDs), but available literature particularly focuses on major depression (MDD), while the information in bipolar disorders (BDs) is still limited.

Objectives: The present study aimed at assessing vitamin B12, homocysteine and folic acid in bipolar inpatients and detecting any relationship with clinical features or outcome measures.

Methods: A total sample of 69 inpatients was selected. Diagnoses of bipolar disorder I (BDI), II (BDII), schizoaffective disorders, and MDD, were assessed according to DSM-5 criteria. The Mini International Neuropsychiatric Interview (MINI), Hamilton Rating Scale for Depression (HRSD), Young Mania Rating Scale (YMRS) and Clinical Global Impression-Severity (CGI) scales were used to complete the psychopathological evaluation. The blood parameters were measured according to common clinical-chemical methods.

Results: About 50 % of bipolar patients (34) showed significantly lower vitamin B12, and 14 higher homocysteine levels than normative values. No differences were noted between genders, except for a slightly higher rate of women showing lower homocysteine, phase of illness, intake of psychotropic drugs, or dietary habits. Folic acid levels were normal in most of the sample. Patients with a family history of suicide showed significantly lower levels of vitamin B12.

Conclusions: These results suggest that implementing the assessment of vitamin B12, homocysteine and folic acid in patients with BD in routine clinical practice could be a useful as well as simple, non-invasive and cheap tool. Although other studies are necessary, the present findings that lower levels of vitamin B12 seem typical of patients with a family history of suicide independently from the