Title
Patterns of methamphetamine use vary by age and HIV serostatus

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serum levels of corticosterone after LPS injection was determined utilizing specific ELISA kits.

Results: Morphine administration per se had no effects on basal TNF levels. Morphine inhibited intraperitoneal LPS-induced TNF release but this effect occurred only with high doses (3.1 and 10 mg/kg) and this effect was not dose dependent. Serum corticosterone levels increased after a single LPS challenge and morphine dose dependently prevented this effect. After repeated administration or after morphine withdrawal, tolerance was developed to morphine inhibitory effects on peritoneal TNF release and serum corticosterone levels in response to LPS.

Conclusions: Morphine inhibitory effects on innate immunity depend on the opioid administration schedule and duration treatment.

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Moderating effects of race in clinical trial participation and outcomes among marijuana-dependent young adults

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Aims: Few studies focus specifically on marijuana treatment outcomes among racial minorities. The present secondary analysis of a clinical trial addresses this gap. It was hypothesized that (1) African Americans would have higher attrition rates than Whites, especially during the clinical trial phases following randomization, (2) overall substance use and retention outcomes would vary when stratified by race and (3) race would moderate the relationship between treatment type and outcomes.

Methods: 112 court-referred marijuana-dependent young adults (ages 18–25) were randomized to one of four treatment conditions: Motivational Enhancement Therapy (MET)/Cognitive Behavioral Therapy (CBT), MET/CBT + Contingency Management (CM), Drug Counseling (DC) or DC + CM. African American participants were compared to White participants with respect to rates of participation in phases of treatment and substance use outcomes using chi-square and *t*-test analyses. In addition, the interaction of race and treatment condition was examined via General Linear Modeling to ascertain if the interventions yielded different effects based on race.

Results: African Americans were significantly less likely to complete the treatment and posttreatment phases of the clinical trial than Whites. Irrespective of treatment type, substance use outcomes did not vary by race. However, there was a significant interaction effect between treatment type and race; African Americans did not benefit differentially from any specific type of treatment, but CM was effective in reducing proportion of marijuana positive samples among White youth.

Conclusions: Findings suggest that clinical trial treatment and posttreatment completion rates vary by race in this population, as does response to treatment. More treatment research focusing specifically on African American marijuana-dependent youth is warranted.

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Patterns of methamphetamine use vary by age and HIV serostatus

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Aims: Given the high co-occurrence of methamphetamine (MA) use and HIV infection and the aging of HIV persons in the U.S., we examined MA use behaviors in relation to age and HIV serostatus. Considering research indicating possible age-related effects on psychosocial and neuropharmacological factors that may affect MA use patterns, we hypothesized that the oldest cohort may differ in MA use behaviors in comparison to younger cohorts.

Methods: Participants included 227 MA-dependent persons across four 10-year age cohorts (20s: $n = 22$, 30s: $n = 73$, 40s: $n = 106$, 50s: $n = 26$). Individuals underwent extensive substance use, neuropsychological, medical, and psychiatric evaluations. Age cohorts did not differ on demographic factors or prevalence of psychiatric comorbidities, other substance use disorders, or HIV infection.

Results: Analyses of variance revealed significant between-group differences for age of first use, recency of use, and cumulative days of use ($p < .05$). The two youngest cohorts initiated use at a younger age than the next older cohorts, and the oldest cohort reported more remote use than all other cohorts ($ps < .05$). Age and HIV, but not their interaction, significantly predicted age of first use and cumulative days of use ($ps < .0001$). Age, HIV, and their interaction significantly predicted total quantity ($p < .0001$), such that MA consumption increased with advancing age for HIV− ($r = .29$), but not for HIV+ ($r = .02$), persons.

Conclusions: As compared to their younger counterparts, older adults had a later onset, greater duration, and earlier cessation of MA use, which may be driven by psychosocial and/or biomedical factors. In particular, HIV infection appears to dampen the association between older age and greater MA use, perhaps due to incident chronic illness. Older persons without HIV should be assessed for problematic substance use, which may place them at risk for HIV transmission.

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