

UC San Diego

UC San Diego Previously Published Works

Title

C - 26 Combined Effects of HIV and Past Methamphetamine Use Disorder on Frailty, Neurocognition, and Everyday Functioning

Permalink

<https://escholarship.org/uc/item/5500d6w7>

Journal

Archives of Clinical Neuropsychology, 33(6)

ISSN

0887-6177

Authors

Paolillo, E
Saloner, R
Montoya, J
[et al.](#)

Publication Date

2018-09-01

DOI

10.1093/arclin/acy061.179

Peer reviewed

Abstract
Poster Session C

Friday, October 19, 2018 12:00 pm - 1:30 pm

NEUROLOGICAL AND NEUROPSYCHIATRIC DISORDERS: OTHER

C - 26

Combined Effects of HIV and Past Methamphetamine Use Disorder on Frailty, Neurocognition, and Everyday Functioning

Paolillo E, Saloner R, Montoya J, Campbell L, Pasipanodya E, Iudicello J, Moore R, Moore D

Objective: To examine persistent effects of lifetime methamphetamine use disorders (MA) on global neurocognition, everyday functioning impairment, and accumulated damage to multiple physiologic systems (conceptualized as “frailty”) among persons living with HIV (PLWH). **Method:** 210 participants, aged 35–65, were categorized into three groups based on HIV status and lifetime MA diagnosis (occurring >12 months ago): HIV+/MA+ (n = 43); HIV+/MA- (n = 75); and HIV-/MA- (n = 92). Participants completed a comprehensive neurocognitive battery and self-reported measure of IADL dependence. A frailty index score (representing proportion of accumulated multisystem deficits) was calculated out of 27 possible medical and psychiatric deficits. Three multiple regression models examined differences in global neurocognition, IADL dependence, and frailty across groups, covarying for demographic and neuropsychiatric characteristics that differed between groups (e.g., lifetime alcohol use disorder). **Results:** HIV+/MA+ participants had worse global neurocognitive functioning and greater likelihood of IADL dependence than HIV-/MA- participants ($p < .01$), but not HIV+/MA- participants ($p > .05$). HIV+/MA+ participants had higher frailty index scores than both HIV-/MA- ($b = -0.14$, $p < .001$) and HIV+/MA- participants ($b = -0.05$, $p = .030$). Across the entire sample, higher frailty index score was related to worse global neurocognition ($r = -0.24$, $p < .001$) and greater likelihood of IADL dependence ($\beta = 25.9$, $p < .001$). **Conclusions:** Results demonstrated an adverse effect of HIV, but not past MA, on neurocognitive and everyday functioning. In contrast, there was a combined detrimental effect of HIV and past MA on frailty. Given evidence of potential legacy effects of MA among older (≥ 50) PLWH, these findings support future longitudinal research to determine whether frailty may be a preclinical marker of neurocognitive and functional decline.