Medication Errors in the Community

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Conflicts of Interest

- None to declare

Community Care

- Health care provision in the community is increasing
    - Ontario Homecare Association

- Health care provision by non regulated persons is playing a greater role in care
    - Canadian Caregiver Coalition

Care Errors

- Adverse events in home care are beginning to be better characterized
  - Sears N et al. *Int J Qual Health Care* 2013
  - Blais R et al. *BMJ Qual Saf* 2013
- The use of non-regulated caregivers is a contributing factor to the adverse events
  - Mayahara M et al. *J Hosp Palliat Nurs* 2014

Preventability

- There is a high index of preventability in these adverse events
    - Sears N et al. *Int J Qual Health Care* 2013

Institute for Safe Medication Practices Canada
L'Institut pour l'utilisation sécuritaire des médicaments du Canada

Dedicated to reducing preventable harm from medications

The Coroner’s and Medical Examiner’s Project

Study Objectives

- Determine the characteristics of fatal medication errors that happen in the non – regulated community

- Identify the contributing factors to fatal medication errors that happen in the community

Study

- Health Canada Special Project
- University of Toronto Research Ethics Board Approval

Methods

- Coroner and Medical Examiner Files from 2007-2012 from 4 provinces
- Inclusion criteria:
  - death was outside a regulated facility
  - related to a medication incident in a therapeutic context
- Exclusion criteria
  - medication administration was performed by a regulated health care professional

Methods

- Simple Quantitative Analysis
- Qualitative Analysis
  - Multi-incident analysis technique outlined in the Canadian Incident Analysis Framework

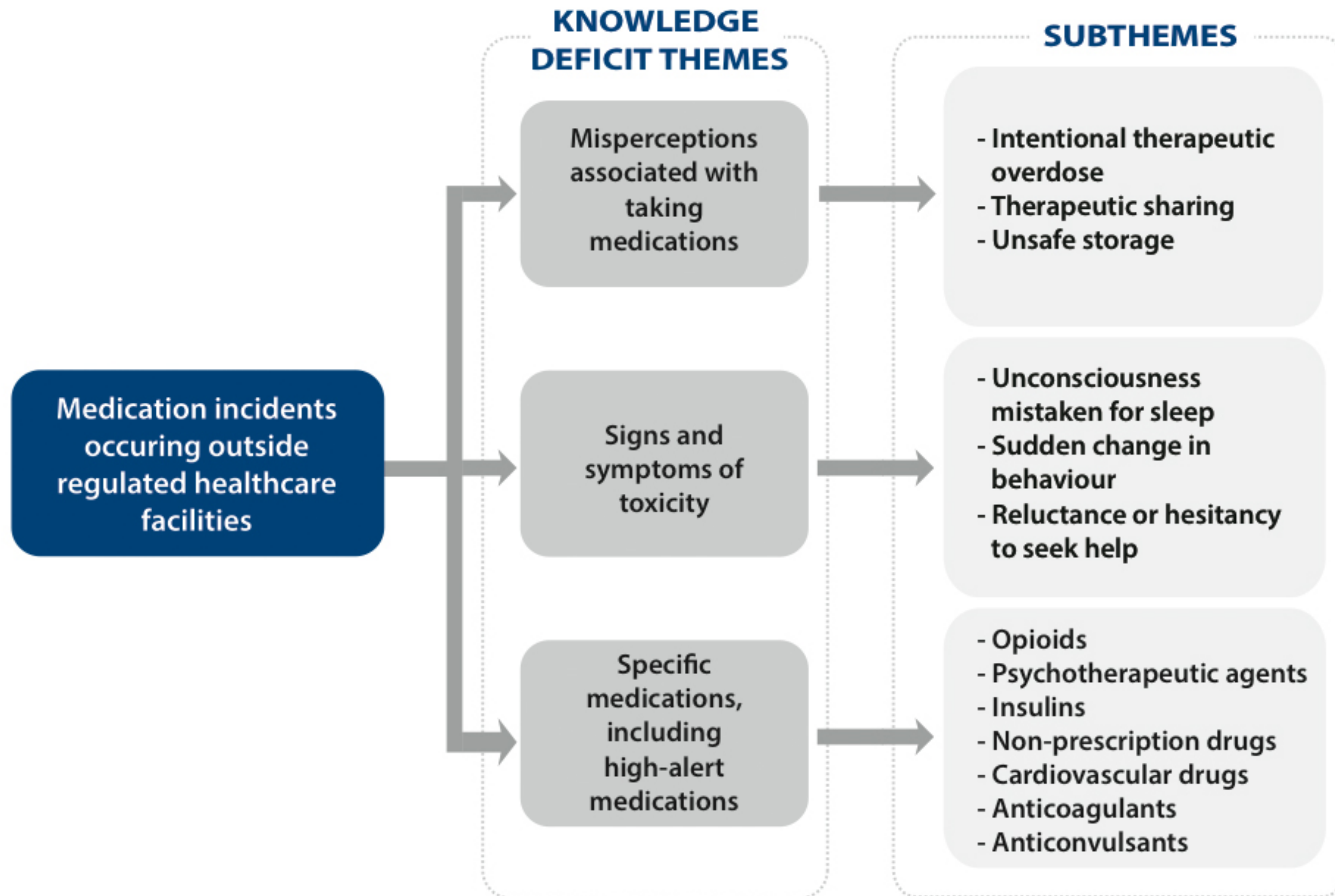
Results

- 122 Coroner/Medical Examiner death files in total of which 45 met inclusion criteria

Results

- Drugs
  - Opioids (20 cases)
  - Psychotherapeutic agents (17 cases)
  - Insulins (5 cases)
  - Non prescription drugs (5 cases)
  - Others (9 cases)
- Locations
  - Private residence (36 cases)
  - Other (9 cases)

Results



Results

- Qualitative Themes
  - Misperceptions associated with taking medications
    - Intentional Therapeutic Overdose
    - Therapeutic Sharing
    - Unsafe storage

Results

- Qualitative Themes
  - Signs and symptoms of toxicity
    - Coma mistaken for sleep
    - Changes in behaviour
    - Reluctance or hesitancy to seek help

Results

- Qualitative Themes
  - Risks of specific medications
    - For example:
      - Opioids – respiratory suppression
      - Non-prescription drugs – liver toxicity
      - Anticoagulants - bleeding

Conclusions

- Medication errors are a notable cause of healthcare related death in the community and an important Public Health concern.
- We have identified significant contributing factors to these deaths.

Implications for Public Health

- Address the deficiencies in knowledge with respect to both general and specific risks of medications

- Develop and implement comprehensive injury prevention strategies
  - identification and management of toxicity and overdose

Implications for Public Health

- Continue the surveillance of patient safety outside of regulated facilities

Thank you