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Patterns of new drug emergence: A comment in light of ‘krokodil’

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Philip Jenkins, in his estimable book “Synthetic Panics: the symbolic politics of designer drugs”, writes about the cycles of emergence and subsidence, as if in waves, of new or modified formulations of psychoactive substances. Almost invariably, these drugs emerge from obscurity in a few localities, are produced and used by an unknown but probably small number of experimenters, and then “exposed” by an intrepid reporter or two following up on information from a police or medical contact. Thereafter, the use expands and then most often quickly peaks. The rate at which the pattern unfolds seems to depend upon the ease of synthesis or acquisition, the market potential, and the appearance of relative benefit or adverse effects of its use.

Faced with an emergence of a new drug, anti-drug authorities seize on a combination of strategies to reduce it expanding, using an almost standard characterization of the drug as the newest, greatest menace, likely to do more damage than the previous worst-ever drug it is seen to be displacing. The strategies include a mix of criminalization, control of the reactants in the synthesis or the possibilities for drug diversion or prescribing, demonization of the drug’s effects, and dehumanization of its users. Almost invariably, the drug is described as “the most dangerous drug yet”, worse than the previous most dangerous drug yet. And if the drug is being used by marginalized populations, the strategies take their harshest form. Reinerman and Levine demonstrate this point clearly in comparing free-base cocaine used by the rich and its commercialized form, crack, used by the urban poor and minorities (Reinerman & Levine, 2004). In the former case, drug treatment expanded; in the latter, criminal penalties were escalated, creating “...the most massive wave of imprisonment in the history of the United States” (Bureau of Justice Statistics, 1995; Reinerman & Levine, 2004).

But the macro-level use patterns of drugs as they emerge and their use spreads often have a life of their own, defying efforts for control or receding to become historical footnotes without any assist from the authorities. A paradigmatic example of this approach to curtail and the counterintuitive effects of such efforts can be seen in the U.S. responses to reports of

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increasing methamphetamine use in the American heartland during the past decade. A parallel example can be seen in looking at the response to the emergence of krokodil use in the countries of the former Soviet Union. Comparison of these two patterns of drug emergence and spread reveals some interesting similarities and differences.

Methamphetamine in the U.S., 1995–2010

During the last years of the 1990s and the early years of the 2000s decade, newspapers and magazines throughout the U.S. were full of lurid reports of methamphetamine use by non-urban populations and the appearance of toxic waste sites associated with makeshift “meth labs” for methamphetamine synthesis. Reporting of arrests and lab seizures climbed nearly every year until the middle of the decade. Multipronged efforts by government agencies, mostly in law enforcement, and non-governmental organizations, mostly through media campaigns were undertaken in response. An example of the criminal justice approach came be glimpsed in data from the state of Missouri in the American Midwest, which was considered the epicenter of a methamphetamine epidemic. The state has led the nation in the number of meth lab incidents (those raided by the police or identified as toxic waste sites after their abandonment) in every year that nationwide statistics have been kept (2003–2012). The Missouri State Patrol was vigilant in identifying and shutting labs; the number peaked at around 2800 for three years running (2002–2004) (Missouri State Highway Patrol, 2013). National efforts to control the expansion of methamphetamine synthesis and use culminated with the passage in 2005 of the (CMEA), a subsection of the 2005 revision of the anti-terrorist Patriot Act.

In conjunction with criminal justice action, media campaigns to demonize the drug and depict its users at unattractive and less than human were initiated. An example of a non-governmental program that took this approach is the Montana Meth Project (<http://montana.methproject.org/>), which was established in 2005 and began its public promotion campaigns late in that year. It is often reported that these efforts resulted in waning methamphetamine abuse (Siebel & Mange, 2009). However, it should be noted that this article was written by the project’s founder and executive director of the Illinois chapter, so the article may lack objectivity.

The data themselves paint a more nuanced picture, and it can be argued with equal force that the abuse of methamphetamine and local meth lab production were on the decline before any organized efforts at curtailing methamphetamine abuse. It is difficult even to determine when the growth of methamphetamine and the consequent panic began in a country as large and heterogeneous as the U.S. For instance, in 1996, the U.S. Drug Enforcement Administration issued a white paper on the methamphetamine situation entitled “Methamphetamine: A Growing Domestic Threat” (U.S. Drug Enforcement Administration, 1996). At that time, methamphetamine abuse was concentrated in the West – the Pacific and Mountain States and most production was local, small scale, and often an activity of outlaw motorcycle gangs (Finckenauer et al., 2001). The next panic, as described above, was a migration of the problem to the suburban and rural Midwest. Nevertheless, reports from the U.S. Drug Enforcement Administration from 2002 failed to recognize the rapid growth in the number and size of meth labs in the Midwest, although it did identify an increasing use

of methamphetamine as a party drug by urban MSM (National Drug Intelligence Center, 2002). By the time that the U.S. federal government passed national legislation in 2006 to assist local law enforcement agencies and restrict access to the synthetic precursors – pseudoephedrine and ephedrine – methamphetamine use was declining. Meth lab incidents in the Missouri, for instance, fell to less than half in 2006 and 2007 (1284 and 1285 reports, respectively) from their peak just two years earlier. And the first arrests for violating the CMEA occurred in March, 2007 (Mulvey, 2007).

By the time that the Montana Meth Project advertisements and videos were circulated, reported use of methamphetamine among the state's had already fallen from a high of 13% in 1999 and 2001 to 9.3% in 2003 and 8.3% in 2005. Subsequent declines to 4.6% in 2007 and 3.1% in 2009 may be attributable in part to the impact of media campaigns, but it is impossible to know to what extent or if the preceding trend would have continued in the absence of the Project's media campaign.

By the time that local, state, and federal law enforcement agencies expanded their efforts to suppress domestic meth labs in the Midwest, an unanticipated and troubling change in methamphetamine production had occurred. The vast majority of methamphetamine, perhaps as much of 90% and certainly more than 70%, was being produced in Mexico and trafficked into the U.S. by drug cartels that had previously smuggled heroin, cocaine, and/or marijuana (Brouwer et al., 2006; Smith & Toro, 1997). Thus, an unintended consequence of the efforts to curtail local production was an increasing reliance on international narco-trafficking to provide the drug. Methamphetamine production in the Midwest may have peaked, but it is far from certain that use has declined in parallel.

Krokodil in the former soviet union, 2009–2012

While the article by Grund, Latypov, and Harris (2013) is an important addition to the scientific literature and constitutes the first thorough examination of the emergence of krokodil, it also reveals the weakness in assembling a comprehensive study without conducting careful ethnographic and epidemiological study. Much of the material on krokodil use comes from journalists and focuses on individual users. A similar but smaller compilation of information about krokodil suffers from the same weakness (Gahr et al., 2012). Missing is any data on the extent of the problem, its geographic penetration and its prevalence in areas that have been penetrated. It is not possible to use the available data to ascertain how prevalent is the preparation and injection of the codeine derivatives that constitute krokodil. Also missing is any exploration of the variations in preparation. Very little actual fieldwork has been done. This is not the fault of the Grund et al.; it is a function of a system of conducting research (not limited just to field of drug research) that is slow to respond to novelty. Reviewers and funders of research proposals want to be sure that the subject is “worthy” of study – in many respects, this means that the subject has to be familiar to them. Thus, the allocation of research funds can be seen as a lagging indicator. By the time a study can be designed and the review panels can be convinced of its importance, the phenomenon may be disappearing. In some instances, this is not a terrible result – it keeps research funds from chasing ephemera, but it also prevents studies that can

identify which emerging drug use practices have staying power and distinguish among the many causes that result in their long-term establishment.

Often, careful ethnographic and epidemiological study cannot be undertaken before the trend is reversed. This may be the case with krokodil. The opportunity to answer the pertinent questions raised in the article by Grund et al. may be disappearing. The rash of garish exposés in the popular press peaked in 2011. Stories from 2012 largely recycled earlier coverage. Prohibition on the sale of codeine may not have prevented abuse (Akhmedova, 2012), but it has probably reduced the prevalence of krokodil manufacture. Anecdotally, I explored the possibility of interviewing krokodil users in the suburbs of St. Petersburg through a contact who knew a group of young users. But by the time I had arranged another trip to Russia, the group had disbanded and my contact told me they were no longer using krokodil, although he was not able to remain in contact to learn what, if anything, had replaced it. Furthermore, it is also impossible to determine what role, if any, the ghoulish pictures in the Russian language press has played in altering krokodil use without a mixed-methods study. But if the trend is comparable to that in the U.S. for methamphetamine, the word can spread very quickly, even to distant drug using communities, about the negative aspects of using certain drug formulations.

It can be hoped that the paper by Grund et al. will stimulate further study and, considering the health of people who inject drugs, it can also be hoped that such study will demonstrate the disappearance of krokodil use. For the current paper is successful in detailing the strong and persistently negatives involved. What is unclear is what the next “most dangerous drug yet” will be. Last year alone, 73 new synthetic drugs were detected in the European Union (Anonymous). But a beneficial side effect of studies on krokodil and the limitations on what can be learned from the current system should be the establishment of the complementary surveillance and ethnographic system to spot emerging new drugs, conduct careful fieldwork, and undertake analysis of how use of these drugs is initiated, expands, and is (or is not) sustained.

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