



PURPOSE / OBJECTIVES

- ❑ Opioid addiction and prescription drug misuse is an epidemic in the United States that has gradually increased in the past two decades.
- ❑ In 2020, the Centers for Disease Control and Prevention (CDC) estimated the cost of opioid addiction to be nearly \$ 1.5 trillion, and the trend is likely to increase in the coming years.
- ❑ This has become a major public health issue with a significant impact on morbidity and mortality.
- ❑ The present study aims to determine the profile and outcome in women with opioid-addiction-associated ED visits in United States.

MATERIAL & METHODS

- ❑ We analyzed data on Opioid addiction Emergency Departments visits utilizing the Nationwide Emergency Department Sample (NEDS) database from January 2018 to December 2019.
- ❑ In a multivariate analysis, we determined the association between opioid addictions and ED visits because of attempted suicides, assaults, and unintentional injuries.
- ❑ We also explore the influence of opioid addiction on health outcomes such as in-hospital mortality, total hospital charges, length of hospitalization, and discharge disposition.
- ❑ We adjusted for covariates such as patient's age, race/ethnicity, insurance type income quartile, hospital parameters (ownership, region of hospital, hospital urban-rural divide, teaching hospital status), depression, dementia, and preexisting comorbidities (hypertension, diabetes, and obesity). We also adjusted for the mechanism of disease.
- ❑ Samples were weighed to generate nationally representative estimates.

	30-day in-hospital Survival	Length of Hospital Stay (> median LOS)	Discharge Disposition OR (95% CI)		
	HR (95% CI)	OR (95%CI)	Routine Home Discharge	Skilled Nursing Facility	In-hospital mortality
Opioid Use	1.34 (1.11-1.64)	1.21 (1.14-1.28)	Reference	0.86 (0.80-0.91)	1.39 (1.15-1.69)

RESULTS

- ❑ There were 214,056 opioid-addiction-associated ED visits during the study period.
- ❑ The median age was 39 years (Interquartile range: 30-52 years). Among these patients, 73.0% were White, 14.8% were Blacks, and 8.5% were Hispanics.
- ❑ 21,862 (10.2%) of these patients’ ED visits were on account of unintentional injuries, 3,510 (1.6%) were due to attempted suicides, and 1,7,760 (0.8%) were on account of assaults.
- ❑ There were 1,424 deaths. After adjusting for covariates, opioid addiction remains a significant predictor of attempted suicides (OR=1.60, 95% CI 1.47-1.74, p<0.01), unintentional injuries (OR=2.18, 95% CI 1.96 -2.42, p<0.01) and assaults (OR=1.88, 95% CI 1.67 -2.13, p<0.01).
- ❑ It also remains a major predictor of in-hospital mortality (OR=2.91,95% CI 2.34-3.63, p<0.001).

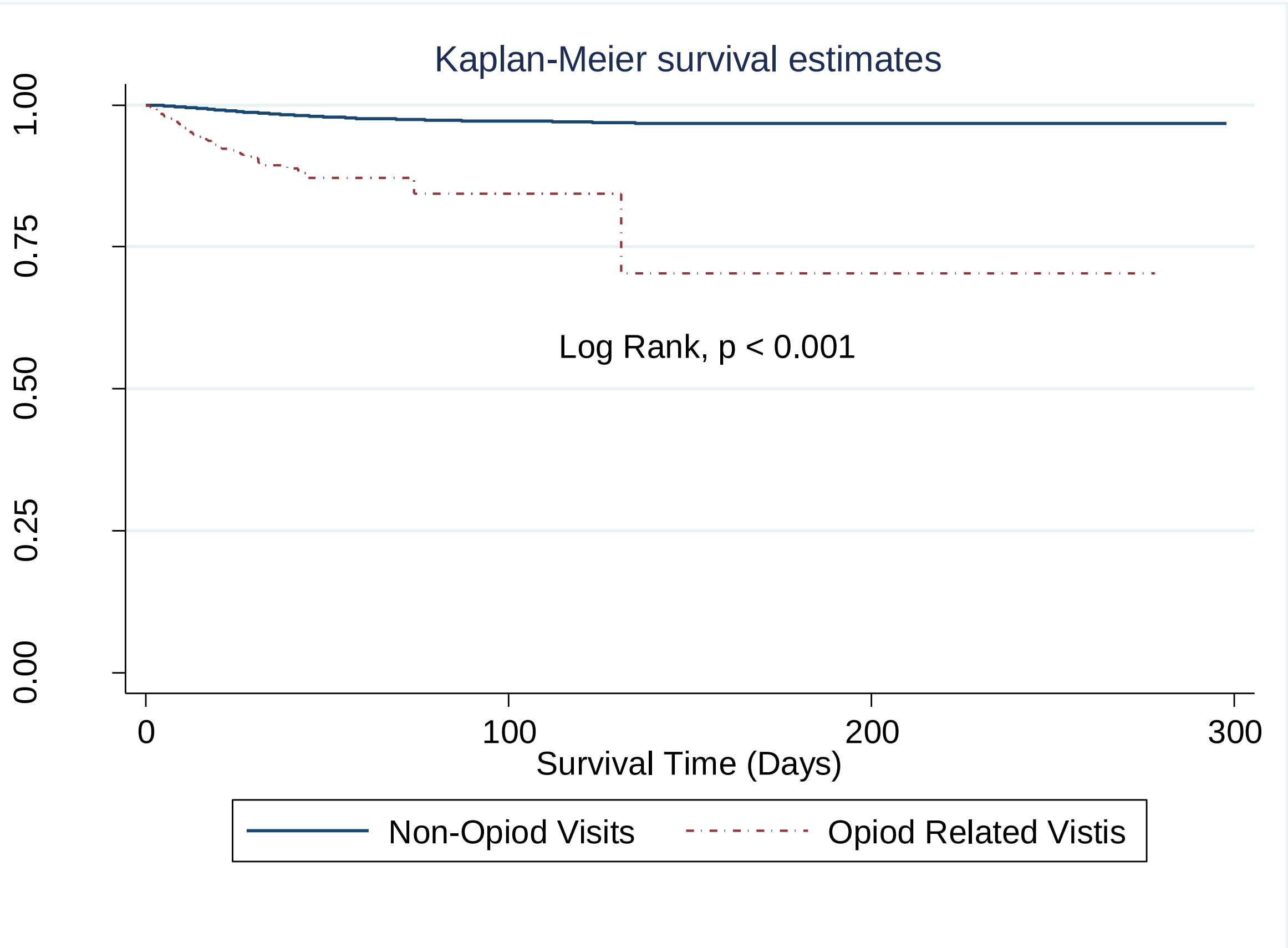


Fig 1. Kaplan Meier plot highlighting the influence of opioid-addiction on survival post- ED visits.

SUMMARY / CONCLUSION

- ❑ This study highlights the significant impact of opioid addiction on women presenting to the Emergency Department (ED) in the United States.
- ❑ The findings demonstrate that opioid addiction is associated with increased rates of attempted suicides, unintentional injuries, and assaults among female patients in the ED.
- ❑ Furthermore, opioid addiction is a major predictor of in-hospital mortality and prolonged hospital stay, indicating its contribution to adverse health outcomes.

Independent Association between Opiod Addiction and Selected Health Outcomes

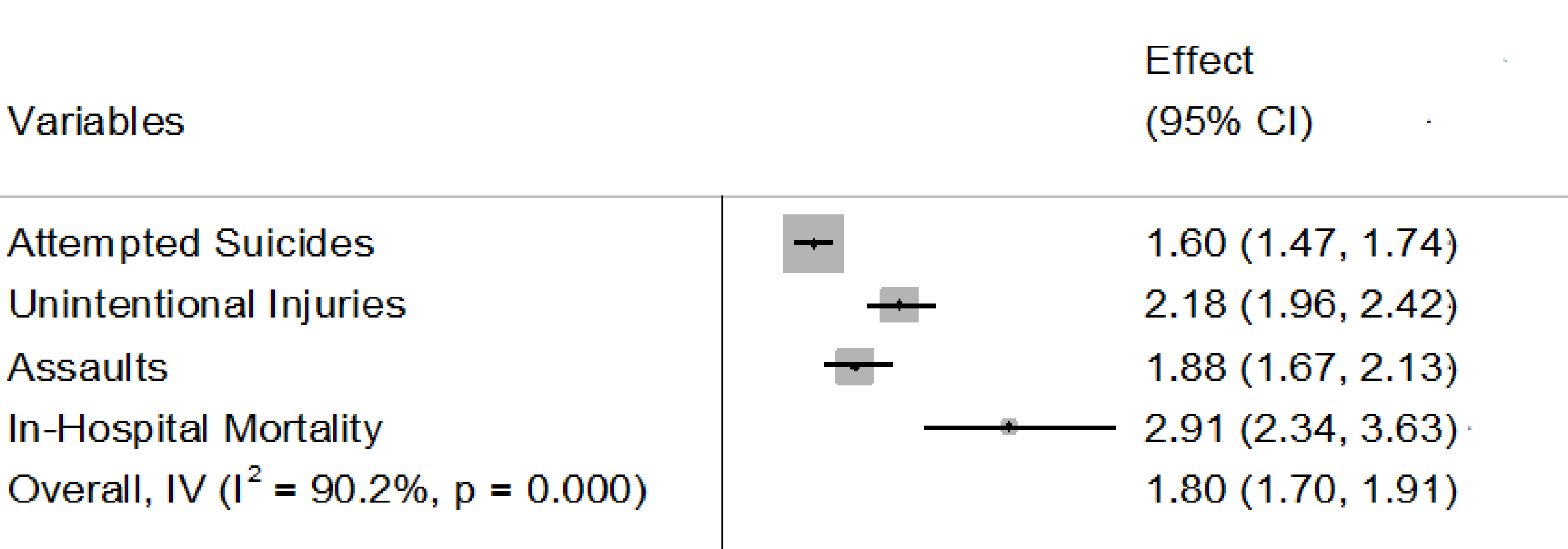


Fig 2. Forest Plot showing the influence of opioid-addiction on selected health outcomes.

POLICY IMPLICATION

- ❑ This study underscores the need for comprehensive interventions to address opioid addiction among women in the United States. Policymakers should prioritize enhanced screening and intervention in ED settings, expand access to evidence-based addiction treatment, foster multidisciplinary collaboration, and implement education and prevention initiatives.

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CONTACT

Dr. Oluwasegun Akinyemi, MD, MPH, FMCOG
Senior Research Fellow,
Howard University College of Medicine
Oluwasegun.akinyemi@howard.edu