Literature Review

Patient, injury, provider and hospital characteristics associated with opioid use

September 24, 2019

Vivian Lyons, MPH, PhDc

HARBORVIEW
INJURY PREVENTION
& RESEARCH CENTER

Background

~80% of current heroin users report their opioid use beginning with nonmedical use of prescribed opioids

~1/2 of injury patients who present to the Emergency Department (ED) are discharged with opioids

Evidence that psychological trauma can impact risk of opioid use dependency

DEPARTMENT OF EPIDEMIOLOGY

UNIVERSITY of WASHINGTON
School of Public Health

HARBORVIEW
INJURY PREVENTION
& RESEARCH CENTER

Prior Research

Large body of work on sustained opioid use, but much less that focuses on the trauma population

Many studies group opioid and non-opioid drugs as one analgesic group

DEPARTMENT OF EPIDEMIOLOGY
UNIVERSITY *of* WASHINGTON
School of Public Health

HARBORVIEW
INJURY PREVENTION
& RESEARCH CENTER

Summary of Findings

	Opioid Use During:		
	Hospitalization	**Post-discharge**	**Next Year following Injury**
Patient	⬆ White, ⬇ black ⬆ Injury ⬇ Mental illness Insurance	⬆ White, ⬇ black ⬆ Older ⬆ Injury ⬆ Married ⬇ Male ⬇ Anxiety diagnosis In hospital use*	⬆ Pre-injury marijuana use ⬆ Alcohol dependence ⬆ Tobacco dependence ⬆ Depression and anxiety ⬆ History of trauma ⬆ Perception of pain ⬆ Filling discharge prescription ⬆ Female Lower SES
Injury	⬆ High pain score	⬆ Fracture ⬆ Surgery ⬆ ISS	⬆ Fracture ⬆ Surgery ISS

Summary of Findings

	Opioid Use During:		
	Hospitalization	Post-discharge	Next Year following Injury
Provider	⬇ More experienced Attending Wide variability	⬆ More experienced Attending	⬆ High intensity provider
Hospital		⬆ Urban ED, ⬇ rural ED Regional differences	⬆ Patient reports of well-managed pain

Conclusion

Injury and trauma were associated with opioid use in hospital, immediately following discharge and long-term.

Future studies should explore provide and hospital characteristics associated with opioid use.

Conflicting results between national studies and single-site studies -> importance of verifying findings with state and national data.

DEPARTMENT OF EPIDEMIOLOGY

UNIVERSITY *of* WASHINGTON
School of Public Health

HARBORVIEW
INJURY PREVENTION
& RESEARCH CENTER