

Letters to the editor

MEOW MEOW OR MIAOW MIAOW: A NEW DRUG OF CONCERN

DEAR EDITOR:

Mephedrone (4-Methylmethcathinone) appears to be the new drug of concern, especially in Europe. Its use has also been reported in some states in the United States, but usage is probably more prevalent than reported. It is known by several street names, namely miaow miaow, meow meow, bounce, bath salts, mad cow, and bubbles.^{1,5}

It is a drug that was reportedly manufactured in China and is a derivative of cathinone compounds found in khat plants in East Africa. It was first synthesized in 1929, but its popularity started in 2003, and by 2007, mephedrone was available for sale on the internet. By 2010, mephedrone became a very common drug in Europe, especially in the United Kingdom. It has been labeled an illegal drug in most European countries, and in Australia, New Zealand, Canada, and the United States, it is also illegal.¹

In the United Kingdom, it is the most popular drug behind cannabis, cocaine, and 3-4-methylenedioxymethamphetamine (MDMA, "ecstasy"). It was classified as an illegal drug in the United Kingdom this year.^{2,4}

Mephedrone is believed to act by stimulating the release of monoamine neurotransmitters and inhibit their reuptake.^{1,3} The drug causes euphoria, sexual stimulation, stimulus-enhanced appreciation for music, and similar effects to cocaine, amphetamines, and MDMA. It also causes hallucinations, anxiety, paranoia

and other delusions, seizures, poor concentration, poor short-term memory, teeth grinding, raised blood pressure, dilated pupils, and seizures.^{4,2} It can be taken orally, snorted, or intravenously administered. Several deaths from effects of the drug have been reported in Europe, and there has been one confirmed death in the United States.⁵ It is available in the form of tablets, capsules, or white powder. Snorting is the most common route of drug use, and the intravenous the least used.³

The presence of the drug has been detected in Oregon, Illinois, Alabama, and North Dakota. North Dakota recently banned mephedrone.^{5,6}

A major concern is that despite its significant prevalence in Europe, shortage of data on the use and patterns of the drug makes health and social interventions in these communities difficult. The other major concern is that more synthetic analogs of cathinone compounds are likely to be synthesized, keeping illegal manufacturing of these drugs a step ahead of government monitoring agencies. Other public health concerns are its increased use among school and college students and its easy accessibility over internet sale sites. It cannot be overstated that interest in research of this drug and its analogs is needed.

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MEDICAL DISABILITY AND PAIN MEDICATION PRESCRIPTION AMONG INTERNAL MEDICINE OUTPATIENTS

DEAR EDITOR:

Patients on medical disability are not uncommon, particularly in primary care settings. From the perspective of psychiatric consultation/liaison, we examined pain medication prescription patterns among outpatients with a

history of medical disability versus those without.

Participants were men and women, ages 17 or older, who presented for routine outpatient treatment in a resident-provider internal medicine clinic. The sample was one of convenience. Exclusion criteria were cognitive (e.g., dementia), medical (e.g., severe illness), psychiatric (e.g., psychosis), and/or intellectual impairment that would preclude the successful completion of a survey booklet, as well as patients who had not been registered in the clinic during the preceding four weeks. A total of 82 patients were approached; 80 agreed to participate (response rate of 97.6%).

The sample consisted of 21 men and 59 women (N=80), ranging in age from 17 to 74 years (mean [M]=45.58, standard deviation [SD]=14.74). Most participants were Caucasian (89.9%), followed by African American (6.3%), Hispanic (2.5%), and Native American (1.3%). With regard to education, 20.3% percent had not graduated high school; 41.8 percent had graduated high school but had not attended college, 21.5 percent attended some college but had not earned a degree, 8.9 percent had a bachelor's degree, and 7.6 percent had a graduate degree.

During assigned clinic times, two resident physicians recruited participants from their clinical caseloads. Participants signed a consent form to enable us to review their medical records for pain medication prescriptions during the preceding four weeks. Participants also completed a survey booklet.

In the survey booklet, we initially explored demographic information and then asked, "Have you ever been on medical disability?" We then examined the

medical records of each participant during the preceding four weeks with regard to pain medication prescriptions. Pain medication prescriptions were coded as narcotic analgesics (when present, the narcotic analgesic was converted to daily morphine equivalents), nonsteroidal anti-inflammatory drugs (NSAIDs), and "other" (e.g., gabapentin, pregabalin, duloxetine, amitriptyline). We also calculated the total number of individual pain medications prescribed per participant. This project was approved by the institutional review boards of both the community hospital and the university.

Twenty-five (31.3%) participants reported having ever been on medical disability. Participants with a history of medical disability were older (M=51.96, SD=9.43) than participants without a history of medical disability (M=42.74, SD=15.83), $F(1,76)=7.00$, $p<0.01$, but there were no statistically significant relationships between medical disability and sex or education.

Compared to participants who had never been on medical disability, those who had had a statistically significantly greater number of prescriptions for pain medications (M=1.36, SD=1.00 vs. M=0.62, SD=0.81, $F(1,78)=12.56$, $p<0.001$), were more likely to have a prescription for a narcotic medication (64.0% vs. 34.5%, $\chi^2(1)=6.06$, $p<0.02$), and had a statistically significantly greater number of prescriptions for "other" pain medications (M=0.52, SD=0.63 vs. M=0.15, SD=0.41, $F(1,78)=9.86$, $p<0.002$), but were not more likely to have a prescription for a NSAID (20.0% vs. 12.7%, $\chi^2(1)=0.71$, $p<0.40$). For those prescribed a narcotic medication (n=35), there

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were no differences between those patients with a history of medical disability versus those without and the amount of the narcotic prescribed in morphine equivalents ($M=72.03$, $SD=83.02$ vs. $M=80.92$, $SD=124.10$, $F(1,33)=0.06$, $p<0.81$).

Our findings suggest that individuals with medical disability histories are more likely to be prescribed a greater number of pain medications, narcotic analgesics, and “other” pain medications, but not higher rates of NSAID prescriptions or higher daily doses of narcotics—all suggesting that patients with histories of medical disability are clinically characterized by pain. This

patient/medication profile may be useful for psychiatrists on consultation/liaison services.

With regards,

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