UNODC/WHO S-O-S Initiative
Creating protective environments - Community management of opioid overdose

Stop - Overdose - Safely

Dr Elizabeth Sáenz
Project Coordinator
Prevention, Treatment and Rehabilitation Section
United Nations Office on Drug and Crime
Elizabeth.saenz@un.org
@DrEliSaenz
Preventable overdose deaths – global

- Opioids:
  - greatest harm to the health
  - severe health consequences associated
- In 2017:
  - 110,000 (66 per cent) of the 167,000 deaths attributed to drug use disorders.

(WDR, 2019)
Opioid crisis

- New highs in opioid overdose deaths in the United States of America and Canada, with the increases largely attributed to the use of fentanyl and its analogues.

- Past-year users of opioids globally is 56 per cent higher than the previously estimated 34.3 million in 2016

(WDR, 2019)
Opioid Overdose crisis in the United States

Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2015

- Any Opioid
- Heroin
- Natural & Semi-Synthetic Opioids (e.g., fentanyl, tramadol)
- Other Synthetic Opioids
- Methadone

WDR 2017: Higher increase in female heroin users and overdose deaths (US data)

Source: Data from Center for Behavioral Health Statistics and Quality, Key substance use and mental health indicators in the United States 2002-2015.

Source: Centres for Disease Control and Prevention Wide-ranging ONline Data for Epidemiologic Research.
People at higher risk of opioid overdose

- People with **opioid dependence**, in particular following reduced tolerance (following detoxification, release from incarceration, cessation of treatment);
- People who **inject opioids**;
- People who use **prescription opioids**, in particular those taking higher doses; People who use opioids in combination with other sedating substances;
- People who **use alone**
- People who use opioids and have **medical conditions** such as HIV, liver or lung disease or suffer from depression;
- **Household members** of people in possession of opioids (including prescription opioids).
Drug use in prison (WDR 2017)

Cannabis, Heroin, IDU
Prevention of opioid overdose

- Improve opioid prescribing
- Prevent opioid use disorder
- Create protective communities
- Treat opioid use disorder
- Emergency response to overdose
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Treat opioid use disorder
Psychosocially assisted pharmacological treatment of opioid dependence (WHO, 2009)

Pharmacological treatment options

- methadone and buprenorphine for opioid agonist maintenance and opioid withdrawal
- alpha-2 adrenergic agonists for opioid withdrawal (clonidine, lofexidine)
- naltrexone for relapse prevention
- naloxone for the treatment of overdose.
Pharmacological treatment with opioid agonists decreases overdose rates (US)

Schwartz RP et al. (2013)
Globally limited access to any drug dependence treatment (1:6)
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Emergency response to overdose
Opioid overdose signs

- Depressed respiratory drive (rate/depth breathing)
- Apnoea - suspension of breathing
- Myosis – contraction of pupils
- Stupor – suspension of sensibility
- Hypoxaemia, cerebral hypoxia – reduced oxygen
- Cardiac arrest as secondary complication
Emergency management of opioid overdose

- Treatable with naloxone, an opioid antagonist which rapidly reverses the effects of opioids.

- Minimal adverse effects beyond the induction of opioid withdrawal symptoms

- It carries no potential for abuse.

- On the WHO List of Essential Medicines.

[Diagram of opioids fitting exactly on receptor and naloxone having a stronger affinity for the receptor]
• All work

• None perfect
CND resolution 55/7: “Promoting measures to prevent drug overdose, in particular opioid overdose (2012)

- Encourages all Member States to include effective elements for the prevention and treatment of drug overdose, in particular opioid overdose, in national drug policies,...., and to share best practices and information on the prevention and treatment of drug overdose, in particular opioid overdose, including the use of (…) naloxone
UNODC/WHO Discussion paper (2013)

Effective measures

- Reducing the availability of opioids and harmful opioid use
- Providing access to effective treatment for people with opioid dependence
- Availability of drug dependence treatment in prisons
- Effective treatment of opioid overdose

New areas

- Naloxone has been traditionally used by medical staff to treat opioid overdose, New approach: to distribute naloxone to first responders (e.g., police and firemen) and to people dependent on opioids, their peers and family members who are likely to be present when an overdose occurs.
EDITORIALS (2014)

Take-home emergency naloxone to prevent deaths from heroin overdose

Now enough experience to justify it

John Strang professor¹, Sheila M Bird professor², Paul Dietze professor³, Gilberto Gerra chief⁴, A Thomas McLellan chief executive officer⁵

¹National Addiction Centre (Institute of Psychiatry and The Maudsley), King’s College London, London SE5 8AF, UK; ²Biostatistics Unit, Cambridge CB2 0SR, UK; ³Burnet Institute, Melbourne, Australia; ⁴UNODC Drug Prevention and Health Branch Division, United Nations Office on Drugs and Crime, Vienna, Austria; ⁵Treatment Research Institute, Philadelphia, PA 19106, USA

A paradigm shift is occurring in the treatment of heroin overdose. On 5 November the World Health Organization launched guidelines on the community management of heroin overdose [1]. Here we argue why this is a time of forethought. In 2012, a United Nations resolution identified the need for more effective prevention of drug overdose, including the use of naloxone.⁶ The same year, the first large scale randomised trial of naloxone in heroin overdose (Naloxone in Opioids) trial (NIH) showed significant reduction in mortality among......
WHO guidelines on community management of opioid overdose (2014)
<table>
<thead>
<tr>
<th>No.</th>
<th>Recommendation</th>
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<tbody>
<tr>
<td>1</td>
<td>People likely to witness an opioid overdose should have access to naloxone and be instructed in its administration to enable them to use it for the emergency management of suspected opioid overdose.</td>
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<td>2</td>
<td>Naloxone is effective when delivered by intravenous, intramuscular, subcutaneous and intranasal routes of administration. Persons using naloxone should select a route of administration based on the formulation available, their skills in administration, the setting and local context.</td>
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<td>3</td>
<td>In suspected opioid overdose, first responders should focus on airway management, assisting ventilation and administering naloxone.</td>
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<td>4</td>
<td>After successful resuscitation following the administration of naloxone, the level of consciousness and breathing of the affected person should be closely observed until full recovery has been achieved.</td>
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UNODC
United Nations Office on Drugs and Crime

UNGASS 2016 – overdose prevention

• Promote the inclusion in national drug policies, in accordance with national legislation and as appropriate, of elements of the prevention and treatment of drug overdose, in particular opioid overdose, including the use of opioid receptor antagonists such as Naloxone to reduce drug-related mortality (OP1m)
UNODC/WHO S-O-S initiative

- 90% of PLWOD trained
- 90% of those trained given naloxone
- 90% of those carry naloxone with them
**S-O-S**: Broad mobilization of partners promoting the 90-90-90 target

**Stop - Overdose - Safely**
UNODC/WHO Multi-country S-O-S Study (2018-2020)

- 1. Feasibility
- 2. Effectiveness of training

Open for countries/groups to join with own resources
S-O-S Study - Aims

• What is the **feasibility** of substantially increasing access to naloxone and training in overdose management to lay people likely to witness an opioid overdose in different community settings (in LMICs)?

• What is the **effectiveness** of training people and providing them with naloxone on their capacity to effectively respond to future witnessed overdoses?

• (What is the **impact** of scaling up naloxone access and overdose management on the number of deaths in people at high risk of opioid overdose (such as those just released from prison).
S-O-S Study

Four project countries in Eastern Europe and Central Asia

- 160 national trainers trained
- 1500 people enrolled in the cohort study
- 4600 people trained on identification and management of opioid overdose
- 6500 Take-Home-Naloxone kits distributed
A range of coordinated interventions

Reducing overdose deaths & creating protective communities

Policy support
Prevention
Treatment
Risk reduction
Emergency response
In summary

• Offer of evidence-based information, prevention, treatment and care of drug use disorders and overdose in the community and in prison settings
• Create protective S-O-S communities to manage opioid overdose emergencies
• Support from science and policy – wide practical implementation remains challenging
• Promote options for treatment and care as alternatives to conviction or punishment

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Thank you!

elizabeth.saenz@un.org
@DrElisaenz
www.unodc.org/treatment