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Substances, poisonings and A&E clinics

LEDER

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Figures from the Oslo Accident and Emergency Outpatient Clinic show that intake of 'traditional' substances such as alcohol, cannabis and heroin remains the main cause of poisonings by substances of abuse. Novel psychoactive substances may alter this picture.

The emergency outpatient clinic services in Norway occupy a unique position internationally, largely thanks to the LEON principle, which states that treatment should be provided at the lowest level of effective care (1). Patients who would otherwise have filled up the emergency departments of hospitals can thus complete their treatment in an A&E clinic. In this way, the LEON principle serves both the patient and the healthcare service, as well as society that pays the bill. Despite Norway's small population, the Oslo Accident and Emergency Outpatient Clinic (OAEOC) reports most poisonings of all the centres in the European Drug Emergencies Network (Euro-DEN) (2). Appropriate prioritisation of resources can make for economically sound patient loops, but also training and high quality for the frontline services.

In a study which is now published in the Journal of the Norwegian Medical Association, Tran and colleagues describe an increase in the number of patients in most groups of agents, with the exception of heroin and benzodiazepine poisonings (3). A typical poisoning patient admitted to hospital has a low median age, low consciousness and a high risk of admission to an intensive care unit (4). Nevertheless, most likely due to good treatment options, but also the nature of the poisonings, hospital mortality for this group is low (less than 1 %) (5). The long-term mortality, on the other hand, is alarmingly high (6), with a clear association between mortality and repeated poisoning episodes (7). Previous studies show that 30 % of the patients are treated for a further poisoning episode at some level in the healthcare services within one year, irrespective of the intention behind the poisoning (8). This means that the increase in the number of poisonings by substances of abuse in the A&E clinic is a matter for concern.

The majority of the presentations to A&E services with poisoning by a substance of abuse are associated with traditional substances (3). We know, however, that hundreds of novel psychoactive substances have entered the European market (9). Lack of capacity for

analysing these at the A&E clinics, combined with the recognition that such substances were detected in 8 % of the poisonings by substances of abuse in Oslo as early as 2014 (10), lead to the suspicion that these novel substances with new sales routes (primarily via the internet) are likely to account for a constantly increasing proportion of the actual poisonings that are currently registered in the healthcare services.

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In the data material of Tran and colleagues, the number of heroin overdoses is decreasing, which is gratifying. Data that were collected by Oslo University Hospital in the same period and are included in the same study (Euro-DEN), but not yet published, indicate some increase in heroin overdoses in the period 2014–18. The reason may be that more heroin overdose patients become more seriously ill, or that the threshold for hospitalisation is lower. So far, Norway has avoided the marked increase in substances such as illegal fentanyl derivates or prescribed oxycodone medications that has been observed in some countries in Europe and in the United States in recent years (3). The reported increase in Norwegian police seizures in 2017–18 nevertheless causes concern (3) and raises the question of whether these patients have so far simply gone under the radar in the health service.

Tran and colleagues point out that the number of patients presenting with cannabis poisoning was increasing, and also that the cannabis was more potent (3). However, given an increasing number of new synthetic cannabinoids with other properties – to some extent more stimulant to the central nervous system and psychosis-inducing – I would have liked to see a brief comment on this topic from the authors. It is a known fact that in most cases, no analyses for these substances are made, especially not in the A&E clinics.

The attention paid to the new cannabinoids should monitor the increased number of such poisonings. The medical histories and the patients' own descriptions of symptoms from the use of these substances could provide useful knowledge to us as healthcare workers.

Although Tran and colleagues point out that retrospective data inclusion represents a limitation, such data often have better quality than registry studies. The authors must be applauded for their identification of and knowledge collection in this vulnerable patient population. This epidemiological foundation should be followed by a framework of prophylaxis, therapy and aftercare, where coordination with interdisciplinary specialised addiction treatment forms the roof over a coherent care and treatment programme.

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