

# Addiction & the Humanities, Vol. 7(9) - Why krokodil, why Russia?

November 9, 2011

During June of this year, *Time* Magazine and the British newspaper *The Independent* published stories about a disturbing new trend in drug use: the steady rise in Russia of “krokodil” consumption (Shuster, 2011; Walker, 2011). Krokodil (or crocodile in English) is “homemade” desomorphine, referred to as a very powerful synthetic opiate that is significantly less expensive than heroin. Its name comes from the scaly appearance of users’ skin. This cheap, homemade alternative to heroin has shocking effects on users’ minds and bodies. The story about krokodil was picked up in several blogs, and people began posting graphic videos on YouTube documenting the drug’s destructive consequences.

These stories tended to focus on krokodil’s physical effects, and no wonder. Derived from a combination of codeine, which is available over the counter in Russia, gasoline, paint thinner, iodine, hydrochloric acid, red phosphorus, lighter fluid, and industrial cleaning oil, krokodil causes scarring, gangrene and bone exposure at the site of injection. Other consequences include amputation, brain damage, blood poisoning, burst arteries, tooth loss, HIV from using dirty needles, and early death. Users who try to stop, face an excruciating month-long withdrawal process, marked by seizures, fever, and vomiting and often necessitating powerful tranquilizers for pain.

Please note that the following video is very graphic and contains footage of rotting flesh, needle injection in the groin area, and disturbing images. Please use your discretion before viewing.

The *Time* Magazine story mentioned that, so far, Russia is the only country in the world to experience krokodil use at epidemic proportions. Estimates of its use in Russia range from 100,000 (Walker, 2011) to 1,000,000 users (Miller, 2011; Shuster, 2011). Regional governors report that krokodil accounts for approximately half of all their addiction and drug-related deaths (Shuster, 2011). As recently as June of this year, officials at the U.S. National Institute on Drug

Abuse had no awareness of the drug (Miller, 2011).

In this edition of *Addiction & the Humanities*, we consider the Russian epidemic of krokodil use from an intersectional lens (Smye, Browne, Varcoe, & Josewski, 2011); in other words, we ask how krokodil use might be shaped by intersecting variables associated with social identity and health. Though krokodil has yet to attract empirical attention, available information indicates that including geography, class, age, and stigma all might play important roles in determining krokodil use.

- **Geography:** Many users report resorting to krokodil at times when heroin becomes too expensive (Walker, 2011), indicating that heroin addiction is a primary factor in krokodil use. Indeed, according to unofficial estimates, Russia has more heroin users than any other country in the world: about two million (Walker, 2011). Russia's high consumption of heroin could be attributed in part to a quirk of geography (Grau et al., 2009). Russia is closely proximate to Afghanistan, where there was a sharp rise in poppy cultivation following U.S.-led invasion (Stack, 2009). The Russian government's efforts to try to limit the amount of heroin entering the country inadvertently might have increased the street value of heroin in many areas. In parts of Russia where supplies of heroin are low and prices are high, krokodil use is especially high (Walker, 2011).
- **Class:** Social disadvantage (stemming from poverty, unemployment, homelessness) increases risk for problematic substance use, in part, by creating stress (Mulia, Ye, Zemore, & Greenfield, 2008). During early 2009, Russian poverty rates rose one third compared to late 2008 - 24.5 million compared to 18.5 million, respectively (Huffington Post, 2009). This stressful economic change, along with the inexpensive manufacturing of krokodil (which has been called "a drug for the poor") - just over \$3 US (Walker, 2011) - might be a reason why this drug has increased at epidemic proportions among Russians.
- **Age:** Some observers speculate that one reason Russian teenagers begin using drugs is because of extreme boredom during intense winter months. U.S. research indicates that boredom is a risk factor for drug use (National Center on Addiction and Substance Use, 2003). It appears that getting together with other teenagers to use drugs is normal among bored teens (Shuster, 2011), and perhaps acts as a means of stimulation.
- **Stigma/Attitudes toward Treatment:** Research in other areas of the world

has indicated that attitudes toward treatment and addiction-related stigma are treatment-seeking barriers for substance abusers (e.g., Myers, Fakier, & Louw, 2009). Russians might fear seeking treatment because they want to avoid being identified, targeted, and stigmatized for their addiction. There are several fundamental differences between the psychiatric treatment of addiction in the U.S. and the narcological treatment of addiction in Russia (Mendelevich, 2011). According to Moscow's Chief Drug Addiction Specialist, "the drug addict is feared and loathed. People... don't like drug addicts. So the addict feels like a pariah and has no reason to get healthy" (Stack, 2009, para. 31). Most Russian treatment professionals view addiction as deviance and not as a disease, believe that the underlying cause is dissoluteness, and identify religion as an effective treatment option. People with addiction are often stigmatized, viewed as criminals, forced to register at treatment facilities, have few rights, do not have control over their treatment or other options including harm reduction (i.e., Russian treatment is generally abstinence-based), receive convoluted informed consent forms, have their confidentiality infringed upon when specialists turn over information to authorities, and some patients lose their license after registering at treatment clinics in some regions (Mendelevich, 2011). This cultural attitude might be a primary reason why addiction continues to increase in Russia.

- **Education and Governmental Response:** Approximately 83 heroin users die from overdose every day in Russia (Stack, 2009), but most Russians are unaware of the risks (Grau, et al., 2009; Stack, 2009). Educating the public and developing national strategies for preventing drug abuse could have a significant impact on the Russian public health. Russia's government largely was unprepared to deal with population-wide heroin addiction, as their country was previously unaffected during the Soviet Union. Methadone, a drug often used for treating opioid dependence in the U.S., is illegal in Russia (Stack, 2009).

The Russian government has considered some steps toward curbing the krokodil epidemic. These are short-term solutions, such as banning the websites that describe how to make it, making codeine available by prescription only, and confiscating doses (Shuster, 2011; Walker, 2011).

But krokodil will likely continue to plague the Russia unless and until the government and people address some of the broader social issues described

above. Solutions could include, for example, opening federally funded treatment centers that incorporate ethical treatment and more up-to-date psychiatric techniques and education for citizens regarding the risks of krokodil and other drugs.

-Tasha Chandler

What do you think? Please use the comment link below to provide feedback on this article.

## References

Grau, L. E., Green, T. C., Torban, M., Blinnikova, K., Krupitsky, E., Ilyuk, R., . . . Heimer, R. (2009). Psychosocial and contextual correlates of opioid overdose risk among drug users in St. Petersburg, Russia. *Harm Reduction Journal*, 6(17). doi: 10.1186/1477-7517-6-17

Huffington Post. (2009). Poverty Rate Rises In Russia By A Third. *Huffington Post* Retrieved Nov. 08, 2011, from [http://www.huffingtonpost.com/2009/08/28/poverty-rate-rises-in-rus\\_n\\_271547.html](http://www.huffingtonpost.com/2009/08/28/poverty-rate-rises-in-rus_n_271547.html)

Mendelevich, V. D. (2011). Bioethical differences between drug addiction treatment professionals inside and outside the Russian Federation. *Harm Reduction Journal*, 8(15). doi: 10.1186/1477-7517-8-15

Miller, J. R. (2011). DEA Now Monitoring Krokodil, a Deadly Morphine Derivative. *Fox News* Retrieved Nov. 08, 2011, from <http://www.foxnews.com/us/2011/06/28/dea-now-monitoring-krokodil-deadly-morphine-derivative/>

Mulia, N., Ye, Y., Zemore, S. E., & Greenfield, T. K. (2008). Social disadvantage, stress, and alcohol use among Black, Hispanic, and White Americans: Findings from the 2005 U.S. National Alcohol Survey. *Journal of Studies on Alcohol and Drugs*, 69, 827-833.

Myers, B., Fakier, N., & Louw, J. (2009). Stigma, treatment beliefs, and substance abuse treatment use in historically disadvantaged communities. *African Journal of Psychiatry*, 12(3), 218-222.

National Center on Addiction and Substance Use. (2003). CASA 2003 Teen Survey: High Stress, Frequent Boredom, Too Much Spending Money: Triple Threat that Hikes Risk of Teen Substance Abuse Retrieved Nov. 08, 2011, from <http://www.casacolumbia.org/templates/PressReleases.aspx?articleid=348&zoneid=46>

Shuster, S. (2011). The Curse of the Crocodile: Russia's Deadly Designer Drug. Time Retrieved Nov. 08, 2011, from <http://www.time.com/time/printout/0,8816,2078355,00.html>

Smye, V., Browne, A. J., Varcoe, C., & Josewski, V. (2011). Harm reduction, methadone maintenance treatment and the root causes of health and social inequities: An intersectional lens in the Canadian context. Harm Reduction Journal, 8(17). doi: 10.1186/1477-7517-8-17

Stack, M. K. (2009). Heroin addiction spreads like wildfire in Russia. Los Angeles Times Retrieved Nov. 08, 2011, from <http://articles.latimes.com/2009/sep/25/world/fg-russia-heroin25>

Walker, S. (2011). Krokodil: The drug that eats junkies. The Independent Retrieved Nov. 08, 2011, from <http://www.independent.co.uk/news/world/europe/krokodil-the-drug-that-eats-junkies-2300787.html#>