Original Article

The Perceived Stigma of Addiction and Treatment Utilization among Cannabis Addicts in Thailand

Suneerat Yangyuen, Manop Kanato[1], Chatchada Mahaweerawat[2], Udomsak Mahaweerawat

Department of Occupational Health and Safety, Faculty of Public Health, Mahasarakham University, [2]Faculty of Medicine, Mahasarakham University, Mahasarakham, [1]Department of Community Medicine, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

Abstract

Context: A major social problem among clients with substance use disorders is stigmatization related to health conditions, which contributes to poor mental and physical health circumstances and becomes hazardous to substance abuse treatment. Meanwhile, decreased stigmatization among cannabis users might occur because some people use cannabis without experiencing harm or believe it to be a harmless substance and might not be receiving treatment. Several studies have investigated stigma toward substance use disorder and treatment. However, less is known about how stigmatization influences treatment. **Aims:** To investigate the association between the perceived stigma of addiction and treatment utilization among cannabis addicts. **Materials and Methods:** A cross-sectional design was conducted with consecutive sampling techniques among 977 cannabis users recruited from all 7 compulsory drug detention centers in Thailand. The data were collected by standardized interviewers with a structured interviewing questionnaire. Binary logistic regression was applied to determine the effect of perceived stigma of treatment utilization. **Results:** Most clients were male (84.5%), had a family history of drug problems (54.5%), and had a history of mental health problems (5.1%). Most of them reported moderate-to-high levels of perceived stigma (87.2%) and received treatment (28.9%). Greater perceived stigma was associated with decreased treatment for cannabis abuse. **Conclusions:** The perceived stigma of addiction is a barrier to cannabis abuse treatment utilization. Thus, a better understanding of stigma could reduce its negative impact on seeking and engaging in treatment.

Keywords: Cannabis, stigma, treatment

Introduction

Cannabis is the second-most prevalent drug used in Thailand. In 2015, cannabis users (6.7%) were treated in the drug treatment system.[1] Several studies have implied that illicit drug users are the most stigmatized groups and have identified stigma as a barrier to treatment for drugs including cannabis and methamphetamine.[2-4] The stigma can impact feelings and beliefs about treatment and discourage individuals from seeking treatment.[5,6] Thus, investigating the effect of stigma on treatment utilization may help increase access to substance abuse treatment and recovery services. This study aims to determine the association between perceived stigma addiction and treatment utilization among cannabis addicts.

Subjects and Methods

Study population and data collection

This cross-sectional study was conducted from January 2016 to December 2017 at all 7 compulsory drug detention centers (CDDCs) operated by the Ministry of Public Health, Thailand. The eligible clients were drug addicts who had received treatment and rehabilitation under compulsory treatment systems, were diagnosed with cannabis abuse or dependence by the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, were enrolled in cannabis addiction treatment throughout the study period, and were willing to participate, although they were excluded if they provided an incomplete response. The participants who met the eligibility criteria were selected by consecutive sampling techniques. All 977 cannabis users met all criteria, which satisfied the calculation of the sample size using Cochran's formula,[7] which

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Address for correspondence: Dr. Suneerat Yangyuen, Faculty of Public Health, Mahasarakham University, 41/20, Khamriang Sub-District, Kantarawichai District, Mahasarakham 44150, Thailand.
E-mail: suneeratyang1@hotmail.com

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is an estimator of the percentage of drug addicts who reported moderate-to-high perceived stigma (71%) in the study followed by Duangjampha and Kanato[8] and a 95% confidence interval and desired precision of 3%. This accounted for 879 participants, and we then adjusted the sample size for nonresponse or dropout percentages[9] plus 10%. Thus, the final sample size was 977. This study was approved by the Research Ethics Boards of Khon Kaen University and the Princess Mother National Institute on Drug Abuse Treatment (ref no. HE581318).

We adopt the behavioral model of health services utilization to examine the factors associated with treatment utilization. This model comprises three components: predisposing factors, enabling factors, and need factors.[10] Then, data points were gathered by structured interview questionnaires conducted by 14 standardized interviewers of all CDDCs. After receiving the research information, all participants provided written informed consent and were interviewed in a private room.

Measurements

The structured interview questionnaire was composed of three parts as follows:

Part 1: Predictors of treatment utilization encompassed three groups: predisposing factors, enabling factors, and need factors. The predisposing factors included sex, age, education, marital status, and family history of drug problems. Enabling factors included monthly income and occupational status. Need factors included duration of cannabis use and history of mental health problems.

Part 2: Perceived stigma of addiction: We administered the Addiction Stigma Scale for the Thai population developed by Kanato and Leyatikul.[11] The respondents were asked about their beliefs regarding the way others in their neighborhood think about cannabis users. This summed rating scale comprised 30 items across the following 5 dimensions: familiarity, perception of dangerousness, fear, social distance, and community responsiveness (Cronbach's alpha, 0.83). The total scores were calculated by summing the scores across all items (range 16–120), with higher scores indicating greater perceived stigma. Total scores were then categorized into three groups based on tertiles of their natural distributions as follows: low ≤83, moderate 84–93, and high ≥94.

Part 3: Treatment utilization for cannabis-related problems: The clients were asked if they had received any treatment for the use of cannabis in the past 12 months. The type of treatment was either one launched by a government subsidiary (free of charge for clients) or a paid form of treatment, such as a drug rehabilitation facility, mental health center, hospital (i.e. as an inpatient), emergency room or crisis center, doctor's office, and self-help group. An affirmative answer to any of these treatments was designated as having received treatment.

Data analysis

Descriptive analyses were performed for all variable characteristics. Then, the bivariate odds ratio (OR) was computed to examine the relationship among each predictor, the perceived stigma of addiction, and cannabis abuse treatment utilization. The adjusted OR estimated from multivariable logistic regression indicated the association between the perceived stigma of addiction and treatment utilization after adjustments were made for all other predictors. We developed a series model such as model 1; we added perceived stigma and predisposing and enabling factors to the model. In model 2, all need factors were entered into model 1. The statistical significance level was set as a $P < 0.05$, and SPSS version 20.0 (IBM Corp., Armonk, NY, USA) was used for all analyses.

Results

Most of the participants were male (84.5%) and aged 18 years or older (85%); they were employed (72%) and had no history of mental health problems (94.9%). More than half of them had completed primary school or less and had a family history of drug problems. Approximately one-third used cannabis for 3 or more years, 51.9% perceived a high level of stigma, and 28.9% received treatment [Table 1].

Bivariate analyses indicated that moderate-to-high levels of perceived stigma were significantly related to decreased odds of cannabis abuse treatment utilization. In addition, females were less likely to receive treatment; by contrast, those who had a history of mental health problems or family drug problems were more likely to receive treatment. Furthermore, multivariate analyses in model 1 revealed that the association between the perceived stigma of addiction and treatment utilization was similar to that of the bivariate model. Treatment utilization was related to predisposing factors, such as sex, age, and a family history of drug problems, but not to enabling factors. In model 2, need factors were added to model 1. The perceived stigma of addiction remained associated with decreased treatment after adjustments were made for all predictors. A history of mental health problems or family drug problems was related to receiving increased treatment, but was inversely associated with being female [Table 2].

Discussion

The findings showed that clients with greater perceived stigma of addiction were less likely to receive cannabis treatment, which is consistent with the studies of Kerridge *et al*.,[4] van der Pol *et al*.,[6] and Brubaker *et al*.[12] An explanation of such findings is that stigma is one factor influencing substance users' decision to seek and enter treatment as well as cannabis abuse treatment utilization.[2-5] Some studies have found that substance users may experience health-related stigma as a sociocultural process promoted by devaluing, prejudiced, discriminatory, negative perspectives that have labeled users as bad, dangerous, weak, immoral individuals who pose a risk to society. Stigma is a person-level barrier that refers to individuals' attitudes and behaviors that affect health decisions, which lead to avoiding treatment or dropping out prematurely.[2,5,13] Therefore, the stigma may impair treatment utilization in several ways; for example, drug users may seek to avoid the public label and stigmatization

Table 1: Distribution of predisposing, enabling, and need factors by cannabis abuse treatment utilization

	Total (n=977), n (%)	Receive treatment (n=283), n (%)	Not receive treatment (n=694), n (%)
Predisposing factors			
Perceived stigma of addiction			
High stigma	507 (51.9)	115 (40.6)	392 (56.5)
Moderate stigma	345 (35.3)	108 (38.2)	237 (34.1)
Low stigma	125 (12.8)	60 (21.2)	65 (9.4)
Sex			
Female	151 (15.5)	23 (8.1)	128 (18.4)
Male	826 (84.5)	260 (91.9)	566 (81.6)
Age (years)			
≥18	830 (85.0)	238 (84.1)	592 (85.3)
<18	147 (15.0)	45 (15.9)	102 (14.7)
Education			
Primary school or lower	499 (51.1)	136 (48.1)	363 (52.3)
Secondary school or above	478 (48.9)	147 (51.9)	331 (47.7)
Marital status			
Married	393 (40.2)	111 (39.2)	282 (40.6)
Others (single, separated, divorced, widowed)	584 (59.8)	172 (60.8)	412 (59.4)
Family history of drug problems			
Yes	532 (54.5)	181 (64.0)	351 (50.6)
No	445 (45.5)	102 (36.0)	343 (49.4)
Enabling factors			
Occupational status			
Employed	703 (72.0)	196 (69.3)	507 (73.1)
Unemployed	274 (28.0)	87 (30.7)	187 (26.9)
Monthly income (THB)			
<6000	480 (49.1)	146 (51.6)	334 (48.1)
≥6000	497 (50.9)	137 (48.4)	360 (51.9)
Need factors			
Duration of cannabis use (years)			
≥3	592 (60.6)	176 (62.2)	416 (59.9)
<3	385 (39.4)	107 (37.8)	278 (40.1)
History of mental health problems			
Yes	50 (5.1)	26 (9.2)	24 (3.5)
No	927 (94.9)	257 (90.8)	670 (96.5)

THB: Thai baht

of drug abuse and discontinue treatment prematurely or may seek to avoid the negative feelings of shame and guilt about themselves by choosing not to seek treatment.[13-15] Moreover, the levels of stigma associated with each substance vary by social acceptability and its potential harmfulness, and cannabis use has become less stigmatized due to the belief that it is less harmful and has the lowest rates of disapproval compared to those of other illicit drugs. Thus, cannabis users delay seeking treatment and entering into treatment services.[4,16] This finding does not support those of Frischknecht *et al*.,[17] Brown *et al*.,[18] and Mohammed,[19] who found no relationship between stigma and previous treatment attempts. These potential differences might be attributed to the study population, the types of stigma, and the measurement of stigma.

Gender differences in receiving treatment were found, and females were less likely to receive treatment than males, in accordance with the findings of Wu *et al*.,[20] Ilgen *et al*.,[21] Chen *et al*.,[22] and Choi *et al*.[23] One possible explanation is that females are more likely to encounter multiple barriers to drug abuse treatment than males, such as family and partner influence and responsibilities of child care and home care, which may interfere with regular treatment, as well as a lack of support from their partner in seeking treatment, which may decrease their motivation to pursue treatment.[24-26] Another reason is that the fear of treatment and a lack of information about and confidence in the treatment system keeps them from receiving treatment.[25,27-29] Moreover, females were more likely than males to perceive negative consequences of treatment, such as losing their job, friends, or custody of their children, as well as experiencing disrupted family relationships, all of which affected their decision to seek treatment.[27,29,30] An alternative explanation is that female substance users were more highly stigmatized than males, and this heightened stigma led to less interest in seeking treatment.

Table 2: Odds ratios and 95% confidence intervals from logistic regression for cannabis abuse treatment utilization

	Bivariate, OR (95%CI)	aOR (95%CI)	
		Model 1	Model 2
Perceived stigma of addiction (ref: low stigma)			
High stigma	0.31 (0.21-0.47)**	0.36 (0.24-0.54)**	0.35 (0.23-0.53)**
Moderate stigma	0.49 (0.32-0.75)**	0.53 (0.34-0.81)**	0.52 (0.33-0.80)**
Predisposing factors			
Female (ref: male)	0.39 (0.24-0.62)**	0.36 (0.22-0.63)**	0.37 (0.21-0.64)**
Age ≥18 (ref: <18 years)	0.91 (0.62-1.33)	0.59 (0.37-0.92)*	0.68 (0.42-1.11)
Primary school or lower (ref: Secondary school or above)	0.84 (0.64-1.11)	0.81 (0.61-1.08)	0.80 (0.60-1.08)
Marital status (ref: Others)	0.94 (0.71-1.25)	1.00 (0.74-1.35)	0.94 (0.69-1.28)
Family history of drug problems (ref: No)	1.73 (1.30-2.30)**	1.62 (1.21-2.18)**	1.58 (1.17-2.13)**
Enabling factors			
Employed (ref: Unemployed)	0.83 (0.61-1.12)	0.90 (0.61-1.32)	0.86 (0.58-1.26)
Monthly income <6000 (ref: ≥6000 THB)	1.14 (0.87-1.51)	1.13 (0.81-1.59)	1.09 (0.77-1.55)
Need factors			
Duration of cannabis use ≥ 3 (ref: <3 years)	1.09 (0.82-1.46)		1.24 (0.91-1.68)
History of mental health problems (ref: No)	2.82 (1.59-5.01)**		2.56 (1.35-4.83)**

*P<0.05, **P<0.01. OR: Odds ratio, aOR: Adjusted OR, CI: Confidence interval, ref: Reference group, THB: Thai baht

In addition, labels, guilt, and shame were significant barriers to treatment for females.[24,25,29-31] Furthermore, clients with a family history of drug problems received more treatment in this study. Consistent with the findings of Keyes *et al*.,[32] Kenny *et al*.,[33] Tucker *et al*.,[34] and Kerridge *et al*.,[4] showed that families as a pressure structure had been involved in drug users' decision to start therapy, even if they did not consider their drug use to be a problem. The explanation for this finding is that family members of individuals with drug problems hold less stigmatizing attitudes and show positive support to their family, as shown in their involvement in treatment and discussions of their experiences of the family member with a substance use disorder, which would increase the likelihood of seeking treatment.[6,35] In addition, individuals may be learning from a family member who struggles with substance abuse problems, which may motivate them to seek treatment to avoid future consequences of drug abuse.[12] Our results still showed that need factors as a history of mental health problems were associated with receiving treatment. This finding is consistent with those of previous studies, such as Chen *et al*.,[22] Choi *et al*.,[23] Ilgen *et al*.,[36] and Blanco *et al*.,[37] indicating that individuals with comorbid psychiatric and substance use disorders are more likely to receive treatment. A possible explanation is that psychiatric disorders may mediate the relationship between stigma and drug abuse treatment utilization and that individuals who had received treatment had significantly more mental health problems than did those who had never been in treatment.[4,6,38] Another explanation is that there is a greater severity of substance use disorder when it is related to a comorbid psychiatric disorder, and drug users are aware of their symptom severity as a result of prolonged substance abuse, which may lead them to suffer from illness, thus motivating them to enter treatment.[22,39,40]

The obvious limitation of the study is its cross-sectional design, so temporality and causality could not be inferred. This perceived stigma of addiction was assessed by the addiction stigma scale for Thai people, and the findings may differ from those of other people in different contexts. Despite these limitations, our study has the strength of a large sample size and uses a nationally representative sample so that the results can be generalized. This study demonstrated the influence of perceived stigma on treatment among cannabis addicts, a hard-to-reach group. Further, longitudinal studies are needed to delineate the temporal associations between stigma and treatment utilization, as stigmatization appears to change over time. In addition, future research needs to examine the association between stigmatization and substance abuse treatment among other legal or illegal drug users, or how stigma relates to the severity of drug use behavior.

Conclusions

This study revealed that the perceived stigma of addiction was a barrier to cannabis abuse treatment utilization. A better understanding of the stigma experienced by cannabis addicts is necessary to develop targeted programs to reduce the stigma of cannabis use, which might promote treatment utilization.

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Conflicts of interest

There are no conflicts of interest.

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