The future of drug supply monitoring in Europe

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Introduction and aims

Drug markets can be seen from the perspective of supply and demand. Market-related indicators, therefore, particularly administrative data, such as seizures, price, purity and drug-related offences, are used in most countries for assessment of the drug situation and policy evaluation. However, the illicit nature of drug markets limits data availability and interpretation. Drug policy is also increasingly focused on reducing harm, so expanding the scope of the indicators monitored to better address market-related harms has been identified as a priority (Council Conclusions, 2013). The EMCDDA has developed a conceptual framework to provide coherence and maintain progress by improving quality of collection and reporting of existing data, extending the range of data collected, and enhancing analysis. These are illustrated here using the example of drug prices.

Method

The process for elaborating the supply framework involved review of relevant published literature, internal consultation and expert engagement.

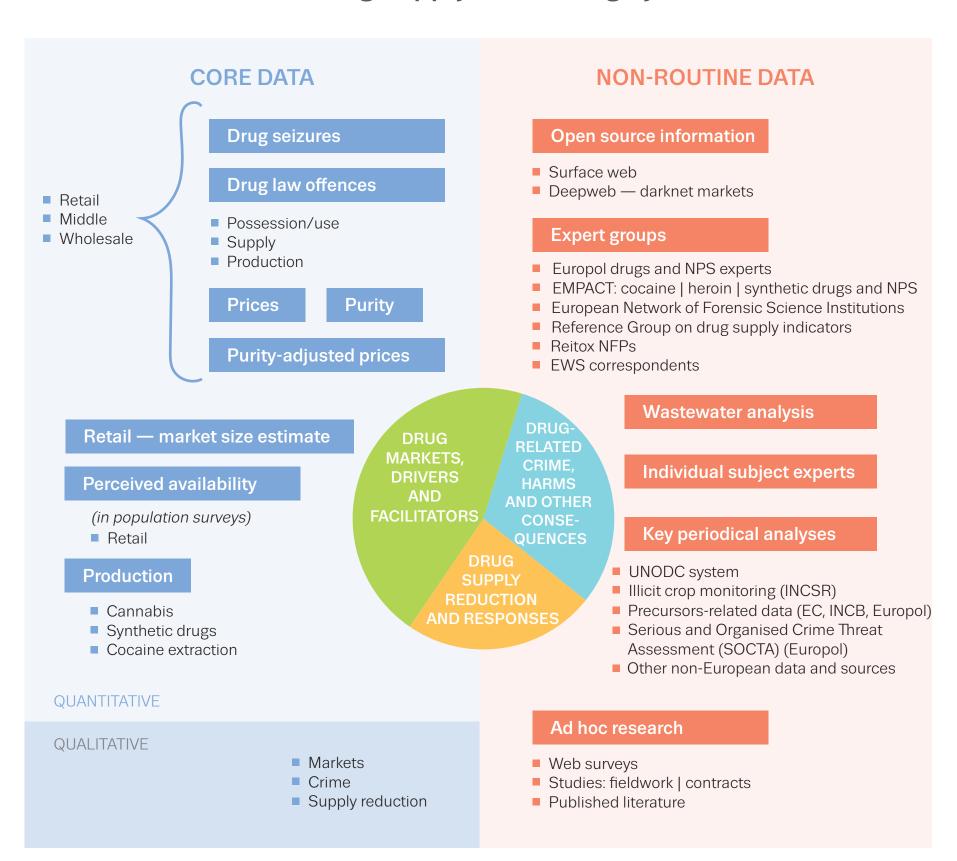
Conceptual framework

The EMCDDA has been working on developing the existing supply indicators. These were initially conceptualised as covering drug markets, drug-related crime and drug supply reduction. In light of developments in drug markets and supply activities, their wider impacts and in tackling the drivers and enablers of drug supply, the conceptual framework has been developed further and the three thematic areas broadened (Figure 1).

Within each thematic area, there are core data, which the EMCDDA has been or is beginning to collect on a regular basis. These core data include both quantitative and qualitative information, which can provide important context to help understand the routine data collections and additional information on the operation of the market. Some data sources may be analysed to provide insights under more than one indicator.

In addition, the EMCDDA collects a range of nonroutine data from a wide variety of sources, which it is seeking to expand further, drawing on a range of

FIGURE 1 | EMCDDA drug supply monitoring system



external expertise, periodical reports and research findings and also seeks to exploit new data sources, such as open source data from the surface and dark net. Each thematic area comprises different domains and a range of potential indicators within each domain (Figure 2).

The example of drug prices

Developing the supply side data infrastructure should give a better understanding of how drug markets operate. Producers, traffickers and sellers are seen as responding to price and risk. Increases in the risks of arrest, drug seizure or asset confiscation lead to smaller quantities of drugs being offered at any given price. The price itself is determined by the interaction of the supply

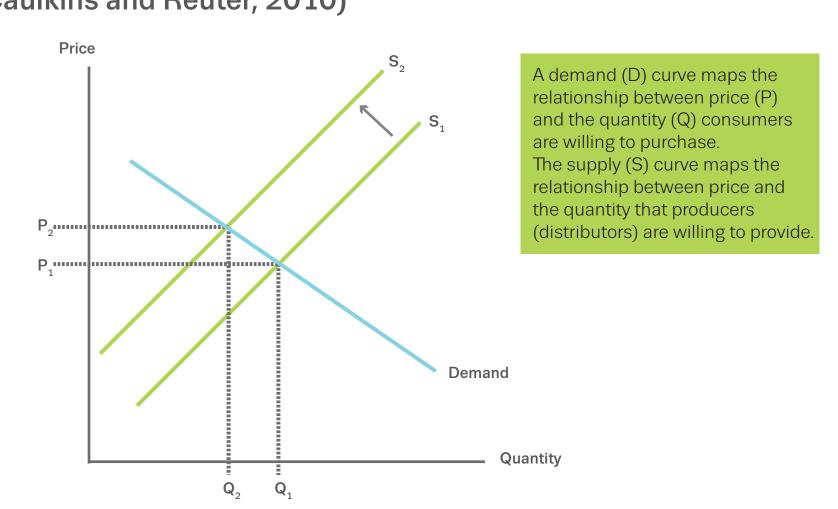
FIGURE 2 | Thematic areas, domains and potential indicators



and demand curves, as captured in the standard economic market diagram (Figure 3). The supply curve can shift for reasons other than policy interventions; for example, a drought in Afghanistan may raise the farm-gate price of opium, which may have an effect on the price of heroin along the supply chain.

A number of improvements have been introduced in recent years, including collection of price data beyond the retail market level to include wholesale and middle market. Since price fluctuations can be influenced by events at any point in the supply chain, the authors are exploring access to price data at drug source and importation levels, based on the prices and risk framework (Reuter and Kleiman, 1986). This will offer enhanced insight into the factors that influence price. Export prices would reflect shifts in supply from producer countries, the differences between export and import prices would indicate changes in trafficking and retail prices would be indicative of shifts in domestic supply.

FIGURE 3 | Effect of a shift in the drug supply curve (adapted from Caulkins and Reuter, 2010)



Conclusions

The EMCDDA conceptual framework provides coherence to improvements in current approaches, and opens up additional opportunities for data collection and analysis, which over time will improve understanding of drug markets, harms and supply reduction activities and ultimately, policy responses. There are limitations to any one source of information but collecting a range of data and triangulating sources can contribute to understanding the complex and constantly changing drug markets landscape.

References

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