EPP225

Short-Term Effects of an AI-Based Wearable Adherence Monitor in Outpatient Psychiatry: Randomized Controlled Trial

S. Yoon[1]*, W.-M. Bahk[2], S.-Y. Lee[1], B.-H. Yoon[3] and E.-S. Lim[4]
[1]Department of Psychiatry, Wonkwang University Hospital, Iksan-Si; [2]Department of Psychiatry, The Catholic University of Korea, Seoul, Korea, Seoul; [3]Department of Psychiatry, Naju National Hospital, Naju, Korea, Naju-Si and [4]Department of Psychiatry, Shinsegae Hyo Hospital, Gimje, Korea, Republic of
*Corresponding author.
doi: 10.1192/j.eurpsy.2026.12055

Introduction: Medication nonadherence undermines treatment effectiveness in psychiatric care, yet objective, continuous measurement in routine practice is challenging. AI-enabled wearables may offer scalable monitoring but evidence from randomized evaluations remains limited.
Objectives: the present study evaluated the effectiveness of an AI-based wearable and behavioral data algorithm for adherence monitoring in outpatient psychiatric patients, using a randomized design.
Methods: We conducted a single-center, prospective, randomized controlled trial of an AI-based, wrist-worn adherence monitoring system in outpatient psychiatric care. Participants (age ≥12 years) were randomized 1:1 to smartwatch intervention or usual care for 4 weeks. Algorithm-derived adherence was calculated as the proportion of detected medication events relative to scheduled doses over prespecified 28-day baseline and post-intervention windows. The primary endpoint was change in adherence (Δ = post − pre). Analyses used complete cases with linear regression (adjusting for baseline adherence, age, sex, and medication covariates) and HC3 standard errors; ANCOVA served as a confirmatory model. Prespecified responder thresholds were Δ ≥10 and ≥20 percentage points (pp). Sensitivity analyses excluded benzodiazepine users.
Results: Seventy-eight participants were analyzed (control n=41; intervention n=37; mean age 18.8±6.7 years). Baseline adherence was similar (control 22.4%±16.5; intervention 20.4%±17.1). Follow-up adherence increased modestly in controls (25.5% ±15.2) and substantially in the intervention group (39.9%±34.5). The mean change favored intervention (+19.5%±38.1 vs +3.1% ±11.5). In adjusted models, intervention assignment was associated with greater improvement (β=14.28, 95% CI 1.80–26.77; p=0.025); ANCOVA results were consistent. Responder analyses showed higher odds at the ≥20 pp threshold (45.9% vs 4.9%; OR=16.58, 95% CI 3.48–78.97; p<0.001), but not at ≥10 pp (54.1% vs 39.0%; OR=1.84; p=0.185). Excluding benzodiazepine users yielded similar effects.
Conclusions: An AI-enabled smartwatch intervention improved short-term, algorithm-derived medication adherence compared with usual care in outpatient psychiatry. Larger, multi-center trials with longer follow-up and clinical endpoints are warranted.

Disclosure of Interest: None Declared

Sexual Medicine and Mental Health

EPP226

Prevalence of Erectile Dysfunction in Chronic Hemodialysis Patients

H. Hsine[1]*, S. Kolsi[2], A. Bouaziz[2], M. El Behi[2] and W. Abbes[2]
[1]Psychiatry, La Metairie Clinic, Nyon, Switzerland and [2]Psychiatry, University Hospital of Gabès, Gabes, Tunisia
*Corresponding author.
doi: 10.1192/j.eurpsy.2026.12054

Introduction: Erectile dysfunction (ED) is a frequent but still insufficiently explored complication in patients with end-stage chronic kidney disease undergoing hemodialysis. It represents a relevant marker of overall health in these patients, closely linked to vascular, metabolic, and psychological disorders associated with renal disease. Despite its major impact on quality of life and marital relationships, ED remains rarely screened for and poorly managed in nephrology practice.
Objectives: To determine the prevalence of ED in chronic hemodialysis patients and the associated factors.
Methods: We conducted a descriptive and analytical cross-sectional study in the form of a survey among 50 patients with chronic renal failure treated with periodic chronic hemodialysis in the nephrology department of Gabes Regional Hospital. The study was carried out from February 1, 2025, to May 31, 2025. We used a pre-established form to collect sociodemographic and clinical data, and the Arabic version of the International Index of Erectile Function (IIEF-5) to screen for ED.
Results: The mean age was 49.3 ± 16.18 years [19–78]. In our sample, 64% of patients were married. Their socioeconomic level was low in 46% of cases. Before initiation of hemodialysis, 86% of patients were professionally active. However, after starting dialysis, half of the patients became unemployed (56%). Hypertension was the most frequent comorbidity (70.7%). Nephropathy was of diabetic origin in 40% of cases. The mean duration of hemodialysis was 58 ± 82 months [3 months–25 years]. The mean IIEF-5 score was 12.94 ± 5.75. The prevalence of ED was 86%, moderate in 28% of cases, and severe in 40% of hemodialyzed men. We did not find statistically significant correlations between the IIEF score and age, somatic comorbidities (diabetes, hypertension, dyslipidemia), or dialysis duration.
Conclusions: The high prevalence of ED further illustrates the particular severity of chronic kidney disease. It should be considered among the key determinants of quality of life in hemodialysis patients. Systematic screening for ED and a multidisciplinary management approach are essential.

Disclosure of Interest: None Declared

EPP227

Sexual Dysfunctions, Post-Traumatic Stress Disorder, and Postpartum Hemorrhage : Trait Anxiety as a moderator factor

N. Smaoui[1], A. Jedidi[1]*, S. Omri[1], N. Charfi[1], H. Hkim[2], R. Feki[1], I. Gassara[1], M. Maalej[1], M. Maalej[1] and L. Zouari[1]