INJECTING EXTRACTS FROM FENTANYL PATCHES: HARM REDUCTION INSIGHTS FROM A MIXED-METHODS STUDY

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Background
In Czechia, the predominant mode of fentanyl use involves intravenous administration of extracts prepared from transdermal fentanyl patches. The risks arise not only from the injection itself but also from fentanyl's narrow margin of exposure, i.e. the window between intended effects and life-threatening condition, and informal extraction procedure. As the number of people who use fentanyl continues to grow, it becomes essential to implement harm reduction measures informed by the evidence and experience of people who use fentanyl.

Methods
Data were collected from people injecting fentanyl via an online questionnaire administered with the support of 13 addiction treatment and harm reduction centers across the Czech Republic. The survey covered epidemiological information, details of methods used to extract fentanyl from patches (including additives and preparation techniques), and respondents' experiences, knowledge, and practices related to risk of overdose. The analytical part of the study was conducted in the laboratory, where extracts prepared according to reported procedures were analysed using HPLC-UV.

Results
We collected 44 completed questionnaires (32 men, 11 women, 1 non-binary respondent). Respondents reported using predominantly heroin, fentanyl, and buprenorphine. Adding an acidic substance is essential for extraction. The type of acid (acetic, citric, ascorbic), its amount (pH), and heating time can significantly affect fentanyl extraction. People who are injecting fentanyl should not change the preparation procedure and be careful about the strength of the patch and the manufacturer. Slow dosing into a vein and having a naloxone spray is also recommended.

Conclusion
This study uniquely combines a survey of people who use fentanyl with laboratory analysis to provide evidence-based recommendations for harm reduction practice. The results are shared with harm reduction centers to support targeted interventions that reduce the risks associated with injecting extracts prepared from fentanyl patches.

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