INTRODUCTION: Kratom is a complex plant whose leaves contain over 40 bioactive alkaloids, some of which act as partial “biased” agonists at mu opioid receptors. Kratom produces dose-dependent analgesic, anxiolytic, and stimulatory effects. Kratom use has increased in the US amidst the opioid epidemic, with people using kratom as a short- and long-term opioid substitute and to mitigate opioid withdrawal symptoms.

Kratom is also being used to “self-treat” pain, anxiety, depression, and fatigue symptoms.

METHODS: Using Amazon Mechanical Turk, a crowdsourcing platform increasingly used in behavioral research, US adults with past 6-month use of alcohol, stimulants, and/or opioids were recruited online. Between September-December 2020, 1,670 surveys completed; 1,510 were evaluated here. In these preliminary data, we examined prevalence and correlates of lifetime kratom use among a broader and possibly more representative US sample than prior surveys.

Data collected through March 31 resulted in a total of 2,615 evaluable surveys. Lifetime kratom use was also identified in order to recontact participants for further evaluation via online survey.

RESULTS: In our preliminary sample (N=1,510), 13.4% reported any lifetime kratom use. Past-year use was reported by 8.1%. Kratom-using adults were generally younger, male, unpartnered, without children, suburban/urban, and had lower annual income compared to those who had never tried kratom. Measures of childhood adversity, chronic pain, anxiety, depression, and perceived socioeconomic status were all poorer among those who had tried kratom. This kratom-use group also had higher rates of lifetime use for all traditional (and potentially more) novel substances. DSM-5 diagnostic criteria for any past-year substance use disorder (SUD) were far higher among the kratom use group (83.2% vs. 55.9%). Compared to the non-use group, those who had used kratom had higher rates of suspected (72.3% vs. 35.4%) or medically diagnosed (28.2% vs. 10.9%) SUD.

Despite high SUD rates, lifetime SUD treatment was low at 33.2%, although still higher than the non-use group (11.1%). As of April 2021, we recontacted and completed follow-up surveys with 129 respondents who reported lifetime kratom use to better contextualize use... come to the poster session for more details!

Over 13% of respondents reported ever using kratom. Substance use disorder rates and polydrug use were higher among kratom-using adults. Researchers and clinicians must include kratom on all standardized drug assessments.

Among the recontacted subsample (N=129):

- Only 1/3 of respondents initiated kratom use before or during 2015.
- The mean age of kratom use initiation was 29.9; older than use initiation for all traditional (and most, but not all) novel substances.

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Kratom "use disorder" assessed using a modified DSM-5 SUD diagnostic checklist, rates were low, even though a majority had qualified for any past-year SUD in the parent study.

The kratom use group also had a higher proportion of SUD, greater likelihood of nonmedical buprenorphine and/or methadone use, and to have ever been engaged with opioid agonist therapy.

The kratom use group used a greater variety of drugs than those who had never tried kratom, particularly: cannabidiol, psychadelics, and nonmedical prescription opioids.