

Palliative Care for Patients with Opioid Use Disorder and Cancer: A Population-based Cohort Study

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Ontario adult

residents who died

between July 2015

and Dec 2021

With OUD (within

previous 3 years)



Without OUD

BACKGROUND

- US and Canada declared opioid crises in 2016 that is driven by fentanyl and fentanyl analogues.
- Opioid use disorder (OUD) is a complex biopsychosocial disorder in which people engage in persistent opioid use despite harmful consequences.
- People with OUD are at high risk of prematurely dying from other diseases, including cancer, and can benefit from palliative care.
- Palliative care improves the quality of life of patients with life-limiting illnesses through symptom management and psychosocial support.
- Patients with cancer are more likely to receive palliative care than other disease groups.
- It is unknown how many patients with OUD and cancer receive palliative care services at the end of their lives.

RESEARCH OBJECTIVES:

To compare palliative care provision between people with and without OUD at the end of their lives, and to evaluate whether associations between OUD and each outcome differed by cancer status.

METHODS and ANALYSIS

Population-level retrospective cohort study in Ontario, Canada using health administrative data

OUD case definition:

- ≥1 opioid-related emergency department visit,
- ≥1 opioid-related hospitalization, and/or
- OUD identified by opioid agonist treatment prescriptions







Receipt of palliative care (primary outcome)

Palliative care setting

•	 Crude, unadjusted descriptive analyses were used to describe our outcomes across subgro 	ups of
	interest.	

- Multivariable logistic regression analyses were used for each outcome.
- Due to association between palliative care and cancer, we incorporated cancer as an interaction term.
- All models were adjusted for age, sex, rurality, immigrant status, marginalization indices, comorbidities and substance use.

RESULTS

End-of-life Characteristics

- Of 679,840 decedents, **11,200** had a history of OUD (1.6%)
- Compared to decedents without OUD, those with OUD died at a younger age (mean age 49.8 vs. 77.5 years; StD 1.75) and were more likely to live in neighbourhoods with high marginalization indices.
- Compared to decedents without OUD, those with OUD had increased use of substances other than opioids.
 - Stimulants 9.6 vs 1.3%; StD 0.37
 - Alcohol 17.8% vs 7.6%; StD 0.31
- 2,166 (19.3%) decedents with OUD had cancer. After matching by age, those with OUD were less likely to have cancer compared to those without OUD (19.5% vs 34.2%; StD 0.34).

Palliative Care

- 5,029 people with OUD (45.3%) received palliative care in the last 90 days of life and, of these, 4359 (86.7%) received it in acute care hospitals.
- Most common diagnoses associated with physician palliative care assessments for decedents with OUD were lung cancer (8.3%) and other cancers (5.3%).
- Among patients with cancer, decedents with OUD were 11% less likely to receive any palliative care at the end of their lives (RR 0.89; CI 0.87-0.91)
- Patients with OUD and cancer were less likely to receive palliative care in acute care (RR 0.89; CI 0.86-0.93), clinic (RR0.81; CI 0.77-0.86) and home (RR 0.80; CI 0.76-0.84).
- Among patients without cancer, there was a 32% reduction in palliative care intensity for patients with OUD compared to those without (IRR 0.68; CI 0.66-0.69) and no significant difference among patients with cancer (IRR 1.03; CI 0.95-1.11).

Outcome (Effect: OUD (ref = 'None))	Receipt of any Palliative Care RR (robust 95% CI)	
All Patients	0.84 (0.82-0.86)	
Patients with cancer	0.89 (0.87- 0.91)	
Patients without cancer	0.89 (0.87-0.92)	



	Palliative Care Setting Fully adjusted RR (robust 95% CI)			
Outcome (Effect: OUD (ref = 'None))	Acute Care	Clinic	Home	Long-term Care
All patients	0.87	0.68	0.62	0.84
	(0.85-0.89)	(0.64- 0.71)	(0.59-0.66)	(0.74-0.94)
Patients with cancer	0.89	0.81	0.80	1.26
	(0.86-0.93)	(0.77-0.86)	(0.76-0.84)	(1.06-1.50)
Patients without cancer	0.92	0.81	0.72	0.65
	(0.89-0.95)	(0.75-0.88)	(0.65-0.79)	(0.55-0.78)

CONCLUSIONS

- Patients with OUD are dying at a young age and experience more marginalization compared to the general population.
- Cancer is a common indication for palliative care physician involvement for patients with OUD
- Among patients with cancer, patients with OUD are less likely to receive any palliative care especially in acute care, clinic, and home settings