Australian National University

Pill testing trial in the ACT: Evaluation

Progress report

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Introduction

Pill testing services (also known as drug checking or drug safety testing) have existed for over 50 years and now operate in more than 20 countries across Europe, the Americas and New Zealand (Kriener, Billeth et al. 2001, Benschop, Rabes et al. 2002, Brunt, Nagy et al. 2017, Barratt, Kowalski et al. 2018, Measham 2018). Pill testing is a public health intervention that allows the general public to submit substances for chemical analysis. Services use a range of delivery models (e.g. on-site or fixed-site services), methods of chemical analysis and approaches to communicating analysed results (Barratt, Bruno et al. 2018, Measham 2018). A key part of many pill testing services is to use a harm minimisation approach with people who use drugs and provided health information to accompany test results (Benschop, Rabes et al. 2002, Hungerbuehler, Buecheli et al. 2011).

In recent years, there has been significant public debate in Australia on the merits of introducing pill testing in response to a number of drug-related fatalities at music festivals. Advocates argue that pill testing can reduce drug-related harm, connect hard-to-reach populations with health services, monitor drug markets for new or particularly dangerous substances, provide assistance to emergency services for treating drug-related presentations, and contribute to an early warning system for dangerous substances (Ritter 2014, Willis 2019). Opponents argue that there is limited evidence that pill testing reduces harm or deaths, that testing outside a laboratory setting may not accurately identify all substances present in a sample, and that the intervention may encourage or normalise drug use or give a false sense of security that some drugs are safe to consume (Winstock, Wolff et al. 2001, Trask and Burgess 2018).

Despite the range of services operating globally, the evidence base for pill testing is still developing and few independent evaluations have been published. From Europe, it appears that the introduction of pill testing has not increased drug use, uptake or drug-related deaths (Benschop, Rabes et al. 2002, Hungerbuehler, Buecheli et al. 2011). Evidence suggests that pill testing can be useful for monitoring drug markets and identifying particularly dangerous or new psychoactive substances, and this information has been used to issue public alerts and bring about changes in drug markets (Spruit 2001, Brunt, Nagy et al. 2017, Ontario Agency for Health Protection and Promotion and Leece 2017). Pill testing can also effectively engage with people who take drugs for the purposes of harm minimisation (Benschop, Rabes et al. 2002, Hungerbuehler, Buecheli et al. 2011).

Studies have, however, tended to focus on service processes rather than behavioural or health outcomes of using a pill testing service. One outcome that has been studied is people's intention to discard the substance they had tested after receiving the result, however, the findings of these studies vary widely as do the methods used to determine disposal rates (Ontario Agency for Health Protection and Promotion and Leece 2017, Measham 2018). There is a need for further research into the extent to which (if at all), and how, pill testing changes people's drug taking behaviour in the short and longer term. Given that few pill testing trials have been conducted in Australia, there is a need for further evidence of the effectiveness and feasibility of different pill testing models in the Australian context.

ACT Pill testing trial 2019

The first government-approved pill testing trial was implemented in Australia on 29 April 2018 at the Groovin' The Moo (GTM) festival in Canberra by Pill Testing Australia (previously STA-SAFE) (Makkai, Macleod et al. 2018). The pill testing trial was supported by ACT Health and ACT Policing. A second trial was approved to run at the GTM festival a year later, on 28 April 2019. The on-site pill testing model used was informed by a harm minimisation approach that seeks to advise patrons about the contents of the substances they are taking and deliver harm minimisation information, while also providing important data on the drugs in circulation to health and law enforcement agencies.

The pill testing service was conducted at GTM 2019 by volunteer medical staff, analytical chemists and peer-based harm minimisation workers. Patrons were assessed for eligibility, asked to sign a waiver, and then asked to provide a scraping of the substance for testing. After the substance was tested, chemists and medical staff provided patrons with the result and reiterated that no level of drug use is 'safe'. Patrons then received a brief personalised harm minimsation intervention to discuss the risks of consuming the substance and how to minimise these risks. Referrals to health or alcohol and drug services were provided where necessary. A card with their sample number was provided to patrons to be given to emergency services in the event of a drug-related presentation to allow them to identify the substance taken through the pill testing service.

Initial results from the pill testing trial at GTM 2019 showed that 234 patrons used the service and 171 samples were tested (Pill Testing Australia, 29 April 2019). MDMA was the predominant substance identified and 7 samples contained the dangerous substance n-ethylpentylone. All the patrons whose drugs were found to contain n-ethylpentylone discarded their drugs in the amnesty bin (Pill Testing Australia, 29 April 2019). Health warnings and safety information were provided to all patrons.

Evaluation

Given the need for further evidence of the feasibility of providing pill testing in Australia and its effectiveness for changing drug use behaviour, an external, independent evaluation of the ACT pill testing trial 2019 is being conducted by researchers at the Australian National University and Social Research & Evaluation Pty Ltd, financially supported by a grant from ACT Health. The purpose of the evaluation is to inform policy making in the ACT and contribute to evidence on pill testing in the Australian context. A further aim is to develop a strong evaluation framework for future evaluations of pill testing services in Australia. This research is the first independent analysis of the impacts of pill testing in Australia.

The evaluation framework

The evaluation model

The evaluation is applying the Utilisation-Focused Evaluation model, one acknowledged internationally as being among the best approaches for contemporary evaluations. The key feature of this model is that it applies social science research methods to produce information for users for specific, intended uses, in this case decision-making about potential future pill testing interventions. Guidance and support are being provided by an evaluation Reference Group.

The evaluation questions

The evaluation is assessing the quality, value and importance of the trial, that is, its outcomes within its unique, real-world context. More specifically, six evaluation questions are being answered (here 'the program' refers to the April 2019 GTM trial):

1. How successfully was the program implemented, given its specific context?

2. To what extent was the program received positively by participants and by other key stakeholders?

3. To what extent did the program result in participants' attitudinal and/or behavioural change related to illicit drug use?

4. To what extent did the program produce valuable information about illicit drug availability in Canberra, and how did the authorities use that information?

5. Did the program have any unintended consequences, either positive or negative? If so, what were they?

6. Should the program continue and, if so, what changes in the program and its contexts are desirable?

The evaluation methods

Six data sources are being used in the evaluation:

1. Pre-testing survey: pill testing patrons were screened for eligibility for participating in the evaluation (including being aged 18 years or older, and not intoxicated). Those identified as eligible completed a brief survey before presenting their substances for testing.

2. Post-testing survey: once they had received their testing results and completed the brief intervention delivered by the Pill Testing Australia peer volunteers, evaluation participants completed a second survey and were invited to provide contact details for a follow-up interview.

3. Observational data: during the day, evaluators observed and recorded what was happening in and around the pill testing venue.

4. Follow-up interviews with participants: these will be conducted in June/July 2019

5. Follow-up interviews with other stakeholders: key stakeholders for the trial and evaluation, including those involved in the implementation of the trial and others who are likely to be users of the evaluation findings, will be interviewed in June/July 2019.

6. Indicators derived from routinely collected administrative data: these are being collected with the assistance of the data custodians, and will cover such areas as the policing and health services at the GTM festival.

Ethics and confidentiality

The ethical aspects of this evaluation have been approved by the ANU Human Research Ethics Committee (Protocol 2018/648). It is also a Prescribed Study under the *Epidemiological Studies (Confidentiality) Act 1992* (ACT).

Intended outcomes

1. Development of new evaluation instruments for use in this trial and any further pill testing services in Australia or internationally.
2. Establishment of baseline data for ongoing evaluation of pill testing in Australia including but not limited to:
    i. The production of new knowledge about how to implement an event-based pill testing program within the specific ACT context.
    ii. The production of new knowledge about how participants experience pill testing as a harm minimsation intervention.

iii. The production of new knowledge on the degree to which participants' experience of pill testing contributes to less harmful drug use behaviour, if at all, and if so, how that occurs.
iv. The production of new knowledge about pill testing in an Australian context that can be generalised to other settings and parts of the nation to add to the evidence base informing decisions on whether and how to implement similar programs elsewhere.

Evaluation methods and instruments

The evaluation team conducted the first stage of the evaluation, the pre- and post-test surveys and observational methods, during the delivery of the pill testing service on 28 April 2019. Data collection ran smoothly and did not interfere with the delivery of the service.

On review of the preliminary data minor amendments will be made to the pre- and post-test surveys for future evaluations. Overall, the instruments are short enough to be feasibly used in a busy health service and comprehensive enough to capture key demographic and behavioural data.

Participants

A total of 234 pill testing patrons entered the service. Of these, 22 declined to enrol in the evaluation and 53 were under the age of 18 years of age (thus excluded from the evaluation), resulting in 159 people participating in the evaluation. One of these was subsequently excluded from the analysis as they knowingly presented a sample of candy for testing, leaving a total of 158 valid evaluation participants. All participants completed the pre-test survey and most of those (n=147) also completed the post-test survey.

In terms of gender, slightly fewer than half of the evaluation participants self-identified as female (n=76, 48%), slightly over half of the participants self-identified as male (n=81, 51%), and one participant self-identified as another gender (1%). The age range was 18 to 51 years old; the average (mean) age was 21 years, the median 20 years, with almost half of the evaluation participants (46%) being 18 or 19 years of age.

Among the participants of the evaluation, 106 participants at the pre-test (67%) were there to present a drug for testing while the remaining participants were there to accompany other patron(s). According to the post-test results, most of the participants (141 out of 147 participants (i.e. 96%)) personally received the test result from staff or were present when the result was given. Most of the participants who provided post-test evaluation data also received the brief intervention (123 out of 147 participants (84%)).

Ongoing data collection and analysis

In addition to completing this analysis of the pre- and post-test survey data, collection of data is ongoing. The evaluation team will conduct follow-up interviews with evaluation participants who agreed to continue with the research, including interviews with key stakeholders, those involved in the implementation of the trial and others who are likely to be users of the evaluation findings, and analysis of indicators derived from routinely collected administrative data. Detailed analysis of the data and evaluation findings will be reported in the final report towards the end of 2019.

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