



#6529: Prevalence of Cannabidiol Use in Patients Undergoing Sports Medicine Procedures on the Knee, Shoulder, or Hip: A Survey Study

Sophia Madjarova BA¹, Arjun Khorana BS¹, William Chan MEng^{3,4}, Answorth Allen MD^{1,2}, Riley William MD^{1,2}, Benedict Nwachukwu MD MBA^{1,2}, Alexandra Sideris PhD^{3,4,5}

¹ Department of Sports Medicine, Hospital for Special Surgery, New York, NY, USA; ² Department of Orthopedic Surgery, Weill Cornell Medicine, New York, NY, USA; ³ Pain Prevention Research Center, Department of Anesthesiology, Critical Care & Pain Management, Hospital for Special Surgery, New York, NY, USA; ⁴ Department of Anesthesiology, Critical Care & Pain Management, Hospital for Special Surgery, New York, NY, USA; ⁵ Department of Anesthesiology, Weill Cornell Medicine, New York, NY, USA



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INTRODUCTION

Managing post-operative pain with opioids carries risks, including addiction. A promising alternative gaining attention is cannabidiol (CBD), a non-intoxicating derivative of the cannabis plant that is federally legal in the United States. While current literature predominantly focuses on CBD use among patients undergoing joint replacements, a generally older population,^{1,2} reports from the National Survey on Drug Use and Health indicate that adults aged 18-35 are the most frequent self-reporters of cannabis use.³ This study aims to address this potential gap by reporting on the prevalence of self-medication with CBD in the adult population undergoing elective sports medicine procedures on the hip, knee, and shoulder and subjective effects in this often younger and healthier patient population.

METHODS

After Institutional Review Board approval, an anonymous 27 item questionnaire was designed by the study team with the purpose of collecting patient demographics and information on familiarity with and use of CBD. Specific measures of interest were patient-reported reasons for use and perceived efficacy of CBD on a Likert scale. Questionnaires were distributed through email via REDCap to adult surgical patients who visited 1 of 3 sports medicine orthopedic surgeons at a single, high-volume orthopedic specialty hospital between September 20, 2024, and December 23, 2024. At the time of abstract submission, data collection was still ongoing, and thus preliminary data are presented here.

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Figure 1. Last Reported Use of CBD

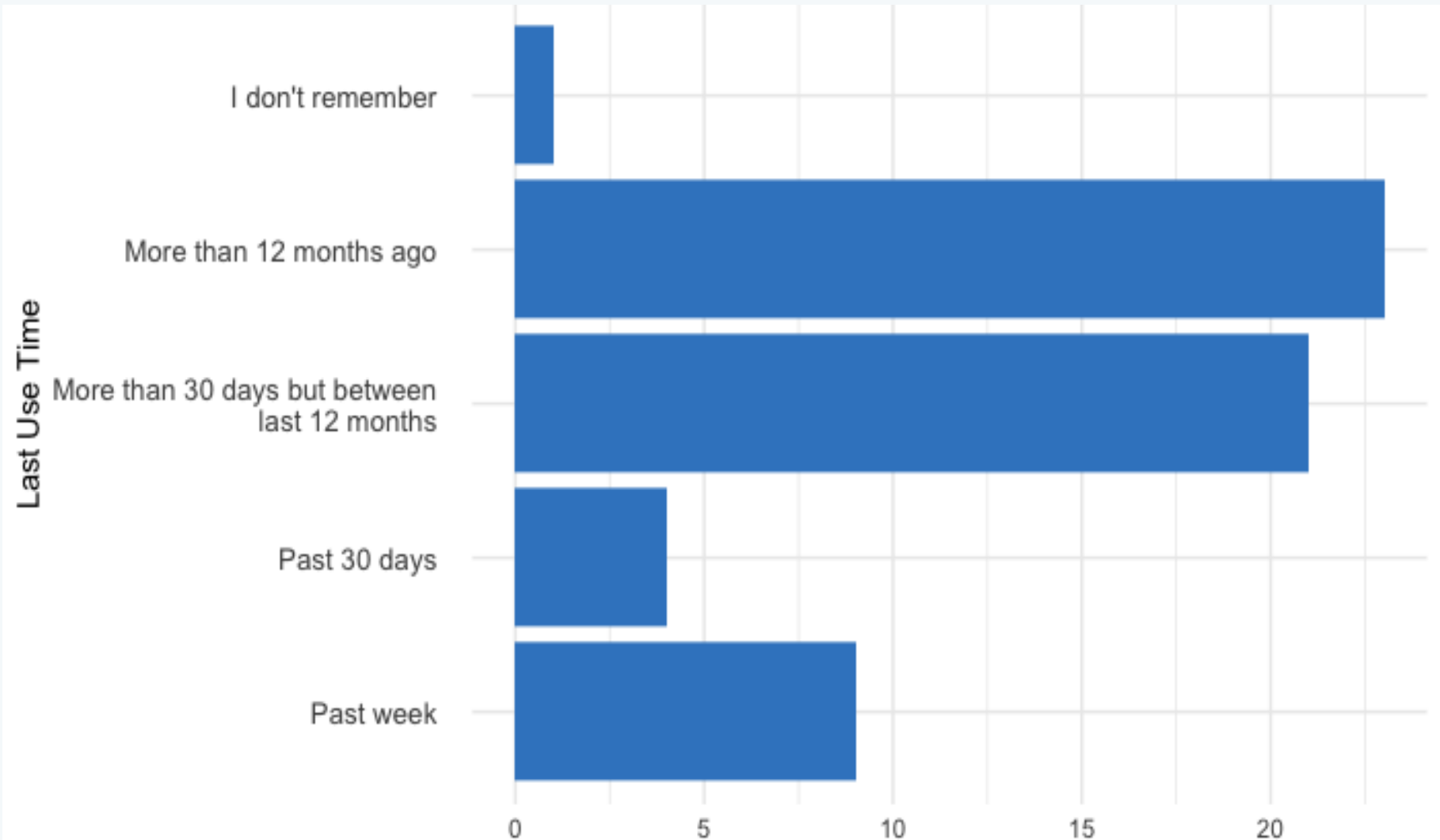


Figure 2. Primary Reason for CBD Use

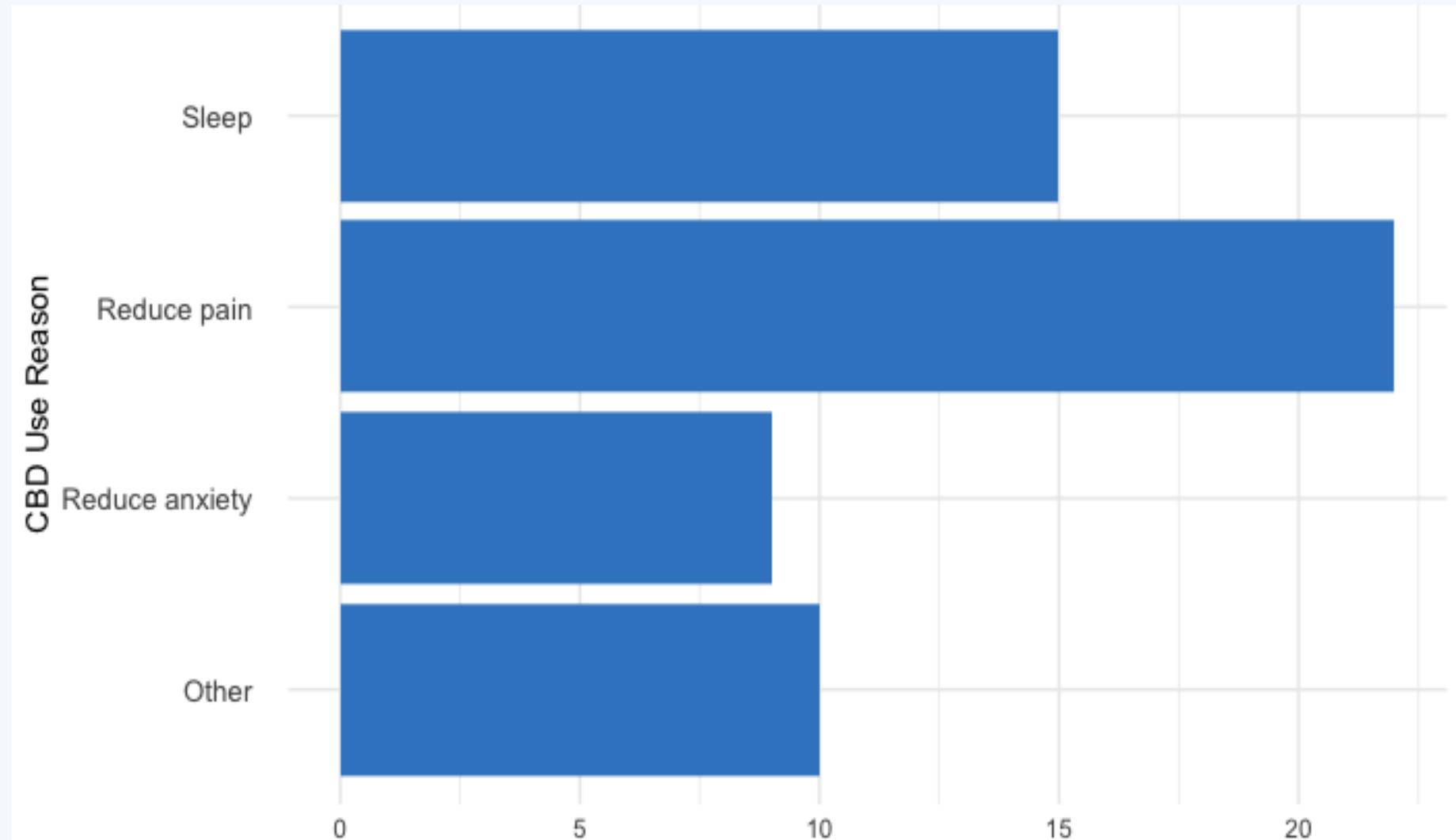


Table 1. Demographic Information Stratified by Self-Reported CBD Use

	Self-Reported CBD Use		p-value
	CBD User	Non-User	
Sex, N (%)			
Female	25 (43.1)	35 (40.7)	0.909
Male	33 (56.9)	51 (59.3)	
Race, N (%)			
White/ Caucasian	42 (91.3)	65 (86.7)	0.5623
African American	0 (0.0)	4 (5.3)	
Asian/Pacific Islander	0 (0.0)	1 (1.3)	
Other	3 (6.5)	4 (5.3)	
Declined to answer	1 (2.2)	1 (1.3)	
Highest Degree of Education, N (%)			
Some high school, no diploma	0 (0.0)	1 (1.1)	0.005
High school graduate (or GED)	3 (5.7)	1 (1.1)	
Some college, no degree	2 (3.8)	11 (12.1)	
Bachelor’s Degree	30 (56.6)	35 (38.5)	
Trade/vocational training	0 (0.0)	2 (2.2)	
Master’s/Doctoral Degree	18 (34.0)	41 (45.1)	

RESULTS

Out of 470 surveys emailed, 159 patients partially or fully completed the questionnaire (34%) of which 144 (91%) had complete data for all CBD related questions (**Table 1**). The majority of respondents were male (58.3%, n=91/156), 38.6% of patients were aged 30 or younger, 74.2% (n=115/155) identified as White and 84.6%(n=132/156) reported having at least an associate or bachelor’s degree. Highest level of education attained varied significantly between CBD users and non-users (p = 0.005) (**Table 1**). Overall, 90% (n=135/150) had heard of CBD, primarily from friends (81.3%, n=109/134) or media (75.4%, n=101/134). Approximately 39.2% (n=58/148) reported ever trying CBD, of which 36.2% (n=21/58) reported last use of CBD more than 30 days but within the last 12 months before the visit. The most frequent route of administration was oral ingestion (“gummies”) (62.1%, n=36/58) followed by lotions or balms (48.3%, n=28) with 43.6% (n=24/55) procuring their products from dispensaries. Most patients reported using CBD to reduce pain (39.3%, n=22/56) or aid with sleep (26.8%, n=15/56), and 33.3% (n=19/57) indicated CBD to be moderately or very helpful.

DISCUSSION

Overall prevalence of self-reported CBD use in survey respondents was 39.2%. Approximately a third used CBD on an as needed basis, with most patients using gummies and preferring to purchase from dispensaries. Primary reasons for use were for pain or sleep. In a study by Deckey and colleagues in Arizona, 19% of respondents reported using CBD prior to their initial visit, 31% reported using CBD on an as-needed basis, most (75%) used topicals, and 22% purchased CBD from a dispensary, highlighting key differences in patient behaviors between two high-volume practices based in different states.⁴ Ongoing data collection and analysis will further elucidate perceived efficacy and changes to prescription medication use with the incorporation of CBD.

References →

