Old dog, new tricks? Using opioid supply information for horizon scanning

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**Background and aims**

Much attention is focused on the many new drugs emerging alongside the apparent decline in the use of established substances, such as heroin. In this globalised, inter-connected world the situation can change rapidly, problems can metamorphose and new challenges emerge. To keep pace with change it is important to make use of all available data to monitor and predict new trends.

Indicators relating to the production and supply of illicit drugs are less well developed than those relating to demand and their reliability and interpretation is sometimes contested. However, analysis of such data that respects its limitations and integrates it with other data sources can be of considerable help in understanding trends and identifying possible future problems.

**Analytical approach**

The EMCDDA collects a range of data for monitoring the illicit drug phenomenon on an annual basis from EU countries, Norway and Turkey. These are structured around key epidemiological indicators, drug supply and market indicators, and are supplemented by information from law enforcement and other sources.

Analysing this wide range of information from the perspective of drug supply as a business may help to identify possible future developments and highlight necessary monitoring data. Such an approach (Figure 1) is used here to analyse changes seen in the illicit opioid market.

**Diversification of opioids being misused in Europe**

While the number of heroin users entering treatment for the first time in Europe has more than halved from a peak of 59 000 in 2007 to 23 000 in 2013, in a number of countries other opioids such as methadone, buprenorphine and fentanyl are increasingly prominent (Figure 2).

This diversification is seen in supply data also, with seizures of opium, morphine, methadone, fentanyl and tramadol reported by law enforcement agencies in 2013. In addition, 14 new synthetic opioids have been reported to the EU Early Warning System since 2005.

What may be driving these changes, what may happen in the future and how will we know? Several countries in Europe reported a heroin shortage around 2010/11 and a decline in purity. These shortages may have provided the opportunity for new products and/or suppliers to enter the market. When such shocks to the market occur, before it has become well-established, the new product may become the product of choice. This may have occurred in Estonia and Finland, where fentanyl and buprenorphine, respectively, are dominant having replaced heroin use when the Taliban took action against poppy growing in Afghanistan in 2001.

Another driver which may be promoting the use of alternative synthetic opioids is the internet, which provides a new cadre of online dealers access to the market and the new suppliers. Since many of these are medicines, one might need to look at novel sources of information. On the other hand, the signs of increased production in Afghanistan and of increasing purity of heroin on the illicit market may indicate a resurgence in the use of this drug, and services need to be on the lookout for increasing use and harms such as drug-related deaths.

**Conclusions**

The data available on the production and supply of illicit opioids reveal some important developments. Among these are innovations, which can be viewed from a business perspective as a natural response to market disruption and new opportunities. From this perspective, we can identify a number of possible future developments that may have consequences for services beyond law enforcement, e.g. prevention and treatment services. Careful analysis of market-related data can provide useful pointers for future trends and indicate areas for further investigation that have value beyond the enforcement field.

We need to respond in similarly innovative ways in seeking new sources of data and modes of collection that will allow us to confirm if these potential market changes become a reality.