

# Prevalence of gastrointestinal symptoms in patients with cannabis abuse presenting to the emergency room

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## Introduction

Cannabis is a common recreational drug among young adults that is used to induce euphoria, promote relaxation and enhance appetite. There is a recognized correlation between cannabis abuse and cyclic episodes of nausea, vomiting, and abdominal pain (cannabinoid hyperemesis syndrome). However, the contribution of such symptoms to emergency room visits and hospital admissions is not known

## Methods

A one-year, retrospective study was conducted on patients who presented to the emergency department and were later admitted at Abington Hospital-Jefferson Health with confirmed cannabis use (positive urine drug screen).

## Aim/Goal

Our primary outcome was to understand the prevalence of gastrointestinal symptoms in this patient population. We also studied other indices including other recreational drug use, the level of care, and comorbid psychological illnesses.

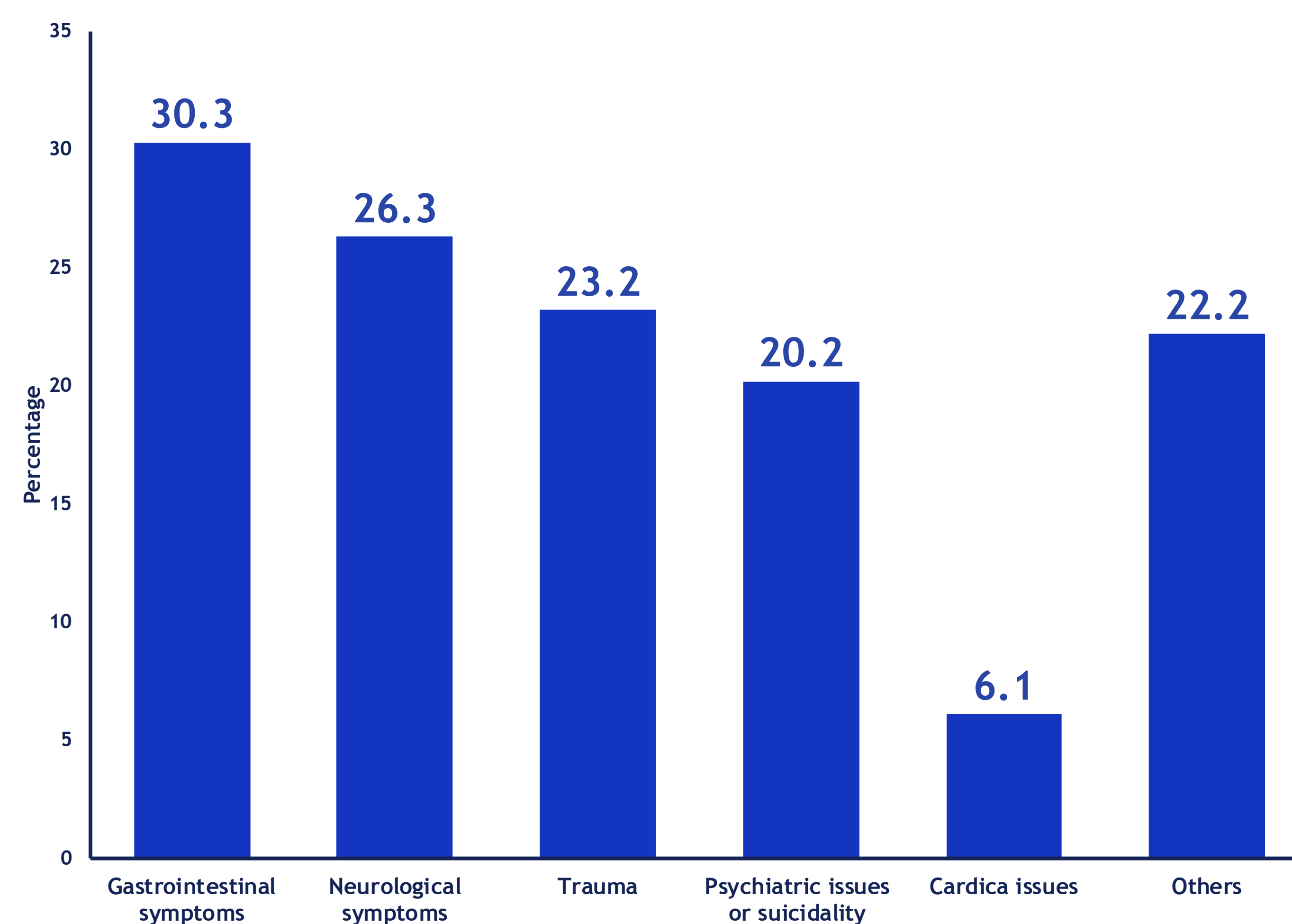
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## Results

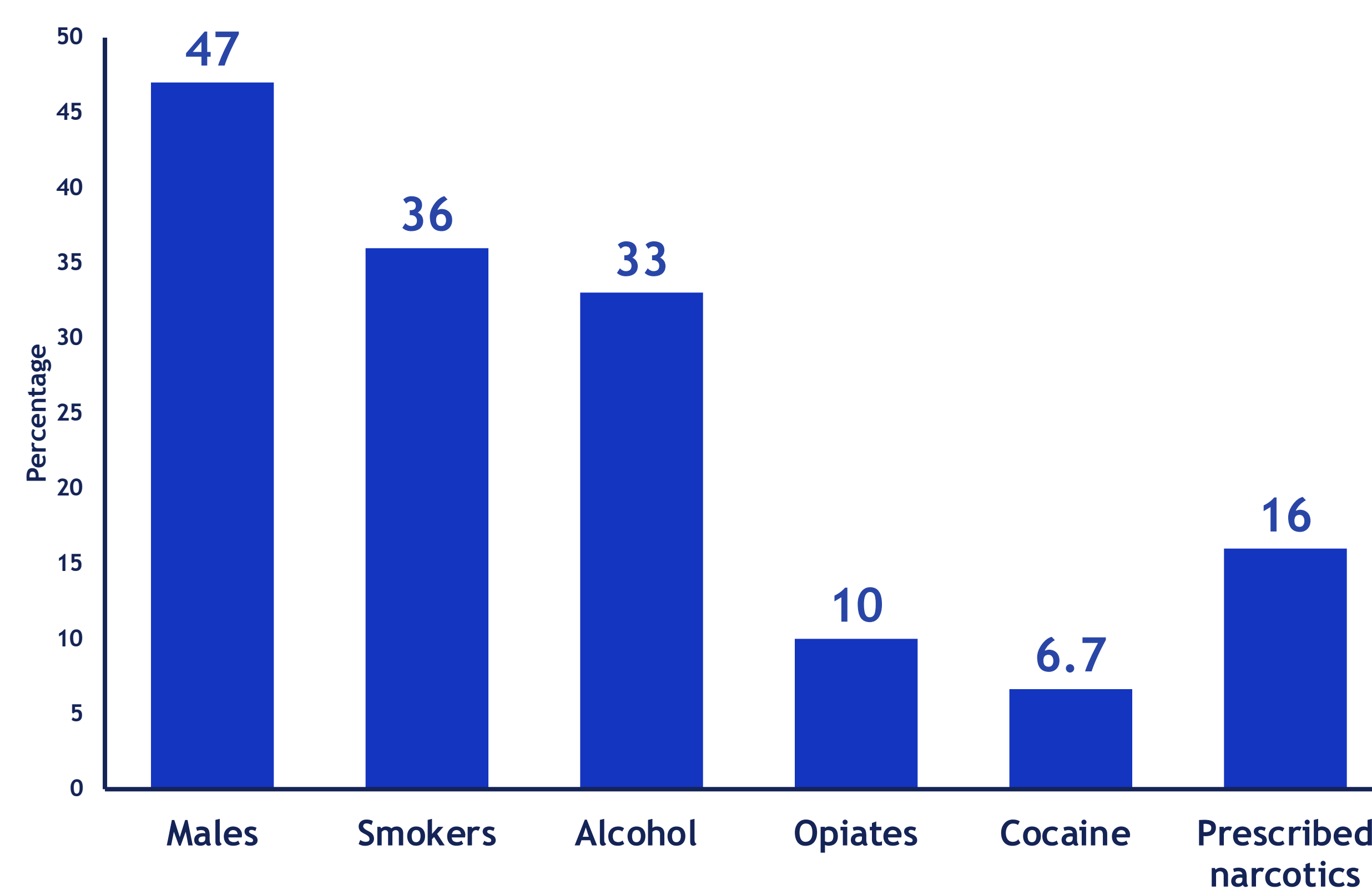
A total of 100 patients were included in the study, 60% were male, 30.3% were admitted with a primary diagnosis of gastrointestinal symptoms (e.g., nausea, vomiting and abdominal pain or cannabinoid hyperemesis), 26.3% with neurological symptoms (i.e., altered mental status, loss of consciousness (LOC) and/or seizures), 23.2% with trauma (i.e., fall or car accident), and 6.1% with cardiac issues. 34% of our patients had no past medical history. Over 50% had at least one psychiatric illness and 38.7% were taking at least one or more antipsychotic medications. Subgroup analysis of our population admitted with GI symptoms (n=30) revealed 47% males, 36% active smokers (vs 34% in total population), 33% admit to alcohol use (vs 40% in total), 10% positive for opiates (vs 18% in total), 6.7% positive for cocaine (vs 8% in total), and 16% are on prescribed narcotics (vs 20.2% total). 27 % of these patients were placed on GMF with tele or higher level of care such as MICU, SICU, or PCU (vs 51% total) and 13.3% received echocardiogram (vs 21.2% total). Interesting results were observed when stratifying patients based on age and type of controlled substance abuse. Marijuana, opiates, and benzodiazepines or barbiturates users were more prevalent in patients 27-36 yrs. of age, with 30%, 33%, and 50%, respectively. While, cocaine, hallucinogens, and amphetamines or methamphetamines users were more prevalent in those aged 26 yrs. or younger, with 37.5%, 100%, and 66%, respectively.

## Conclusion

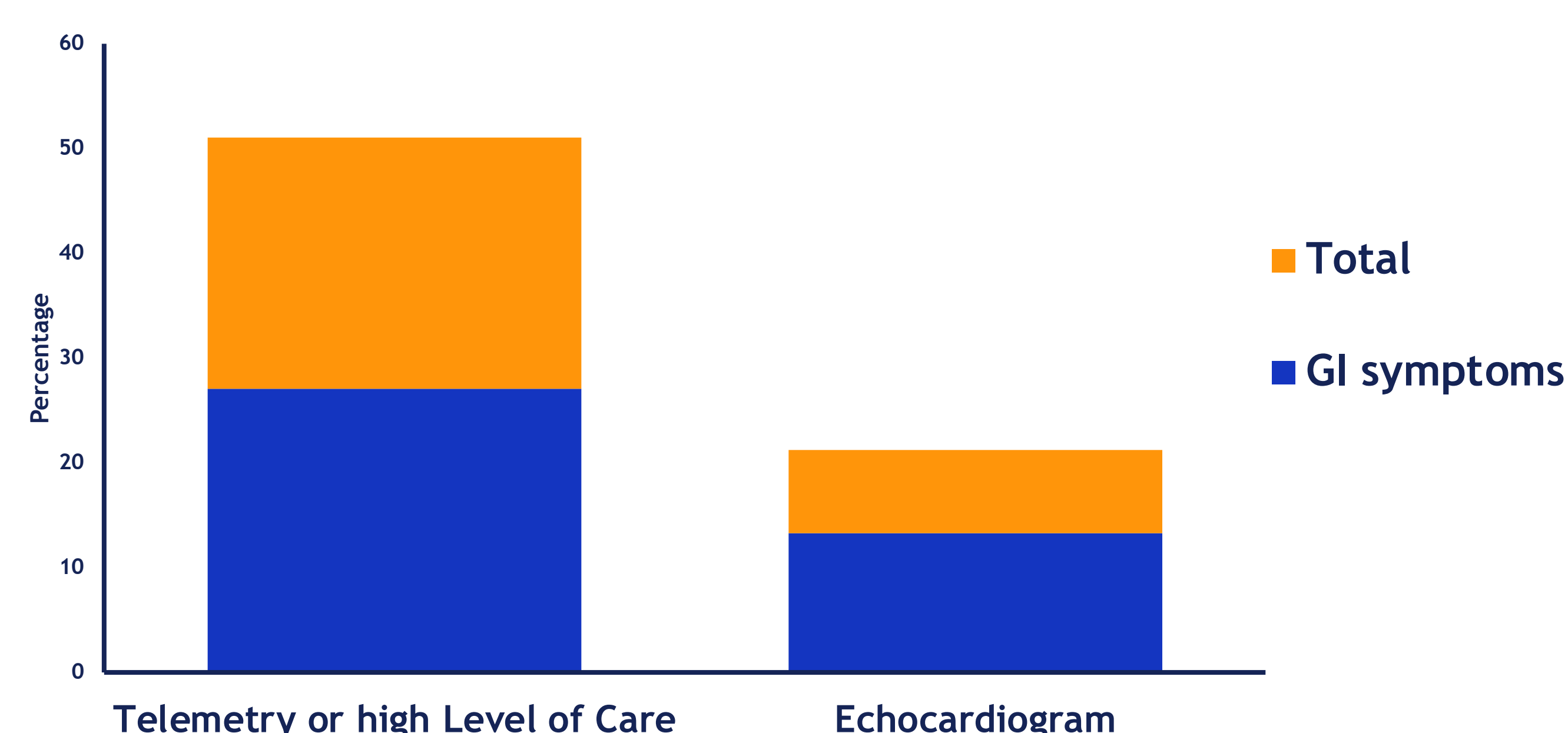
GI symptoms represent an important presenting feature in patients with cannabis abuse likely more than any other presenting features. However, patients with predominant GI symptoms might require lower level of care and less cardiac workup. Additional studies are required to elucidate the significance of GI symptoms in this population of patients further.



Graph 1: Presenting Symptoms in patients with positive UDS for THC



Graph 2: Demographic criteria for patients with THC positive UDS presented with GI symptoms



Graph 3: Level of cardiovascular care for patients with positive UDS for THC presented with GI symptoms