

**Conclusions:** Of note, age did not significantly differ across clusters in contrast to existing research in which cognition is Objectively measured. That is, perceived cognitive errors are significantly associated with lower psychological well-being for both young and older adults with BD.

### **P21: Cultural adaptations of an evidence-based mental health intervention for older adults with depression and anxiety in a low- resource setting in Peru.**

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**Objectives:** Effectively adapting innovative mental health evidence-based community interventions is critical, yet underdeveloped, for reducing the treatment gap among older adults with depressive and anxiety symptoms. The Program to Encourage Active, Rewarding Lives (PEARLS) is an evidence-based community intervention designed to reduce symptoms of depression and improve quality of life among older adults. PEARLS includes 6-8 sessions of in- home visits of trained social workers to deliver a multi-component intervention: problem- solving, behavioral activation activities, and psychoeducation. We used the Framework for Reporting Adaptations and Modifications-Enhanced (FRAME) to document process and changes made to adapting PEARLS, branded as VIDACTIVA (Vidas Activas y Valiosas) in an urban, low- resource community in Lima, Peru.

**Methods:** We obtained data in two stages. First, we conducted formative interviews with several stakeholders, including older adults, health professionals, community health workers (CHWs), city officials, and church leaders from the community. Second, during the iterative pilot phase, we used a mixed-Methods approach, integrating interviews with fidelity assessments, field notes, and training evaluations. We employed an iterative, rapid content analytic approach to triangulate findings from multiple sources and stakeholders, allowing us to identify needed adaptations.

**Results:** We made several adaptations. Most adaptations occurred during the formative phase focused on the training plan for CHWs (VIDACTIVA delivers). We also made adaptations of the components of the intervention (problem-solving) and in the way supervision sessions were conducted. Adaptations involved researchers, CHWs, health professionals and older adults. All adaptations were fidelity-consistent with PEARLS. Due to this is the early stage of implement VIDACTIVA, the most common goal across adaptations was increased feasibility and acceptability of the intervention.

**Conclusions:** The current study is an early effort to apply FRAME in the low-income urban context in Lima, Peru. FRAME guided systematic documentation of the adaptation decision- making process while successfully balancing fidelity. These observations lend insight to continue implementation efforts of VIDACTIVA intervention, which is undergoing a pilot clinical trial.

### **P22: Comparative Analysis of Efficacy of Intravenous Ketamine and Intranasal Esketamine in Treatment-Resistant Depression across Age Groups**

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**Objectives:** Intravenous ketamine (IVK) and intranasal esketamine (ESK) are increasingly used in treatment-resistant depression (TRD). There is limited data on head-to-head comparison as well as few reports on effects across age groups.

**Methods:** A retrospective chart review was conducted with patients from a specialized TRD program who received acute courses of IVK (6 infusions) (n = 113) or ESK (8 intranasal insufflations) (n = 35) between February 2017 and May 2023. Clinical response (defined as 50% decrease in mood scores) and symptomatic improvement were assessed using Beck Depression Inventory (BDI). An analysis was conducted between patients younger or older than 60 years.

**Results:** In IVK, patients under 60 (n = 57; 58.1% female; mean age 44.4 (± 9.8)) had 22.8% response (BDI at infusion 1: 30.4 (± 9.70); infusion 6: 21.2 (± 10.9)). Patients over 60 (n = 56; 49.6% female; mean age 73.2 (± 7.6)) response rate was 26.8% (BDI infusion 1: 24.9 (± 11.0); infusion 6: 19.0 (± 11.6)). There was a statistically significant reduction in BDI scores between baseline and the end of the acute course (p < 0.0001). No difference between the two age groups was observed (p = 0.1165). For ESK patients under 60 (n = 22; 68.1% female; mean age 44.0 (± 8.3)), response rate was 22.78% (BDI at infusion 1: M = 30.4, SD = 9.70; and at infusion 6: M = 21.2, SD = 10.9). In older patients (n = 13; 69.2% female; mean age 72.6 ± 7.4 years) response rate was 30.8% (BDI at infusion 1: M = 24.9, SD = 11.0; at infusion 6: M = 19.0, SD = 11.6). BDI score decline between baseline and end of the acute course was statistically significant (p < 0.0001). No difference between the two age groups was observed (p = 0.5420). No statistical difference was found in patients > 60 between IVK and ESK (p = 0.31) as well as in patients < 60 between IVK and ESK (p = 0.4632).

**Conclusions:** Antidepressant response and reduction of depressive symptoms was similar between IVK and ESK, with no difference between young and old populations.

### **P23: Association of exercise with melatonin level in community-dwelling older adults**

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**Summary:** Melatonin serves as an endogenous synchronizer of biological rhythms. Age-related changes are evident with a significant reduction in melatonin observed in 24-hour secretion. Melatonin exerts a significant cytoprotective action by buffering free radicals and reversing inflammation. However, few studies have explored the association between physical activity and melatonin level. In this study, we compared melatonin level and actigraphy-derived sleep and activity indicators in older adults across two levels of exercise habit (sedentary-to-light exercise and moderate-to-vigorous exercise), as well as the association of these indicators with melatonin levels. We recruited 104 participants (aged 57–84 years) who wore a wristwatch device to monitor their activity (MotionWatch 8; CamNtech, Cambridge, UK) for 14 days. Circadian rhythms were estimated using cosinor analysis, lag 1440 mins correlation coefficient, interdaily stability, and non-parametric analysis. Saliva samples were collected every 30 mins from 18:00 pm till one hour before usual bedtime, and maximum melatonin level during this period. A 5-minute Psychomotor Vigilance Task (PVT) was used to evaluate attention. Habits of physical activities were self-reported. Melatonin level was not significantly different between participants with sedentary-to-light and moderate-to-vigorous exercise habits. Analysis showed that participants who had moderate-vigorous exercise habit were older (p = 0.04), having longer sports time (p < 0.001) and WASO (p = 0.02), more occurrence of daytime naps (intradaily variability) (p = 0.05), more fragmented 24-h sleep-wake cycle (interdaily stability, p = 0.01), and less regular 24h rhythm (lag 1140 mins correlation, p = 0.04). They also showed shorter response time (p = 0.05), and a smaller number of lapses (p = 0.04) in PVT. Regression analysis results showed that weekly