ACMD

Advisory Council on the Misuse of Drugs

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Rt Hon Chris Philp MP
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Dear Minister

Re: ACMD report – 'A review of the evidence on the use and harms of Xylazine, Medetomidine and Detomidine'

Thank you for your letter of 19 June 2023 where you requested advice from the Advisory Council on the Misuse of Drugs (ACMD) on the potential harms of the veterinary medicine xylazine.

The ACMD is pleased to enclose its report describing the use and harms of xylazine. In addition, the ACMD has expanded the scope of the review to also include closely related compounds medetomidine and detomidine. The report includes recommendations on classification and scheduling following a thorough review of the evidence available. The ACMD is grateful to national and international experts who provided their expertise to this review.

The following conclusions were reached after review of these compounds by the ACMD working group:

1. Xylazine, detomidine and medetomidine are prescription veterinary medicines with legitimate uses in a variety of different animal species as sedatives and/or pre-medications prior to use of alternative injectable or inhalational anaesthetics. There are no legitimate uses of these compounds in humans, although dexmedetomidine, the active stereo-isomer of medetomidine, is licensed for use in humans as a sedative for those in intensive care units or undergoing diagnostic or surgical procedures.

2. Information on the acute toxicity of these compounds is largely from intentional and/or accidental exposure in legitimate veterinary practice. It appears that these compounds predominately cause sedation which is unresponsive to naloxone (a treatment for opioid related toxicity) and may require intubation and admission to critical care.

3. Whilst there have been occasional international reports of misuse of detomidine and medetomidine, the ACMD has not been made aware of any evidence of misuse of these compounds in the UK. Currently the risks of health or social harms from the misuse of either of these two compounds in the UK appear small and no further action is warranted at present.

4. Xylazine has been very commonly detected as an adulterant and/or associated with illicit opioids such as fentanyl in North America. It is thought to be added to illicitly synthesised fentanyl to increase and/or prolong the sedative effects of the fentanyl (which are shorter than those of heroin), possibly in part by reducing the metabolism of fentanyl.

5. In the UK to date there is little evidence that individuals are actively seeking to use xylazine. The compound has only been detected in a very small number of analysed samples in which fentanyl has not been co-detected. Instead these samples positive for xylazine have also contained cannabis, benzodiazepines and/or other opioids such as tramadol or codeine. With the reduction in the availability of heroin from Afghanistan, however, there may be an increase in the use of illicitly synthesised fentanyls in the UK opioid market, with the potential for increasing use of xylazine as an enhancer or extender.

6. It is unclear from the literature whether the co-use of illicit opioids with xylazine is associated with more severe toxicity than that seen with the illicit opioids alone. However, xylazine may increase the severity and/or duration of sedation and respiratory depression caused by opioids. The sedative effects associated with xylazine, if used recreationally and/or administered to an individual with malicious intent, could potentially put an individual at risk of accidents or crimes such as assault, robbery or sexual assault. In addition, there are anecdotal and published reports of significant skin ulceration related to the injection of drugs containing xylazine.

7. Qualitative research, reports in the general media and from users on line or engaged with drug treatment services have suggested a higher incidence of skin ulceration associated with the use of xylazine containing drugs that is normally reported. In addition, there have been a small number of peer-review publications describing this issue. To date these reports have largely been from North America rather than from the UK.

8. Dependence and associated withdrawal in individuals thought to be using illicit opioids containing xylazine has been described, although it is unclear whether the features seen in those individuals relates to the xylazine or instead the illicit opioids that the individual will have been also using.

9. Xylazine has been detected in a number of deaths in the UK. It is not clear whether the increase in the number of deaths where it has been detected reflects increased use or more widespread screening for the compound. In all cases, a range of other drugs were detected including classical and novel opioids, stimulants (cocaine, amphetamine), benzodiazepines and other sedatives (pregabalin, diphenhydramine ketamine). The contribution of the detected xylazine to the cause of the reported deaths is currently unclear.

10. Because of the recent increase in the numbers of detections in the UK, the likelihood of further increases in its prevalence and the potential health and social harms associated with xylazine, the ACMD advises that control of xylazine via the Misuse of Drugs Act (1971) is necessary. Its harms were considered to be broadly equivalent to those of other sedatives such as benzodiazepines, zopiclone or pregabalin, so listing in Class C is recommended.

11. The ACMD does not wish to hamper the legitimate use of xylazine in veterinary medicine and recognises the lack of evidence of diversion of veterinary supplies to the illicit drug market. For this reason, listing in Schedule 4 Part 1 of the Misuse of Drugs Regulations is recommended, as this does not require Controlled Drug prescription requirements, safe custody arrangements and drug registers.

Based on the evidence available, the ACMD has made the following recommendations:

Recommendation 1

Although there is no evidence of intended use of xylazine at this time in the UK, given the acute toxicity of xylazine and the similarity to the enhanced toxicity seen when benzodiazepines are co-used with opioids, xylazine should be added to Class C of the Misuse of Drugs Act 1971.

As xylazine has legitimate use as a veterinary medicine, it should be placed in Schedule 4 Part 1 of the Misuse of Drugs Regulations 2001 (as amended).

Lead: Home Office.

Measure of outcome: The inclusion of the listed compounds in Class C of the Misuse of Drugs Act 1971 and Schedule 4 Part 1 of the Misuse of Drugs Regulations 2001.

Recommendation 2

Information should be provided in an appropriate format to the general public (such as Frank) and to harm reduction services on the potential that heroin, fentanyl and other illicit drugs may contain xylazine. This should include information on the potential health effects, including the potential for ulceration associated with the injection of xylazine.

Leads: UK Health Security Agency, Office for Health Improvement and Disparities.

Measure of outcome: Information available for the general public, including those with lived experience.

Recommendation 3

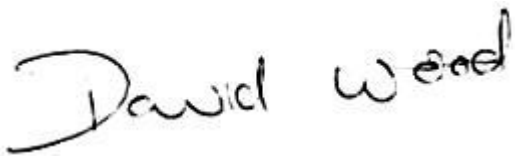
Responsible agencies need to be vigilant and monitor for substances, such as xylazine and related compounds such as detomidine and medetomidine that might be used to augment the opioid market in the UK. This can be done by analysis of seized or submitted drug samples (especially seized heroin and other opioid samples) and analysis of patient toxicology and post mortem samples. These data can then be collected, collated and monitored by the relevant public health agencies in the UK and reviewed by the newly established Synthetic Opioid Taskforce.

Leads: Office for Health Improvement and Disparities, Public Health Wales, Public Health Scotland, Public Health Agency Northern Ireland, Synthetic Opioid Taskforce

Measure of outcome: Information on substances used to augment the UK opioid market provided to the ACMD by the Synthetic Opioid Taskforce.

We welcome the opportunity to discuss this report in due course.

Yours sincerely,



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