Factors Associated with the Perceived Effectiveness of Marijuana for Anxiety Among People Living with HIV



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Background

- Among people living with HIV (PLWH), the prevalence rates of marijuana use range between 20 to 60%, with more than half using marijuana to manage anxiety symptoms.
- PLWH have reported using cannabis to manage HIVassociated symptoms, such as pain, nausea, lack of appetite, insomnia, anxiety, and depression.
- Not all PLWH perceive marijuana as an effective treatment for anxiety. Understanding which factors are associated with perceived marijuana effectiveness has the potential to improve therapeutic recommendations for PLWH.

AIMS

This study aimed to identify specific characteristics (i.e., demographic and health conditions) associated with perceived marijuana effectiveness among PLWH who reported using.

Methods

This is a cross-sectional study using baseline data from the Marijuana and Potential Long-term Effects (MAPLE) Study.

Measures:

- Demographic characteristics included age, sex, sexual orientation, and other; and health conditions (e.g., physical, mental).
- The effectiveness score was dichotomized into two categories, not very effective (0-8) and very effective (9-
- A total of 187 participants who self-reported anxiety (Yes/No) or had a GAD-7 score ≥ 10, or those who reported using cannabis for anxiety/stress were included in the analysis.

Analysis:

- The descriptive analysis used Chi-Square and Fisher's exact tests for categorical variables (N %) and the Mann-Whitney test for numerical variables (Median IQR).
- The multivariate logistic regression analyses identified characteristics associated with perceived effectiveness using the backward elimination method.

People living with HIV who reported cancer or PTSD were more likely to report marijuana as very effective



Compared to other chronic or mental health conditions

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| Not very effective (<9) | Very effective (9+) | |
|-------------------------|---|--|
| N=84 | N=103 | P-Value |
| 51 (40, 56.5) | 50 (38, 57) | 0.713 |
| | | |
| 25 (29.76%) | 46 (44.66%) | 0.037 |
| 59 (70.24%) | 57 (55.34%) | |
| | | |
| 41 (48.81%) | 65 (63.11%) | 0.050 |
| 43 (51.19%) | 38 (36.89%) | |
| | | |
| · | , | 0.781 |
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| , | | |
| 6 (7.14%) | 5 (4.85%) | |
| 00 (00 050() | 00 (07 400() | 0.000 |
| , | , | 0.688 |
| \ | , | |
| 35 (41.67%) | 41 (39.81%) | |
| | | |
| 8 (9.52%) | 16 (15.53%) | 0.172 |
| 8 (33.33%) | 16 (66.67%) | |
| | | |
| 12 (14.29%) | 4 (3.88%) | 0.038 |
| 12 (75.00%) | 4 (25.00%) | |
| | | |
| 1 (1.19%) | 9 (8.74%) | 0.021 |
| 1 (10.00%) | 9 (90.00%) | |
| | | |
| 4 (4.76%) | 15 (14.56%) | 0.014 |
| 50 (54.35%) | 42 (45.65%) | |
| | 51 (40, 56.5) 25 (29.76%) 59 (70.24%) 41 (48.81%) 43 (51.19%) 13 (15.48%) 16 (19.05%) 49 (58.33%) 6 (7.14%) 26 (30.95%) 23 (27.38%) 35 (41.67%) 8 (9.52%) 8 (33.33%) 12 (14.29%) 12 (75.00%) 1 (1.19%) 1 (10.00%) 4 (4.76%) | N=84 N=103 51 (40, 56.5) 50 (38, 57) 25 (29.76%) 46 (44.66%) 59 (70.24%) 57 (55.34%) 41 (48.81%) 65 (63.11%) 43 (51.19%) 38 (36.89%) 13 (15.48%) 13 (12.62%) 16 (19.05%) 18 (17.48%) 49 (58.33%) 67 (65.05%) 6 (7.14%) 5 (4.85%) 26 (30.95%) 28 (27.18%) 23 (27.38%) 34 (33.01%) 35 (41.67%) 41 (39.81%) 8 (9.52%) 16 (15.53%) 8 (33.33%) 16 (66.67%) 12 (14.29%) 4 (3.88%) 12 (75.00%) 4 (25.00%) 1 (1.19%) 9 (8.74%) 1 (10.00%) 9 (90.00%) 4 (4.76%) 15 (14.56%) |

Results

Bivariate analysis:

perceived marijuana effectiveness for anxiety was significantly greater in women, LGBTQ, and self-report schizophrenia, cancer, and chronic lung disease (p≤0.05).

Logistic regression analysis:

Demographic Characteristics

- PLWH who were LGBTQ (OR 0.26, 95% CI .10 .67) or reported diabetes (OR 0.14, 95% CI .02 -.95), depression (OR 0.37, 95% CI .14-.97), or schizophrenia (OR 0.12, 95% CI .02-.64) were less likely to report marijuana as very effective
- PLWH who reported PTSD (OR 3.7, 95% CI 1.10-12.6) and cancer (OR 11.7, 95% CI 1.1 – 128.5) were more likely to report marijuana as very effective for anxiety.

Discussion

- The current research addresses an important gap in the literature by identifying that PTSD and cancer were associated with perceived marijuana effectiveness among PLWH who reported anxiety.
- Limitations include potential multicollinearity among some of the predictor variables in the logistic regression.