



CANNABIS USE PREDICTS RISKS OF HEART FAILURE AND CEREBROVASCULAR ACCIDENTS: RESULTS FROM THE NATIONAL INPATIENT SAMPLE

Poster Contributions
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Background: Cannabis use (CU) has recently been legalized in several states for medicinal purposes and remains the most commonly used illicit drug. Cardiovascular effects of CU are not well established as studies thus far have been limited by size. We therefore utilized a large national database to examine the incidence of cardiovascular risk factors and events amongst patients with CU.

Methods: Patients aged 18-55 years with CU were identified in the Nationwide Inpatient Sample 2009-2010 database using the Ninth Revision of International Classification of Disease (ICD) code 304.3. Demographics, risk factors, and cardiovascular event rates were collected on these patients and compared to general population data.

Results: Incidence of heart failure (HF), cerebrovascular accident (CVA), coronary artery disease (CAD), sudden cardiac death, and hypertension (HTN) were significantly higher in patients with CU. After multivariate regression adjusting for age, gender, diabetes mellitus, HTN, CAD, tobacco use, and alcohol use, CU remained an independent predictor of both HF (OR=1.1 [1.03-1.18], p<0.01) and CVA (OR=1.24 [1.14-1.34], p<0.001).

Conclusions: CU independently predicted the risks of HF and CVA in individuals 18-55 years old. With continued legalization of cannabis, potential cardiovascular effects and their underlying mechanisms need to be further investigated.

Table 1: Demographics, risk factors, and cardiac events in patients 18-55 years old with and without cannabis use

	Cannabis Use n=316,397 (1.5%)	No Cannabis Use n=20,499,215 (98.5%)	P value
Demographics			
Age (years)	33.1 (32.9-33.2)	26.3 (26.31-26.35)	<0.001
Male Gender (%)	60	38	<0.0001
Risk Factors			
Diabetes Mellitus (%)	7.0	7.8	<0.0001
Hypertension (%)	19.9	15.7	<0.0001
Tobacco use (%)	47.2	11.4	<0.0001
Alcohol use (%)	28.1	3.8	<0.0001
Obesity (%)	7	6.5	<0.001
Cardiac Events			
Heart Failure (%)	1.4	1.2	<0.01
Cerebrovascular Accident (%)	1.03	0.62	<0.0001
Coronary Artery Disease (%)	5	4.6	<0.0001
Sudden Cardiac Death (%)	0.21	0.17	0.02
Atrial Fibrillation (%)	1.1	1.0	0.08