"Extreme personal stress" and "a lot of pain": Exploring the physical, mental and social contexts of extramedical pharmaceutical opioid use in Australian paramedic case descriptions.

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Background. Pharmaceutical opioid harm is of international concern, yet little is known about the contexts of use

In 2016, around 1 in 20 Australians used at least one pharmaceutical drug extramedically and nearly 1 in 25 used opioid pain medicines[1].

The over- or inappropriate use of a pharmaceutical drug beyond medical or legal guidelines.

While established opioids such as oxycodone have been well-researched, newer opioids (e.g. Tapentadol) have received little research attention[2].

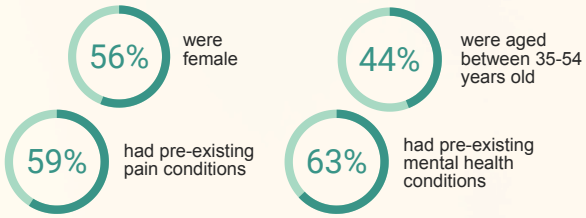
Oxycodone	vs	Tapentadol
A semi-synthetic opioid with analgesic properties comparable to morphine and comes with one of the higher abuse liabilities (e.g. OxyContin).		A newer 'atypical' opioid that has a reduced abuse liability, however the studies that currently ask about tapentadol and other newer opioids are still limited (e.g. Palexia).

Methods. We examined free-text paramedic case notes of ambulance attendances to explore the contexts around the extramedical use of two prominent opioids - oxycodone and tapentadol.

Paramedics complete electronic patient care records (ePCRs) for each ambulance attendance, comprised of both pre-determined data fields and free-text fields for case notes.

Analysis of ePCRs is ongoing at Turning Point for the Ambo and National Ambulance projects. Cases were identified where the recent extramedical use of tapentadol and oxycodone was assessed to have *significantly contributed* to the attendance. Framework analysis[3] was used to identify 'contexts' for extramedical use common to attendances for both tapentadol and oxycodone.

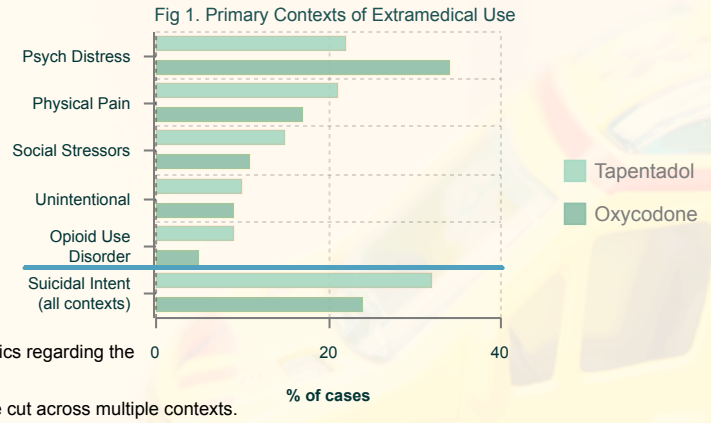
Sample. 82 tapentadol-related attendances between 2013-2018 were identified and compared to 82 oxycodone cases, total sample (n=164).



Oxycodone-related attendances weighted to represent all oxycodone cases captured across the study period.

Results. There was little difference between the opioids, however five main contexts of use emerged as common across both drug types: psychological distress (28% of cases), physical pain (19%), social stressors (13%), unintentional nonadherence (9%) and opioid use disorder (7%).

Fig 1. Primary Contexts of Extramedical Use



- The primary reasons for using opioid(s) extramedically are based on information provided by paramedics regarding the circumstances preceding use, the patient's history, and their interpretations of the patients' intentions.
- Three in ten (28%) attendances were for patients who had intended to suicide via overdose, and these cut across multiple contexts.
- One in 5 (24%) cases were unable to be suitably categorised and were left as 'unclear'.

Psychological Distress

Patient has taken a combination of temazepam, oxycodone and alcohol, with unclear self-harm intentions. Patient states they have no "wish to die but ***just want[s] to get away from things****".*

Suicidal Intent

Patient seated with family members. Patient reports taken diazepam, paracetamol, ibuprofen, tapentadol and an mdma-like substance "as an attempt of self-harm" after relationship break-up. ***Patient stated that they "just wanted to end it."***

Physical Pain

Patient with existing mental health conditions took intentional overdose of tapentadol ***to relieve "chronic joint pain"*** *that "was not resolving with initial prescribed doses."*

Social Stressors

Patient reports consuming a combination of medications not prescribed to the patient, including diazepam, tramadol and oxycodone, along with alcohol. ***Consumption in response to "argument" with, and "in spite against" partner****. Patient "denies suicidal intent", despite prior self-harm history. "*

Opioid Use Disorder

Patient states they "crushed an oxycontin tablet, mixed it with water and injected it" into their forearm ***to "overcome withdrawal symptoms" from existing opioid use****. Developed gastrointestinal symptoms and family member called ambulance.*

Unintentional Nonadherence

Patient reports ***"accidentally mistaking" tapentadol tablets for paracetamol tablets*** *and ingesting them. Patient then reports "feeling light-headed, is extremely anxious and hyperventilating". Patient reported "extreme personal stress" with death of close relative and financial pressure.*

The quotations above are derived from paramedic case notes, and illustrate the contextual factors at play in ambulance attendances relating to extramedical pharmaceutical opioid use. These have been paraphrased to protect patient anonymity.

Conclusion. Paramedics frequently attend patients who have used pharmaceutical opioids extramedically. These patients typically have complex physical and emotional pain needs and often use opioids in acts of self harm. This contrasts with other targeted studies that highlight the prevalence of 'recreational' and illicit use[4], and poor health literacy leading to accidental overdoses[5].

References
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