

Audit to measure and improve compliance with WHO clinical guidelines on community management of opioid overdose.



Dr. Muhammad Umer Iqbal¹, Dr. Mike Scully²

1. Psychiatry Registrar, BST Year 3, TCD (R).
2. Consultant Psychiatrist and Clinical Director, National Drug Treatment Centre, Pearse Street, Dublin 2.

Background

- Opioid misuse and dependence is a well-known risk factor for both accidental and suicidal deaths in people of productive age group.
- The availability of high potency opioids in the illicit market has resulted in an increased incidence of overdose related deaths worldwide.

Fig 1

Fig 2

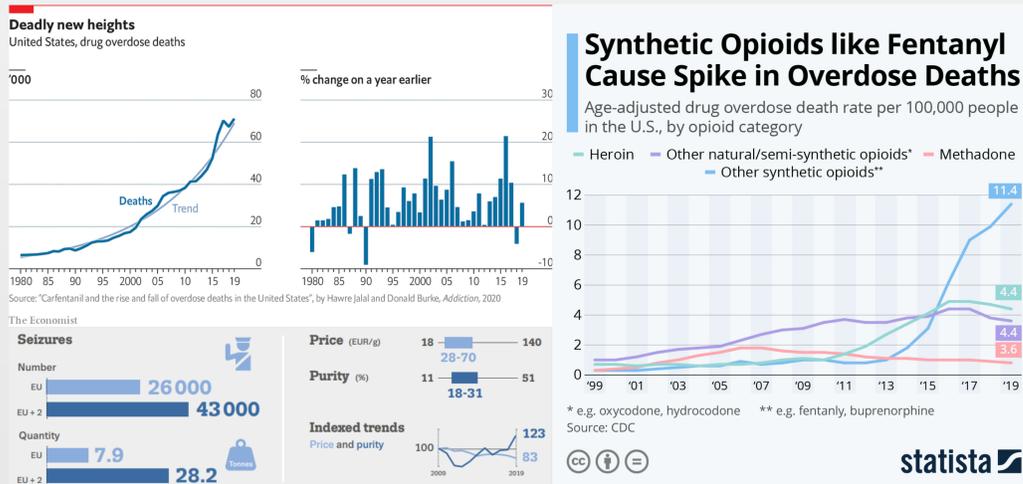


Fig 3

- The incidence of fatal opioid overdose among opioid-dependent individuals is estimated at 0.65 per 100 person years.
- A number of risk factors lead to increased likelihood of a fatal opioid overdose.
- Injecting Opioid users are at elevated risk, particularly when first using injection as a route of administration.
- Together with other prescription and drugs which have respiratory depressive effect puts them at increased risk of accidental or deliberate overdose.

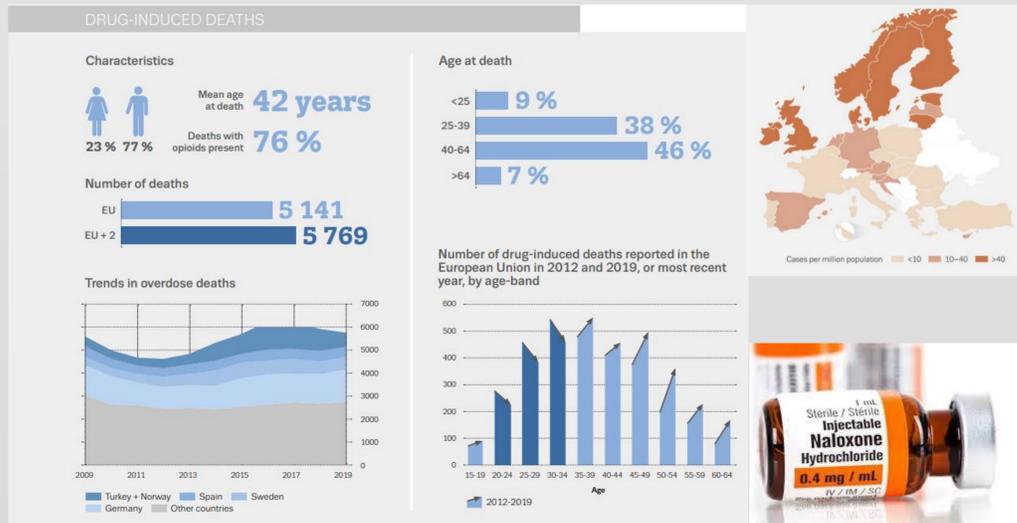


Fig 4: Source: EMCDDA, European Drug report 2021

- Naloxone (n-allylnoroxymorphone) has been used in opioid overdose management for over 40 years, with minimal adverse effects beyond the induction of opioid withdrawal symptoms.
- Naloxone has been shown to be a safe and effective method to prevent opioid overdose related deaths in emergent situations in the community, before help can arrive at the scene.

Aims

- To ensure compliance with 2014 WHO guidelines regarding community management of opioid overdose, and HSE guidelines regarding use of naloxone in emergent situations during Opioid substitution Treatment.

Methods

- 220 service users attending under clinical team were included.
- Service users using non-prescribed opioids were identified using urine samples provided when attending NDTC over the previous 6 months.
- Drug prescriptions contained in electronic patient record system in use in NDTC were searched for active prescription of naloxone for service users who were positive for non-prescribed opiates in urine drug screen over the last 6 months.

- Re-audit was conducted after 6 weeks of providing intervention aiming to improve compliance with clinical guidelines mentioned above.
- The permission to complete this audit cycle was given by Dr. Mike Scully, clinical director, National Drug Treatment Centre.

Results

- Out of service user electronic records searched, 22 service users had disengaged with the clinic for more than one month and were considered inactive.
- 2 service users had positive urine drug screen for prescribed opioids as evident from opioid identification in urine.
- 138 were active opioid users with positive urine results which could not be accounted for by any prescription (chart 1).
- Out of 138, 27 service users had been prescribed naloxone, resulting in compliance rate of prescribing naloxone of 19.5% (chart 2).

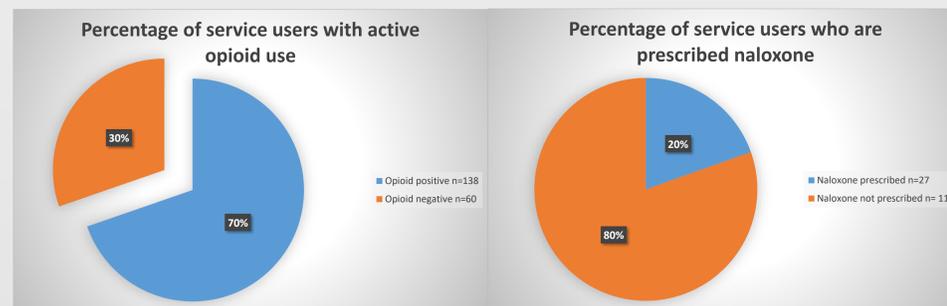


Chart 1

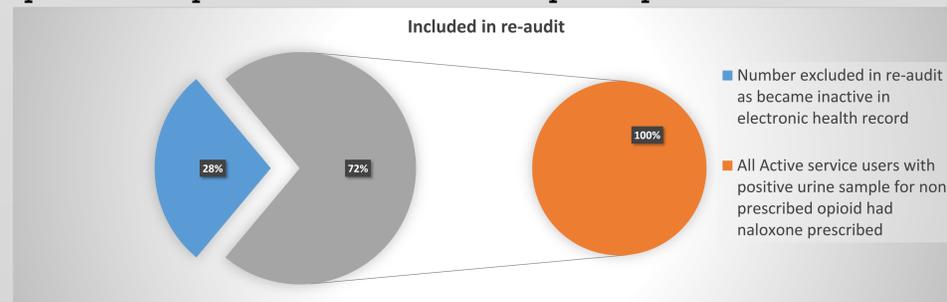
Chart 2

Interventions after first cycle:

- Education sessions were held with prescribing registrars and staff dispensing the medication, to check for active naloxone prescription for every service user attending for opioid substitution treatment.
- All prescribers and dispensing staff were encouraged to inquire about recent use of non-prescribed opioids at every opportunity.
- Dispensing staff was educated to ensure naloxone is prescribed and offered to service users when opioid substitution is being dispensed.
- In order to attain maximum benefit from naloxone, opioid users were encouraged to bring a family member, relative or friend in whose company they are regularly using non-prescribed opioids, to avail of naloxone administration training.

Re-Audit:

- Upon re-audit, 100% of service users with positive urine results for non-prescribed opioids had active Naloxone prescription.



Recommendations and action plan:

- It was recommended that consideration should be given to all service users attending NDTC, to include a discussion around risk of overdose and need for naloxone prescription periodically.
- It was recommended to identify service users deemed at high risk of overdose, namely intravenous opioid users and users of multiple drugs with potential of respiratory depression and death. Interventions aimed at naloxone prescription, dispensing and training should be targeted at those service users as a matter of priority.

References:

1. WHO, community management of opioid overdose, 2014. <https://apps.who.int/iris/handle/10665/137462>
2. HSE guidelines for opioid substitution. <https://www.hse.ie/eng/services/publications/primary/clinical-guidelines-for-opioid-substitution-treatment.pdf>
3. European Drug report, <https://www.emcdda.europa.eu/system/files/publications/13838/DTAT21001ENN.pdf>

Acknowledgements:

- Nursing staff at National Drug Treatment Centre, Pearse Street, Dublin 2.
- Pharmacy Department, National Drug Treatment Centre, Pearse Street, Dublin 2.

Conflicts of interest:

- None