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How addictive is kratom? As a treatment provider, your sample is enriched with the folks who have tried to stop but cannot. This generates a perception of danger that may or may not be warranted. At the same time, it turns a statistic about how many people develop a use disorder into a textured understanding of what that means for an individual and the people around them.

The article reviewed here- one that includes a few potentially pro-kratom authors- attempts to answer this question. It is one of few clinically relevant studies about kratom, let alone about its more sinister synthetic friends like 7-OH mitragynine and mitragynine pseudoindoxol (with opioid receptor affinities similar to morphine and fentanyl respectively) who are probably not included in this cohort. The dearth of information about kratom is so great that there are no treatment trials. Our management of kratom use disorders (KUDs) is based on an understanding of pharmacology, case reports, and expert opinion.

*In this mostly US based cross sectional study, drawn from respondents to an online survey, **25.5% of the people met criteria for KUD and 1/3 of those were in the moderate to severe range.** The sample was relatively educated – all were at least high school graduates or had a GED, 50% were college educated and half were married; and only 16% reported diagnosis of a separate SUD, perhaps biasing toward a healthier population.*

So, is 25.5% a lot? It is probably more than for alcohol – among Americans as a whole, the prevalence of an alcohol use disorder is 10-11% (Bailey, et al 2025) and among those who drink at all, it is ~17% (Krist and Bradley, 2025). It is probably on par or less addictive than cocaine. These are challenging comparisons to make across studies, though, as it depends on sampling, inclusion criteria and how the diagnosis was made. With cocaine use for example¹, among those who have used in the past year, the rate of a use disorder is approximately 17% while among weekly users the rate is estimated at 49.9% (Mustaquim et al, 2021 and Cougle et al, 2016).

Is (powder or leaf) kratom use disorder as consequential as other SUDs? In the group studied here, severity was moderate to severe in 1/3 of people with a KUD (and 8.9% overall). A review of the results table, pasted below shows that among most people with KUD there is tolerance (81%), withdrawal (68%), craving (57%), and increased use overtime (54%). Anecdotally, KUD is manageable with partial opioid agonists and fairly straightforward to stabilize in comparison to fentanyl use and to kratom's synthetic derivative, 7OH mitragynine.

Kratom – even in its powder or leaf form is addictive. How addictive is a difficult number to pinpoint but is probably higher than what we read here among the most vulnerable. What we do with that information, as imperfect as it is, depends on where you stand. From a public health and provider perspective it seems that at a minimum, substantial safeguards (age limits, strict labeling and clear messaging about risk and assurance of product integrity) are warranted.

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¹ Using NSDUH data, which is a screening interview followed by private questionnaire, so probably comparable to an online survey.

Title: Prevalence of Kratom Use Disorder Among Kratom Consumers

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Funding/Conflicts: Funding not reported. **No conflicts disclosed but in a different article** (Rogers et al, 2024), **authors Smith and Grundmann reported the following:** [Smith] has served as a paid scientific advisor to The [Global] Kratom Coalition and to The International Plant and Herbal Alliance (IPHA). [Smith] and [Grundmann] have consulted on legal cases involving kratom. The Kratom Coalition website highlights its mission as “Advocating for safe and responsible natural kratom leaf access” and “committed to protecting and expanding access to leaf kratom across the globe.” The IPHA has a similar but more general mission for plants and herbal compounds.

METHODS

This was a cross-sectional study among adults 18yrs and older conducted via online survey from Feb-May 2023. Participants were recruited from multiple online sources. This included an email “via the American Kratom Association list serve,” posting on Facebook by both “pro and anti-kratom groups” and via reposting by listserv managers downstream of that. Surveys were anonymous and participation was not compensated.

DSM5 criteria were assessed by online surveys. Psychiatric and other substance use disorder (SUD) information and demographics were also collected. Incomplete surveys were excluded as were those completed in more than one hour or less than 3mins (“potential bots”).

MAIN RESULTS

2824 people responded, 253 were excluded because of not actively using, 380 as potential bots, 130 for non-completion, leaving a **total of 2061 responses**.

52% were male, mean age 47.8yrs. 6.8% lived outside the US, and 42.6% resided in the Southern US, 10% in the northeast. 50% had a college education and all had at least a GED or high school education. 45% had another mental health disorder and 16.3% were diagnosed with another SUD.

25.5% (n=525) of the sample met criteria for KUD, and 33.9% of those with a KUD (or 8.9% of the total sample) met criteria for moderate to severe use disorder.

Tolerance, withdrawal, and craving were the most common symptoms among those with KUD (81.3%, 68.0% and 56.8% respectively). The report for other criteria is shown here:

TABLE 2. KUD Symptoms Reported by Survey Participants, Stratified by Qualifying for a Potential KUD

Sample Characteristics	Full Sample (N = 2061)		KUD (n = 525)		No KUD (n = 1536)		P ^a
	Frequency	%	Frequency	%	Frequency	%	
Kratom use disorder symptoms							
Tolerance	648	31.4	427	81.3	221	14.4	<0.0001
Withdrawal	447	21.7	357	68.0	90	5.9	<0.0001
Cravings	340	16.5	298	56.8	42	2.7	<0.0001
Increased use	305	14.8	281	53.5	24	1.6	<0.0001
Inability to cut down use	183	8.9	179	34.1	4	0.3	<0.0001
Continue to use despite physical/psychological problems	106	5.1	104	19.8	2	0.1	<0.0001
Continue to use despite social or interpersonal problems	83	4.0	75	14.3	8	0.5	<0.0001
Spending time to obtain, use, or recover	58	2.8	55	10.5	3	0.2	<0.0001
Impacts work or social life	49	2.4	49	9.3	0	0	<0.0001
Using in physically hazardous situations	44	2.1	42	8.0	2	0.1	<0.0001
Failing to fulfill work, home, or school obligations	34	1.7	33	6.3	1	0.1	<0.0001
Severity							
Mild	—	—	347	66.1	—	—	
Moderate	—	—	105	20.0	—	—	
Severe	—	—	73	13.9	—	—	

p value compares KUD vs no KUD

Those with KUD tended to be younger, male, single and living in the Midwest. Having another SUD increased the chance of KUD (OR 2.83, 2.19-3.67) as did having a mental health disorder (OR not specified).

CONCLUSION

Among this relatively advantaged population of people using kratom who completed an online assessment, 25.5% met criteria for KUD and 8.9% were in the moderate to severe range.

COMMENTARY

This cross-sectional survey provides one estimate of kratom’s “addictiveness.” In a rough comparison, the prevalence of a use disorder is higher than it is among people who use alcohol. (i.e., 25.5% for kratom vs 17% for alcohol).

This said, the number varies from study to study. Other studies asking similar questions in the US population have shown the prevalence of 29.5% among those with lifetime kratom use (Smith, 2022); among people answering an online survey 12.3% reported a use disorder with only 2.4% in the moderate to severe range (Garcia-Romeu et al, 2020). (In that study 41% were using kratom to stop opioid use, which may have influenced self-assessment of kratom impact.) In a Malaysian population of people using for at least 6months, the prevalence of a non-DSM5 defined use disorder was 100% with 55% reporting severe symptoms and 45% reporting moderate in 35min structured interviews (Singh, et al, 2014).

The severity is maybe a bit more than with alcohol though the comparison is complicated (for alcohol, severity was gauged by structured interview in a nationally representative survey (NESARC)). In that study half of those with alcohol use disorder were in the mild range vs two thirds in this report for kratom. (Grant et al, 2015).

Internal validity (how likely are the study results that appear to be for the study group)

There is a possibility of duplicate responses as there was no trace of the individual completing the survey. Since participants were recruited from 'pro and anti-kratom' groups in proportions not described, it's possible (but seems unlikely?) that those with an agenda could have completed the surveys more than once to bias the data.

In addition, this study was done in 2023, just before the influx of more potent synthetic compounds to the kratom supply. Their potential inclusion – or inclusion of inert ingredients in this unregulated market – could over or underestimate development of use disorders.

Perhaps the greatest threat to internal validity is the assessment of SUD using a DSM questionnaire. Though it is valuable that the survey was anonymous, DSM can still miss important impacts as insight may lack for people with active use disorders. This would not wholly affect comparison to other substances though the degree of recognition probably varies based on the nature of symptoms a given substance produces, and the social/environmental circumstance (for example, legal substances are more acceptable than illegal and may have fewer social impacts; physical symptoms as occur with opioids and kratom can heighten one's recognition of a problem).

External validity (can these results be applied beyond the study)

The data may be biased by selecting for a relatively well group (willing and able to complete a survey about SUD criteria other psychiatric symptoms; high educational level; marriage rate; limited report of co-occurring SUD). This may underestimate the consequences and severity of illness that would occur among higher risk groups.

In addition, as alluded to in the introduction, it is challenging to compare this to other substances given by differences in recruitment and the samples overall. One future solution to that may be the NSDUH. That survey does ask about kratom use but there are not published reports on prevalence of KUD yet.

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