Guest editorial

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Drug checking – From guerrilla to government agent: the full spectrum of drug checking services

Introduction

The aim of the special issue is twofold. On the one hand, it capitalises on the momentum generated by the growing scientific and political interest in drug checking to present some of the latest insights and models of drug checking to a diverse audience of academics, policymakers and professionals. On the other hand, it explores some of the limitations of the scientific literature to date (for recent reviews, see Giulini *et al.*, 2022; Maghsoudi *et al.*, 2021; Palamar *et al.*, 2021), which has tended to focus on micro-level variables (e.g. evaluations of technologies or individual behavioural change; e.g. Harper *et al.*, 2017), to the neglect of variables located at the meso-level (including impact at community or event level; but see, e.g. Wallace *et al.*, 2021), or macro-level analyses (such as the effects of drug checking on international drug markets or public health indicators such as national mortality and morbidity) [1]. Additionally, to date, the vast majority of studies on drug checking have been carried out in the Western European context (Maghsoudi *et al.*, 2021) and therefore additional efforts were made by the guest editorial team to directly support submissions to this special issue from other parts of the world such as Latin America, Eastern Europe and Oceania.

Summary of the contributions to the special issue

In the first contribution, Barratt and Measham propose a conceptual approach to drug checking whereby chemical analysis and tailored interventions are considered integral parts of drug checking. After a review of the diverse terminology used to describe drug checking, they identify five defining and ten variable features of drug checking, which allow them to exclude a series of interventions (such as monitoring services that do not return results directly to the service user) from the scope of their definition.

Measham and Simmons then provide a first empirical contribution and show that, given that festivals are sites of supply and consumption of illicit drugs, with greater prevalence of use and quantities consumed than in everyday life, with associated higher risk of overdose and poisoning, festivals also have merit as sites for effective delivery of harm reduction services, including drug checking, directly to people who use drugs (PWUD).

The recent legalisation of drug checking in New Zealand is at the heart of the critical analysis provided by Hutton. She describes the community initiatives, the advocacy work and the resistance, but also the solutions found in the political sphere which led to this legislative change. She also discusses the opportunities and threats posed by this change in a context where drug use remains illegal.

The value of comparative market monitoring at the European level such as occurs amongst TEDI members is highlighted in the contribution of Vrolijk *et al.* Their analysis shows that the increase in MDMA tablet potency observed between 2012 and 2021 was due to an increase

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Two experts in the respective field reviewed each article. When possible, we requested and received the contributions of one European and one non-European reviewer. We followed this procedure with the aim of striking a balance between credibility and transferability. We thank the reviewers for their invaluable contributions to this Special Issue.

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Declaration of conflicting interests: All guest editors are members of the TEDI network. Nicolas Van der Linden is employed part time by Modus Vivendi asbl which operates a DCS. Raoul Koning is employed by the Dutch DCS, Jellinek. Daan van der Gouwe is employed by the Trimbos Institute, where the coordinating office of the Dutch DCS, DIMS, is located. Mireia Ventura is employed by ABD-Energy Control. Fiona Measham is founder and (unpaid) Chair of the Board of Trustees of The Loop Drug Checking Service, UK.

The first two authors, namely Raoul Pieter Joost Koning and Nicolas Van der Linden, share first co-authorship for the editorial.

in tablet weight and not to an increase in the ratio of active ingredient to filler. The fact that this result was observed across all participating TEDI drug checking services (DCS), despite the diversity of technologies used, reinforces its robustness.

The contribution from Wallace *et al.* addresses the issue of service user access with the aim of increasing the scale and reach of drug checking. This results in the application of technology to provide a model of drug checking which helps remove a series of barriers previously identified by the authors, such as the cost of the technologies, the lack of highly qualified personnel, the criminalisation of drug use, the need for sanctioning from authorities and precarity and the stigma associated with drug use.

The issue of access is also addressed in the contribution of Valente *et al.* In their study, they specifically sought to predict the use of drug checking by comparing users of DCS with users of another harm reduction intervention in a festival context. The results lead them to consider ways of removing certain barriers to the use of DCS, in particular the lack of capacity of DCS which does not allow them to respond adequately to demand.

A major contribution of the study conducted by Kushakov *et al.* is the identification of three clusters among visitors of a Drugstore booth installed in 14 festivals in Kyiv, Ukraine, with a discussion of the implications of this finding for the development of tailored harm reduction interventions. Of particular interest to the special issue, the authors also analyse data on the distribution and use of colorimetric test kits. Although not drug checking, according to the definition provided by Barratt and Measham, this type of intervention avoids exposing professionals and service users to legal risks, in a context where the prohibition model is dominant, while working to achieve harm reduction goals.

As a showcase for the guerrilla model, Barratt *et al.* report the results of a case study of community-led unauthorised drug checking in a festival context in Australia, in response to drug-related festival casualties associated with adulterated MDMA. In less-than-ideal conditions and despite using only colorimetric tests, the authors demonstrate the value of such harm reduction in action, in that nearly three-quarters of service users who received unexpected results intended to discard the product.

A description of the DCS operated by Échele Cabeza, in Colombia, is provided by Díaz Moreno *et al.*, with a focus on the outreach services, profile of service users and test results. The role of social media in deploying activism and in increasing engagement with PWUD is also discussed. The benefits of engaging with service users are evident when the authors report the results for the submitted samples of *tusi*, which is an inconsistent mixture of substances with widely varying effects.

Like Kushakov *et al.*, Kaskela *et al.* present an alternative intervention to drug checking that allows them to circumvent legal obstacles but also to gain the trust of stakeholders which, in certain political-legal contexts, may be a prerequisite for the future implementation of drug checking. This intervention corresponds in all respects to the definition of drug checking proposed by Barratt and Measham, except that the analyses are not carried out on drug samples but on residue: plastic bags and other paraphernalia containing traces of drugs were collected at a needle exchange programme and analysed. Their findings have relevance for the themes of access, test results and behavioural intentions and outcomes.

In the last contribution to the special issue, Van der Linden *et al.* firstly, draw on the evidence base of drug checking with a focus on the special issue, to discuss five grounds for resistance to drug checking as well as the unclear legal status of DCS as a major continuing challenge in many parts of the world; and secondly, make recommendations to increase the usefulness of drug checking.

Note

1. The micro-level of social analysis refers to the interactions between professionals and users and the characteristics of services that influence how chemical analysis and intervention are conducted. The meso-level refers to the institutional factors and influences and community issues that define the parameters of service delivery. The macro-level refers to contexts, including legal, political, economic or even regulatory, that are beyond the control of organisations but nevertheless strongly impact their work (adapted from Serpa and Ferreira, 2019; see also Measham, 2019).

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