

NALOXONE POSSESSION AND CARRIAGE AMONG PEOPLE WHO USE OPIOIDS IN NYC: THE IMPACT OF PERSON-LEVEL AND TIME-VARYING CONTEXTUAL FACTORS

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Background: Naloxone distribution is critical for preventing opioid overdose deaths. However, there is limited research examining the impact of time-varying factors on possessing and carrying naloxone; two behaviors essential for opioid overdose reversal. Data collection using ecological momentary assessment (EMA) can address this gap by frequently assessing behaviors and attitudes, thus improving ecological validity.

Methods: We analyzed 3,180 weekly electronic EMAs collected from 40 people who use illicit opioids (PWUO) in New York City between May 2019-May 2022. The EMA assessed mood, drug use, and overdose prevention-related behaviors once a week for 24 months. Descriptive statistics were used to assess the frequency of consistent (“all the time” in the past 7 days) naloxone possession or carriage. Mixed effects binary and multivariable logistic regression was used to test for the impact of time-varying EMA- and baseline-level predictors on each outcome.

Results: Naloxone possession or carriage was reported in 70% of EMAs, with an average of 76 (SD=35.6) EMAs submitted per person. In multivariable models, being in COVID-19 (after 3/12/2020; Odds Ratio (OR)=10.25, 95% Confidence Interval (CI)=3.39-30.98), being female (OR=13.42, CI=2.93-61.39), being White (OR=11.04, CI=2.25-54.14) and lifetime overdose (OR=5.96, CI=1.32-26.82) were associated with higher odds of consistent possession. Being in COVID-19 (OR=4.39, CI=2.04-9.45), recent opioid injection (OR= 3.74, CI=1.40-10.21) being female (OR=17.71, CI=3.98-78.77) and being White (OR=5.85, CI=1.35-25.29) were associated with higher odds of consistent carriage. The most common reasons for inconsistent possession and carriage were forgetting to refill after use (29%) and forgetting to bring it along (40%), respectively.

Conclusion: Our findings suggest consistent naloxone possession and carriage during COVID-19, particularly among women. To improve naloxone possession and carriage in the US, more outreach to Black and Hispanic/Latinx men is crucial. Findings also highlight the importance of using EMA to identify situations when PWUO may need prompt naloxone refills (e.g., after a recent injection event).

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