

CONCLUSION: Our patient survey shows a significant proportion of cancer patients with risk factors for opioid overdoses live alone without a caregiver who could administer take-home naloxone in case of an accidental opioid overdose. More research is needed to care for such patients appropriately.

INTRODUCTION:

- Take-home Naloxone can reverse opioid-related overdoses.
- Administered by any of the following:
 - Emergency personnel
 - Medical Team
 - Bystanders
 - Caregivers
- What if a patient with a cancer diagnosis requiring opioids who carries risk factors for opioid overdoses lives alone?

AIM: This study aims to understand the perception of Take-home naloxone among cancer patients who live alone and carry risk factors for OODs.

METHODS AND MATERIALS:

Current practice: Take-home Naloxone is co-prescribed to patients with active cancer receiving opioids and carries risk factors for opioid overdoses.

Prospective cross-sectional survey:

- Patients with high-risk factors for opioid overdoses + received take-home naloxone co-prescription.
- Between July 2020 and April 2022
- **Goal:** The survey will assess patients' perceptions regarding the prescription and need for Take-home Naloxone.
- A sub-group analysis was conducted among patients who lived alone.

Table 2. Risk factors for opioid overdoses & indications for co-prescribing Naloxone

Variable	Total (N=150)	Patients' Living Arrangement		P-Value
		Live with family or caregivers (N= 127)	Live alone (N= 23)	
MEDD ¹ >90	78 (52)	66 (52)	12 (52)	1.0000
Methadone prescription	21 (14)	18 (14)	3 (13)	1.0000
Benzodiazepines	45 (30)	37 (29)	8 (35)	0.62
Other sedating drugs	106 (71)	92 (72)	14 (61)	0.32
Co-prescription of high dose of gabapentinoids ²	42 (28)	36 (28)	6 (26)	1.0000
Sleep apnea	13 (9)	12 (9)	1 (4)	0.69
COPD ³ or other non-malignant pulmonary disease	13 (9)	10 (8)	3 (13)	0.42
Home Oxygen use	3 (2)	3 (2)	0 (0)	1.0000
Hepatic or renal failure	16 (11)	15 (12)	1 (4)	0.47
History of abuse of opioid/substance abuse	16 (11)	12 (9)	4 (17)	0.27

1. MEDD: Morphine Daily Equivalent Dose
2. Gabapentinoids: Gabapentin >900mg/day, and Pregabalin: >150 mg/day
3. COPD: Chronic Obstructive Pulmonary Disease

RESULTS:

- 23/150 surveyed patients lived alone
- 12/23 (52%) were male
- 13/23 (57%) were white
- 16/23 (70%) had advanced cancer
- No significant differences in most demographics, characteristics, and risk factors for opioid overdoses

Risk factors for opioid overdoses: (most prevalent)

- Morphine equivalent daily dose of >90 (12/23;52%)
- Concurrent use of sedative medications (14/23;61%)
- History of smoking among patients that lived alone (44/127 (35%) vs. 16/23 (70%); p=.0006).
- **Simultaneous use of opioids with alcohol or other sedating medications (p=1.000)**

DISCUSSION:

- A significant number of patients with risk factors live alone.
- Educate community outreach programs.
- Encouraging patients to invite friends and family to medical discussions
- Improving the safety network. Frequent visits from friends and family.
- Artificial intelligence-powered voice bots and pill bots

Table 1. Demographic and Clinical Characteristics of the Study Participants living with a caregiver vs. living alone

Variable	Total (N=150)	Patients' Living Arrangement		P-Value
		Live with family or caregivers (N= 127)	Live alone (N= 23)	
Age, mean (range)	54.6 (22-79)	54.9 (26-79)	52.8 (22-69)	0.44
Male, n (%)	82 (55)	70 (55)	12 (52)	0.82
Race/ethnicity, n (%)				
White	105 (70)	92 (72)	13 (57)	0.20
Hispanic	23 (15)	18 (14)	5 (22)	
African American	17 (11)	14 (11)	3 (13)	
Other	5 (3)	3 (2)	2 (9)	
Highest level of education, n (%)				
9-11th grade	3 (2)	2 (2)	1 (4)	0.00
High school	31 (21)	24 (19)	7 (30)	
Higher education	116 (78)	101 (79)	15 (66)	
Employment status, n (%)				
Full time	46 (31)	38 (30)	8 (35)	0.85
Homemaker	6 (4)	6 (5)	0 (0.0)	
Part-time	9 (6)	8 (6)	1 (4)	
Unemployed	12 (8)	9 (7)	3 (13)	
Retired	47 (31)	41 (32)	6 (26)	
Other	30 (20)	25 (20)	5 (22)	
Cancer type, n (%)				
Head and neck	18 (12)	16 (13)	2 (9)	0.41
Thoracic	17 (11)	14 (11)	3 (13)	
Gastrointestinal	34 (23)	32 (25)	2 (9)	
Gynecologic	4 (3)	4 (3)	0 (0)	
Genitourinary	23 (15)	19 (15)	4 (17)	
Breast	20 (13)	14 (11)	6 (26)	
Hematologic	15 (10)	13 (10)	2 (9)	
Other	19 (13)	15 (12)	4 (17)	
Advanced stage cancer	121 (81)	105 (83)	16 (70)	0.16
CAGE ¹ Positive	11 (7)	8 (6)	3 (13)	0.38
SOAPP ² Positive	19 (17)	13 (14)	6 (35)	0.07
History of drug use (other than Marijuana)				
Never	129 (86)	110 (86)	19 (82)	0.40
Current	3 (2)	2 (2)	1 (4)	
Previous	18 (12)	15 (12)	3 (13)	
History of Marijuana use				
Never	104 (69)	90 (71)	14 (61)	0.45
Current	12 (8)	9 (7)	3 (13)	
Previous	34 (22)	28 (22)	6 (26)	
History of tobacco smoking				
Never	90 (60)	83 (65)	7 (30)	0.0006
Current	9 (6)	4 (3)	5 (22)	
Previous	51 (34)	40 (32)	11 (48)	

1. CAGE: Cut-Down, Annoyed, Guilty and Eye-opener questionnaire
2. SOAPP: Screener & Opioid Assessment for Patients with Pain