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Monitoring Dark Web Marketplaces – Beyond the Silk Road

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Never Stand Still

Medicine

National Drug and Alcohol Research Centre

Introduction

The Drug and New Technologies project (DNET) provides analysis of trends over time in the availability and type of substances sold via the internet to Australia.

Drug markets have changed radically with increasing use of the internet for the discussion of drugs and, more recently, the sale of drugs. Following the FBI seizure and subsequent closure of the Silk Road Marketplace on October 3rd, 2013, immediate discussion among online forums concerning alternative marketplaces for the trade of illicit substances began. Initially two marketplaces were identified, the Black Market Reloaded and Sheep Marketplace, both of which have now been closed. However, in their wake over 15 alternate marketplaces now exist which require active monitoring for changes in size and substance availability

The current poster describes findings from the third Drugs and New Technologies (DNET) bulletin (Van Buskirk et al, 2014), part of the Drug Trends project at the National Drug and Alcohol Research Centre in Australia. Specifically, it presents trends in online availability of drugs from December 2013 to May 2014 on the 'surface web', as well as dark web marketplaces including the Silk Road 2.0, and other alternate marketplaces that have emerged following the closure of the original Silk Road in October 2013.

Methods

Dark web marketplaces were accessed weekly using a dedicated Domestic user account. All listings were quantified and categorised by substance type, retailer name and, where available, price of listing, country of origin, and acceptable shipping destinations. Available substances were placed in one of 15 categories – cannabis, pharmaceuticals, MDMA, cocaine, new psychoactive substances (NPS), methamphetamine, illicit opioids, LSD, magic mushrooms, ketamine, performance and image enhancing drugs (PIEDs), synthetic cannabinoids, GHB, weight loss, and precursors.

Data were analysed over time to determine the number of unique retailers by marketplace selling each substance.

Results

Number of retailers on the major marketplaces

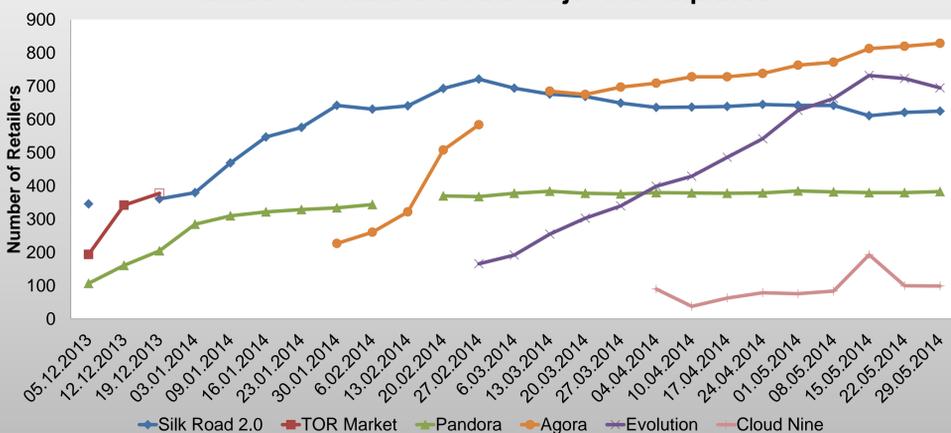


Figure 1: Number of active retailers trading on the top five marketplaces on the Dark web

- Across the top five marketplaces, number of retailers have steadily increased since May 2013.
- To date, the largest Dark web marketplace is Agora.
- Agora is the only marketplace to continually grow in terms of new retailers.

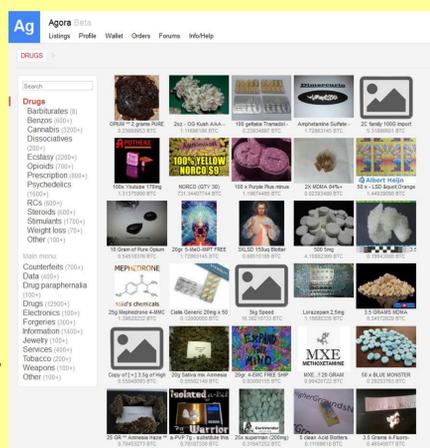
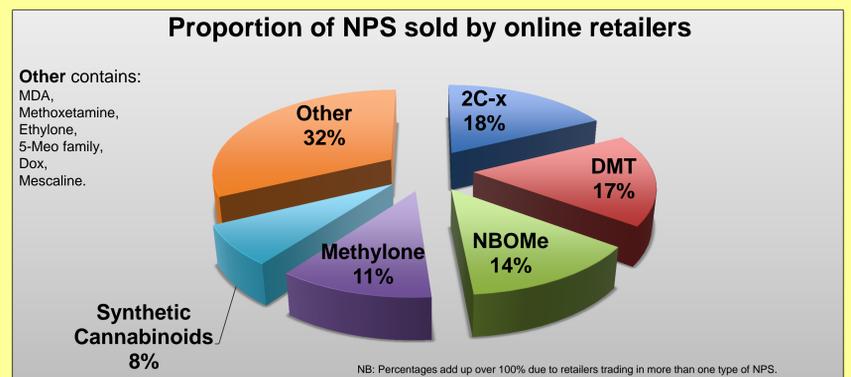


Table 1: Total number of International and Australian only Retailers operating on the top five marketplaces by substance type. NB: Red superscripted numbers indicate the ranking of substances sold by Australian Retailers.

Substance	International Retailers (including AUS)	AUS Retailers	Proportion of AUS to International Retailers
	n	n	%
Cannabis	1771	109 ³	6%
Pharmaceuticals	1534	107 ⁴	7%
MDMA	1177	138 ¹	12%
Cocaine	902	71	9%
Methamphetamine	835	125 ²	8%
NPS	821	76	15%
LSD	450	29	6%
Illicit Opioids	474	28	6%
Magic Mushrooms	234	17	7%
Ketamine	177	16	9%
PIEDs	154	36	23%
GHB	71	6	8%
Synthetic Cannabinoids	74	3	4%
Weight Loss	33	6	18%
Precursors	20	5	25%
Caffeine	10	0	0%
Total Unique Retailers	4295	488	11%

- Top three available substances across marketplaces were cannabis, pharmaceuticals and MDMA.
- Among Australian retailers, MDMA and methamphetamine were the two most commonly sold substances, followed by cannabis and pharmaceuticals.
- Taken together, Australian retailers comprise 11% of the top five dark web marketplaces.

Figure 2: Number of retailers from the top five marketplaces selling the ten most common NPS.



- Drugs from the 2C-x, the NBOMe and DMT categories were the most commonly sold.
- NPS availability mirrored usage patterns seen in the in 2013 Ecstasy and Related Drugs Reporting System (EDRS).

Discussion and Implications

- Five key marketplaces have emerged in the wake of the Silk Road closure: Agora, Evolution, Silk Road 2.0 and Pandora.
- The most commonly available substances on these marketplaces were largely traditional illicit substances and pharmaceuticals, rather than NPS, and therefore largely reflect what is seen in traditional street markets.
- A higher proportion of Australian retailers sold MDMA and methamphetamine than international retailers. This finding indicates a steady increases in the domestic production of methamphetamine. The most recent Illicit Drug Data Report from the Australian Crime Commission suggests that the number of detections of clandestine methamphetamine laboratories is at an all time high.

- Given the rapid rate at which dark web marketplaces appear and subsequently close, as well as their potential impact on traditional street marketplaces, continued monitoring is essential.

Acknowledgements

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