

The impact of psychiatric evaluation among patients with Infective Endocarditis and IVDU in the United States; a study of 34 center

Charleston Area Medical Center

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INTRODUCTION / BACKGROUND

We sought to assess the impact of the Behavioral Medicine evaluation among patients hospitalized with infective endocarditis (IE) and have a diagnosis of Intravenous Drug Use (IVDU).

METHODS

- We identified adult patients who had a diagnosis of Infective Endocarditis and IVDU in the TriNetx (Diamond Network) between January 20th2010 and December 31st, 2020.
- Patients were then divided into those who had Infective Endocarditis and IVDU with a Behavioral Consult and those did not.
- We compared all-cause mortality in the two groups as well as secondary outcomes such as HIV rate, HEP C rates and ICU admission rates.

RESULTS

- A total of 5,891 patients were included. Of those 4974 patients (84.5%) had a Behavioral Medicine consult and 917 patients (15.5%) did not have a Behavioral Consult during their initial inpatient encounter.
- Patients in the group that had a Behavioral Medicine evaluation during the hospitalization had statistically significant lower mortality rate during that hospitalization 64 (6.979%) compared to 90 (9.815%) in the group that did not have a Behavioral Medicine evaluation. P-value 0.0286.
- Patients in the Behavioral consult group tended to be more female (44.5% vs 32.6%, P<0.001) and have higher key comorbidities such as Hypertension (40.2% vs 28.79, P<0.0001) Diabetes (16.2% vs 9.5%, P<0.001).

CONCLUSION

In a large multi-national database, data shows lower mortality among patients with IE and IVDU that were evaluated by Behavioral Medicine during their hospitalization compared to patients with IE and IVDU that were not evaluated by Behavioral Medicine despite having higher rate of other comorbidities.

CHARACTERISTICS AND RESULTS¹

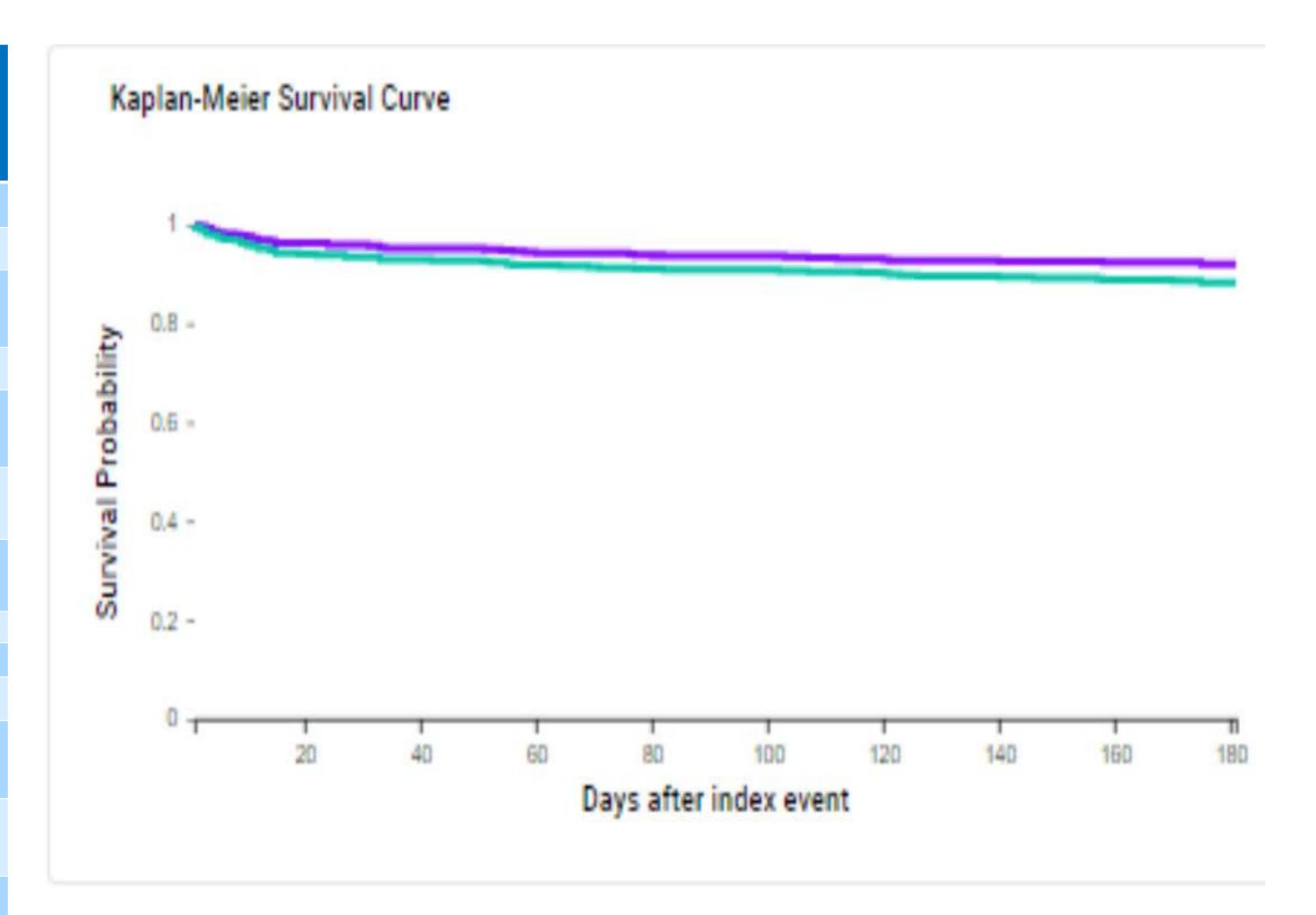
* P-Value is statistically significant

Demographics	IE and IVDU with B-Med consult group; n=4974	IE and IVDU without B-Med consult group; n=917	(P Value)
Age	40 +/- 12.7	40 +/- 12.5	0.9366
Female	2,211 (44.451%)	299 (32.606%)	<0.001*
Male	2,734 (54.966%)	606 (66.085%)	<0.001*
Caucasian	3,825 (76.9%)	671 (73.173%)	0.0147*
African American	725 (14.58%)	150 (16.36%)	0.163
Hispanic	217 (4.36%)	50 (5.45%)	0.145
In-hospital Mortality	347 (6.979%)	90 (9.815%)	0.0286*
HIV	130 (2.62%)	16 (1.75%)	0.2009
Hep-C	884 (17.78%)	142 (15.49%)	0.1879
ICU Admission	981 (19.74%)	194 (21.15%)	0.4527
Hypertension (HTN)	1,998 (40.17%)	264 (28.79%)	<0.0001*
Heart failure (CHF)	955 (19.2%)	136 (14.83%)	0.0018*
Diabetes Mellitus (DM)	805 (16.18%)	87 (9.48%)	<0.0001*
Atherosclerosis	686 (13.79%)	100 (10.91%)	0.0182*
Methicillin-Resistant Staph Aureus (MRSA)	741 (14.89%)	88 (9.59%)	<0.0001*
Stroke	303 (6.11%)	54 (5.89%)	0.8441

SOME OF OUR REFERENCES

1. Gray, M. E., McQuade, E. T. R., Scheld, W. M., & Dillingham, R. A. (2018). Rising rates of injection drug use associated infective endocarditis in Virginia with missed opportunities for addiction treatment referral: a retrospective cohort study. *BMC infectious diseases*, 18(1), 1-9.

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