

Adherence and Discontinuation of Prescription Cannabidiol for the Management of Seizure Disorders at an Integrated Care Center

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PURPOSE

Evaluate adherence, discontinuation rates, and reasons for non-adherence and discontinuation of prescription cannabidiol (CBD) during the 12-month post-initiation period at an integrated care center

METHODS

Setting	<ul style="list-style-type: none"> Neurology clinics at a Southeastern United States academic medical center with an integrated health-system specialty pharmacy (IHSSP)
Design	<ul style="list-style-type: none"> Single-center, prospective cohort study Time frame: January 1, 2019 – April 30, 2020
Sample	<ul style="list-style-type: none"> Inclusion: patients prescribed CBD during the study period by the outpatient neurology clinic and dispensed by the IHSSP Exclusion criteria: medication insurance approval and/or fulfillment not managed by the center's IHSSP or participation in a CBD clinical trial

Outcomes:

Adherence: proportion of days covered (PDC)

Reasons for non-adherence defined as PDC < 0.8

Rates of discontinuation

Reasons for discontinuation

Approximately 94% of patients were adherent to prescription CBD therapy.

Prescription CBD was discontinued by 23% of patients.

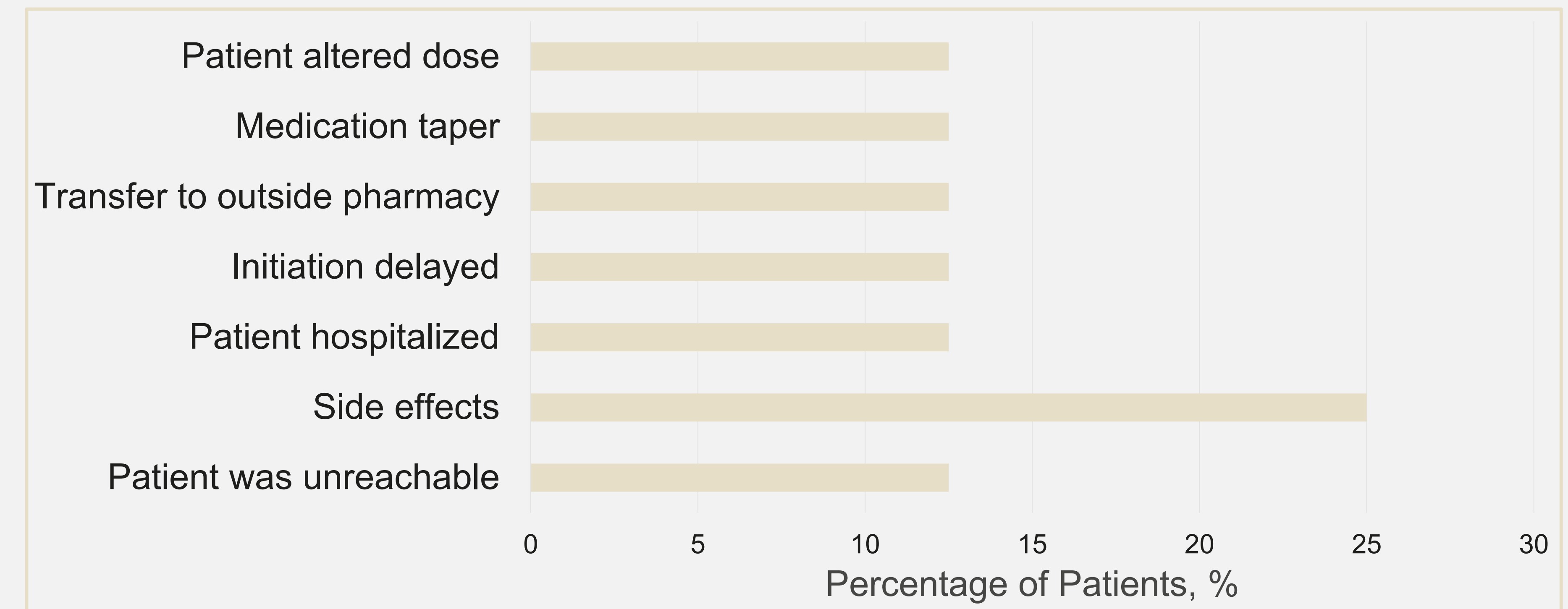
Providers and pharmacists may improve adherence and discontinuation rates by educating patients on timeline of response, adverse effects, and potential need for dose adjustments to balance efficacy and adverse events.

RESULTS

Table 1: Baseline Demographics (N=136)

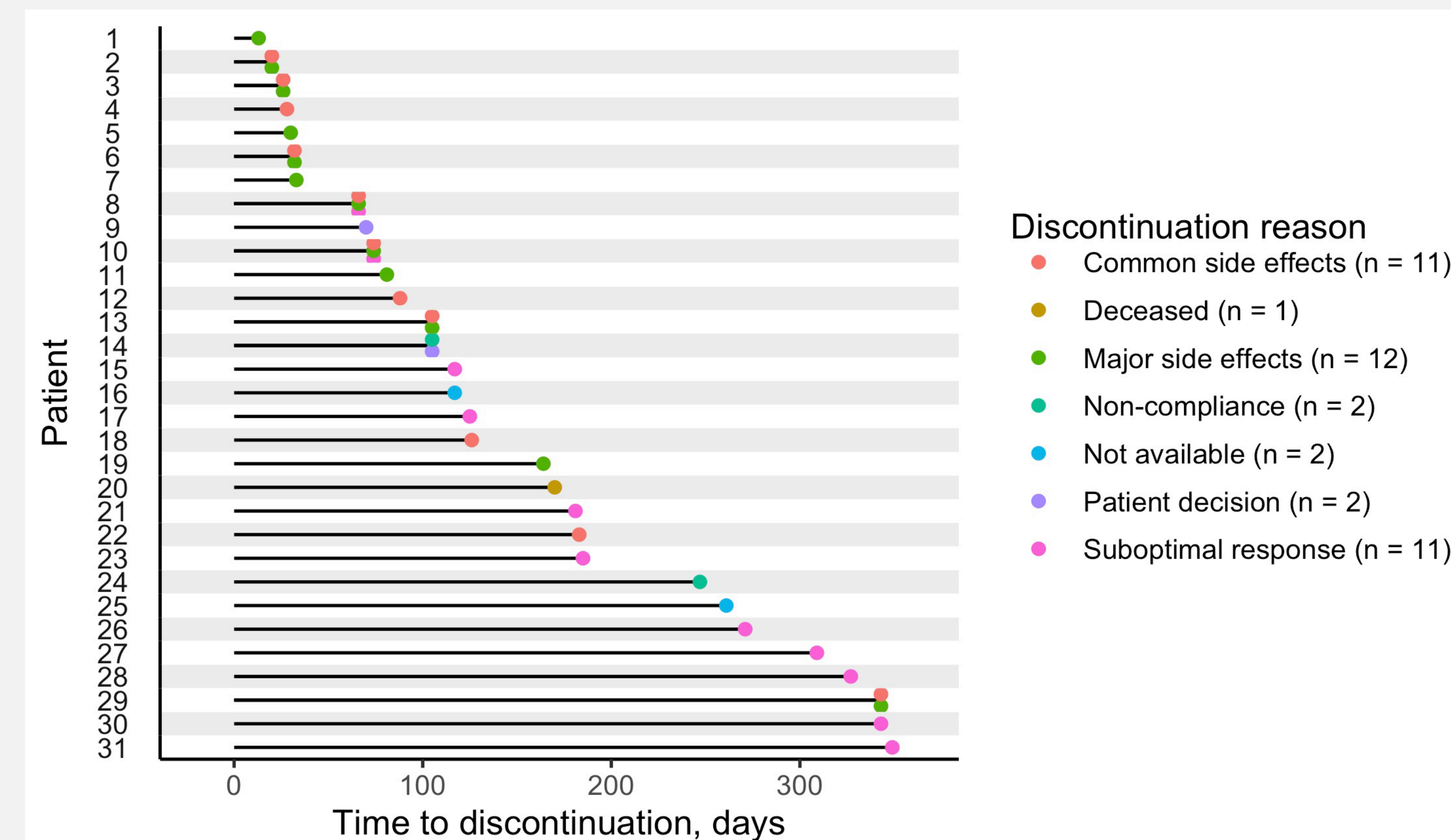
	Pediatric (n=92)	Adult (n=44)
Age, years – median (IQR)	10 (5, 14)	28 (21, 44)
Sex, male – n (%)	49 (53)	19 (43)
Race, white – n (%)	77 (84)	38 (86)
Prior ASM, number – median (IQR)	6 (5, 8)	12 (8, 14)
Prior non-pharmacological treatments – n (%)	40 (43)	28 (64)

Figure 1: Reasons for Non-adherence (n=8)



Among the 128 patients with 3 or more fills, the median PDC was 0.99 (IQR 0.95, 1) with non-adherence seen in 6% (n=8) of patients

Figure 2: Time to Discontinuation (n=31)



Prescription CBD was discontinued by 23% (n=31) of patients within the study period with a median time to discontinuation of 117 days (IQR 68, 216). The most common reason for discontinuation was major side effects (n=12, 29%).

Figure 3: Reasons for Discontinuation (n=41)

