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EDITORIAL

A Call to Colleagues on Concentrated Synthetic 7-OH

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As experts in the field of addiction science, we know firsthand the value of your life-saving work at clinics across the country. We also know the challenges facing many of you in the field of opioid addiction treatment — none more urgent than the rise of lab-made opioids like concentrated synthetic 7-hydroxymitragynine (7-OH). We urge you to document and report any identified cases involving this novel substance to enhance clinical recognition, reduce harms, prevent misdiagnosis, and inform surveillance and policy efforts.[1]

We reviewed the basic science of natural kratom, 7-OH and clinical presentations in the emergency room, psychiatry clinic and pain programs at a recent free, Tulane University CME (https://events.tulane.edu/content/kratom-2025-bench-bedside#:~:text=After%20participating%20in%20this%20educational,%E2%80%A2). We have also previously described the The Concerning Emergence of "Gas Station Heroin" (https://www.psychologytoday.com/us/blog/addiction-outlook/202506/the-concerning-emergence-of-gas-station-heroin). In recent months, we have witnessed concentrated synthetic 7-OH fuel a new wave of America's opioid epidemic and create a crush of patients at treatment centers. In Los Angeles County, for example, local health officials identified six fatal overdoses associated with concentrated synthetic 7-OH ingestion in September and October. Indeed, concentrated synthetic 7-OH opioid products are 13 times more potent than morphine and present major health risks, all while masquerading as natural kratom leaf, wellness supplements, and everyday candy and snacks.[2]

Affirming the serious nature of this threat, the Food and Drug Administration (FDA) has recommended that the Drug Enforcement Administration (DEA) schedule concentrated synthetic 7-OH as a Schedule I substance, although the DEA has yet to take action.[3]

In a July letter to physicians, FDA Commissioner Martin Makary affirmed that although 7-OH byproducts are "found in trace amounts" in natural kratom leaf, this centuries-old botanical "is not our focus." Concentrated synthetic 7-OH opioid products are not tested for safety, have never been studied in humans, and are far more dangerous than natural kratom leaf products, which have an established safety profile and are consumed by approximately 23 million Americans.[4]

US Senator Roger Marshall of Kansas, a physician, reiterated this distinction in an October letter to DEA Administrator Terrance Cole, writing that concentrated synthetic 7-OH opioid products "are adulterated chemical analogues engineered to deliver intense opioid-like effects that no natural Kratom product could produce."

We have seen a significant increase in patient intakes linked to concentrated synthetic 7-OH, and it is now among the most common substances addiction specialists encounter. But because concentrated synthetic 7-OH opioid products are often falsely branded as natural kratom, clinicians may not suspect a potent synthetic agent, resulting in missed diagnoses or inappropriate treatment approaches and documentations of cases.

For these reasons, we are encouraging our colleagues at their respective clinics to take a simple, commonsense step toward quantifying the scope of this expanding drug crisis — by adding an option on your intake forms for patients to

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self-identify as being addicted to concentrated synthetic 7-OH opioid products. This option should be distinct from natural kratom leaf.[5]

In a recent case report published in the Journal of Addiction Medicine, researchers warned that "improved assessment methods are urgently needed in the absence of real-time confirmatory testing," citing the misleading marketing of concentrated synthetic 7-OH as natural kratom, as well as consumer experimentation with these novel products. As concentrated synthetic 7-OH has been shown to cause respiratory depression and increase the intake of other opioids, it is imperative that it not be confused with natural kratom.[6]

More thorough patient intake information is needed to fill the void left by the FDA's Adverse Event Reporting System (FAERS) and local poison control centers, which have struggled to produce reliable data on concentrated synthetic 7-OH consumption. It would also provide valuable, timely evidence for the DEA that could prompt overdue scheduling action and help save lives.

In the days and weeks ahead, please consider joining the growing list of clinics making these important changes to patient intake forms. By marshaling data and working together, we can cut off this crisis at its knees — preventing concentrated synthetic 7-OH from going undetected as a cause of emergency room admissions, seeping even further into our clinics and communities.

Disclosure

Dr Nicole Avena reports personal fees from Global Kratom Coalition, outside the submitted work. Professor Kenneth Blum reports personal fees from VNI, sunder foundation, SCHOLASTIC SERVICES, during the conduct of the study; In addition, Professor Kenneth Blum has a patent 10,894,024 issued to synaplife. The authors report no other conflicts of interest in this work.

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