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Spread the Word: Widespread Distribution of Naloxone to Decrease Opioid-Related Deaths

Clinical Question: Does population-based or programmatic provision of naloxone kits decrease the risk of opioid-related deaths in people who use opioids?

Bottom Line: Offering naloxone kits and overdose related education for people who use opioids and their community may decrease opioid related deaths by ~7 per 100,000 population over one year. Effectiveness is likely influenced by magnitude of opioid problem in a given community and other confounders (like co-ingestions, co-morbidities, type and dose of opioid used).

Evidence:
- Randomized controlled trial:
  - 1676 inmates being released from prison were randomized to kit with single dose naloxone versus no naloxone.\(^1\)\(^,\)\(^2\) After 3 months:
    - Opioid-related deaths: 0.7% naloxone versus 0.4% no naloxone arm, not statistically different.
    - Limitations: Trial stopped early as ~66% of naloxone used on others, thus limiting individual patient analysis.
- Observational studies: pre/post naloxone program initiation:
  - Naloxone kits and overdose education provided to people who use opioids, friends/family, and social agency staff, in Massachusetts.\(^3\) After one year:
    - Opioid-related deaths in community (per 100,000): 11.6 with program, 19.0 without program.
    - Opioid-related hospital visits: unchanged.
  - Other studies found naloxone kits provided to Scottish prisoners (pre-release) or to patients attending Catalonia harm reduction centers decreased opioid-related deaths.\(^4\)\(^,\)\(^5\) Evidence limited by:
    - Improper or unknown “denominators” (number of prisoners released or Catalanion program participants).
  - Limitations: observational studies results may be influenced by other interventions (example: opioid agonist therapy prescribing).

Context:
- Every day, 2 Albertans and 11 Canadians die of an opioid-related death.\(^6\)\(^,\)\(^7\)
- Those at higher risk of opioid-related death include:
  - Previous opioid overdose.\(^8\)
Discharge themselves from drug treatment programs.\textsuperscript{8,9}
Recently released from prison.\textsuperscript{8,10}
Use higher doses of prescribed opioids.\textsuperscript{8,11}
Co-ingest benzodiazepines and/or anti-psychotics.\textsuperscript{8,11,12,13}

- Patient level data supports the use of naloxone by non-medical personnel, emergency medical services, or in the emergency department.\textsuperscript{14,15}

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References: