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Short communication

Facilitators and barriers in treatment seeking for cannabis dependence

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ABSTRACT

Background: Relatively few cannabis dependent people seek treatment and little is known about determinants of treatment seeking.

Methods: Treatment determinants were compared among 70 DSM-IV cannabis dependent patients and 241 non-treatment seeking DSM-IV cannabis dependent community subjects. In addition, perceived facilitators for treatment seeking were assessed in patients, whereas perceived barriers were assessed in 160/241 cannabis dependent community subjects not prepared to seek treatment (precluders), of whom 63/160 showed an objective treatment need, and 30/241 showed a subjective treatment need.

Results: Compared to non-treatment seekers, patients reported more cannabis use (176.9 versus 82.8 joints monthly), more symptoms of dependence (5.6 versus 4.5), higher perceived lack of social support (70.0% versus 41.1%), more pressure to seek treatment (58.6% versus 21.6%), a more positive attitude to treatment, and more previous treatments. In addition, patients reported more mental health problems (internalising disorders 57.1% versus 24.5%; externalising disorders 52.9% versus 35.3%) and more functional impairments (8.4 versus 4.8 monthly days out of role). Cannabis dependent 'precluders' reported desire for self-reliance (50.0%), preference for informal help (22.5%), and absent treatment need (16.9%) as their main reasons not to seek treatment, whereas cannabis dependent community subjects with a subjective treatment need mainly expressed desire for self-reliance (36.7%), treatment ineffectiveness (16.7%), and avoiding stigma (13.3%).

Conclusions: Functional impairment, mental health problems and social pressure are important reasons to seek treatment in people with cannabis dependence. Treatment participation might improve if desire for self-reliance and the preference for informal help are considered, and perceived ineffectiveness of treatment and stigmatisation are publicly addressed.

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1. Introduction

Roughly one in 10 lifetime cannabis users becomes dependent and is at higher risk of adverse outcomes (Agosti et al., 2002; Hall, 2006; Looby and Earleywine, 2007). However, less than a third of all cannabis dependent people seek professional treatment (Agosti and Levin, 2004; Cunningham, 2000; Stinson et al., 2006). This suggests that many in need of treatment fail to get professional care, while timely treatment may reduce the burden of dependence (Danovitch and Gorelick, 2012; Hendriks et al., 2011; McRae et al., 2003). Investigation of the perceived barriers to treatment may help understand why only some seek treatment and many others do not.

Although very little is known about treatment seeking in people with cannabis dependence, available studies suggest that

treatment seeking facilitators include: early onset of cannabis use, previous treatment, comorbid mental disorders and other substance use (Agosti and Levin, 2004; Arendt and Munk-Jorgensen, 2004; Copeland et al., 2001; Gates et al., 2012). Only two studies describe reasons for *not* seeking treatment reported by cannabis users themselves. In the first study, among 25 daily cannabis users who quitted without treatment, the most frequently reported barriers were: cannabis use was not enough of a problem (80%), treatment was not needed to quit (76%) and no treatment seeking to avoid stigma (48%; Ellingstad et al., 2006). However, as they successfully quit, their need for treatment was indeed questionable. The other study among frequent cannabis users identified similar barriers, but at lower rates: thinking treatment is unnecessary (53%), not wanting to quit (23%), unawareness of treatment options (14%) and avoiding stigma (12%; Gates et al., 2012). Again, treatment need can be questioned in this study because frequent users may not have cannabis related problems and most daily users quit or cut down their cannabis use without treatment (Swift

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et al., 2000). Shifting the focus to dependent cannabis users is therefore desirable as they, by definition, experience substantial impairment (Budney and Moore, 2002; Looby and Earleywine, 2007) and thus may report different barriers to treatment. Moreover, comorbidity is an important treatment facilitator and the risk of comorbid disorders is substantially lower among non-dependent compared to dependent cannabis users (van der Pol et al., 2013).

In the present study, we investigate treatment seeking determinants by comparing cannabis dependent patients currently in treatment with non-treatment seeking cannabis dependent users in the community on the following characteristics: cannabis use variables, comorbid disorders, functional impairments and resources. We also explored patients' reasons to seek treatment (facilitators). Similarly, non-treatment seeking subjects were questioned about their reasons not to seek treatment (barriers) with special attention to (a) those who said they would not seek treatment even in the case of cannabis problems (*treatment precluders*), (b) treatment precluders with severe cannabis dependence (>5 cannabis dependence symptoms) and thus having an *objective treatment need*, and (c) cannabis dependent users who thought they needed treatment, but did not seek treatment i.e. with a *subjective treatment need*.

2. Methods

2.1. Samples

Data on non-treatment seeking dependent cannabis users were taken from the baseline assessment of a cohort study on frequent cannabis use (van der Pol et al., 2011). In brief, 600 frequent cannabis users (using ≥ 3 days per week for the past year; aged 18–30 years) were recruited from 'coffee shops' (officially tolerated shops where most Dutch cannabis users buy cannabis; Monshouwer et al., 2011) and through chain referral. From these, we selected subjects fulfilling criteria for 12-month DSM-IV cannabis dependence without addiction treatment in the past year ($n = 241$). Based on two questions posed to all subjects, three (partly overlapping) subpopulations were distinguished. The first question was 'would you seek treatment at specialised addiction treatment services if you had a cannabis problem?'. Those who answered '(probably) not' were labelled '*dependent treatment precluder*' ($n = 160$). A subsample of those with ≥ 5 lifetime dependence symptoms were regarded to have serious cannabis problems and thus as having an '*objective treatment need*' ($n = 63$). Endorsement of the second question whether 'in the past year they had felt the need for professional help with their cannabis problems without seeking treatment?' indicated the presence of a '*subjective treatment need*' ($n = 30$).

Facilitators of treatment seeking were investigated in an additional *patient* sample with the same age range, using similar methods. Seventy cannabis users who voluntarily sought treatment with cannabis as the primary substance were recruited from five specialised addiction treatment facilities through referral by care givers and through posters and flyers in the treatment facilities. Average time in treatment was 17.2 weeks (standard deviation (sd) = 28.8) and all except two were outpatients.

2.2. Assessments

2.2.1. Treatment determinants. *Severity of cannabis dependence:* number of DSM-IV lifetime cannabis dependence symptoms, assessed with the Composite International Diagnostic Interview CIDI 3.0 (Haro et al., 2006). *Cannabis use:* age of first cannabis use and number of joints used in the past four weeks. *Psychiatric comorbidity:* any 12-month DSM-IV mood, anxiety or externalising disorders (ADHD, antisocial personality) assessed with the CIDI. In addition, the 12-month Alcohol Use Disorders Identification Test (AUDIT; Bohn et al., 1995) and any 12-month use of either ecstasy, cocaine, or amphetamines were assessed. *Impairment:* number of days lost from work or other activities in the past four weeks measured with two questions from the WHO Disability Assessment Schedule; 'days out of role' (Von et al., 2008). Mean 12-month cannabis specific impairment in four areas of life (home responsibilities, work/school, friendships, social life) were assessed on scales 0–10 with the Sheehan Disability Scale (SDS; Sheehan, 1983). *Social environment:* (i) perceived lack of social support defined as only moderately or not being able to rely on social network for emotional or practical help; (ii) past year support from friends/family for cannabis related problems (yes; no); (iii) social pressure to seek treatment (yes; no). *Treatment attitude:* participants' estimation of the proportion of people resolving cannabis problems without professional addiction treatment, divided by the proportion that would succeed with treatment (log-transformed). *Treatment history:* lifetime, but not past-year professional mental or substance use treatment.

2.2.2. Perceived treatment facilitators. Patients' primary reasons to seek treatment were assessed with an open ended question. Answers were coded by two researchers into a maximum of three facilitator categories. In addition, a pre-formulated list of 10 reasons to seek treatment was prompted.

2.2.3. Perceived treatment barriers. Dependent treatment precluders were asked an open ended question why they would (probably) not seek treatment. Answers were categorised. In addition, the group with a subjective treatment need was given a pre-formulated list of 11 potential reasons for not seeking treatment.

2.3. Statistical analysis

Non-treatment seeking cannabis dependent users and patients are compared on treatment facilitators using logistic regression. Analyses were adjusted for age and gender because non-treatment seekers were younger and more often male than our patient sample (22.1 versus 25.1 year; 78.8% versus 61.4% male, respectively) and because Dutch cannabis dependent patients in the same age range are on average younger (23.6 years) and more often male (78.4%) than our patient sample (personal communication with an employee from the Dutch national register of addiction treatment). Patients' treatment facilitators and barriers for dependent non-treatment seekers are reported as percentages.

3. Results

3.1. Objective treatment determinants

Compared to dependent non-treatment seekers, patients reported more lifetime cannabis dependence symptoms (5.6 versus 4.5, OR = 1.78, 95% confidence interval [1.39–2.28]), more cannabis use (176.9 versus 82.8 joints per month, OR = 1.01 [1.01–1.02]), more often had internalising disorders (57.1% versus 24.5%, OR = 3.11 [1.69–5.75]) and externalising disorders (52.9% versus 35.3%, OR = 3.19 [1.70–6.02]), had more 'days out of role' (8.4 versus 4.8 days last month, OR = 1.06 [1.02–1.09]); more cannabis specific impairments (mean SDS score: 4.8 versus 2.6, OR = 1.56 [1.37–1.86]) and more often perceived lack of social support (70.0% versus 41.1%, OR = 3.47 [1.83–6.58]).

Unexpectedly, patients did not differ from non-treatment seeking cannabis dependent users on cannabis use age of onset (14.1 versus 14.0 years OR = 0.91 [0.80–1.04]); alcohol problems (40.0% versus 53.1% AUDIT score ≥ 8 OR = 0.71 [0.39–1.29]); and other substance use (42.9% versus 40.3%, OR = 1.06 [0.58–1.95]). Furthermore, patients received more support for their cannabis problems from friends/family (65.7% versus 27.8%, OR = 4.42 [2.36–8.25]), more often perceived social pressure to seek professional treatment (58.6% versus 21.6%, OR = 4.66 [2.48–8.75]), had a more positive attitude towards treatment (45.6 versus 69.6 remission rate without/with treatment, OR = 0.66 [0.48–0.91]) and more previous treatments (61.4% versus 30.7%, OR = 2.33 [1.27–4.28]) than non-treatment seeking cannabis dependent users.

3.2. Perceived treatment facilitators among patients

Impaired mental or physical health was the most frequent spontaneously mentioned reason to seek treatment and this was confirmed by the answers to the pre-formulated list (Table 1). However, there were also some striking differences between both methods to identify treatment facilitators. Dissatisfaction with life and financial considerations were rarely mentioned spontaneously (both 4.3%), while on the pre-formulated list these were frequently reported (84.3% and 60.0%, respectively).

3.3. Perceived treatment barriers among non-treatment seeking cannabis dependent users

The majority of non-treatment seeking dependent users were 'precluders' ($n = 160$, 66.4%), who would probably ($n = 85$, 35.3%) or definitely ($n = 75$, 31.1%) not seek treatment in the case of cannabis related problems. Spontaneously reported barriers for treatment

Table 1
Treatment facilitators: patients' reasons to seek treatment ($n = 70$).

Open-ended	<i>n</i>	%
Impaired mental or physical health	21	30.0
Wanted a better future	13	18.6
Failed to quit alone	12	17.1
Persuaded by others	9	12.9
Functional impairment	9	12.9
Lost interest in cannabis use	8	11.4
Lost everything due to cannabis	6	8.6
Ready to quit	5	7.1
Financial considerations	3	4.3
Dissatisfaction with life	3	4.3
<i>Pre-formulated</i>		
Dissatisfaction with life	59	84.3
Impaired mental health	54	77.1
Functional impairment	44	62.9
Lost interest in cannabis use	43	61.4
Trouble relating to family/friends	43	61.4
Financial considerations	42	60.0
Decreased happiness	42	60.0
Persuaded by family/friends	32	45.7
Impaired physical health/withdrawal	29	41.4
Persuaded by partner	15	21.4

were similar for the total group of treatment precluders and for the subgroup of treatment precluders with an 'objective treatment need.' The most frequent barrier was desire to be self-reliant, followed by preference to seek informal help and thinking that treatment is not needed for cannabis problems (Table 2). Avoiding stigma was reported only by about 8% in both groups. This percentage was slightly higher (13.3%) in non-treatment seeking dependent users with a subjective treatment need, who also more often thought treatment is ineffective. Practical barriers were rarely mentioned spontaneously, but they were endorsed when specifically asked about.

4. Discussion

4.1. Objective treatment determinants

Similar to previous studies of frequent cannabis users, determinants of seeking treatment for cannabis dependent cannabis users

were: cannabis dependence severity, impairment, comorbid mental disorders, and previous treatments. Patients also perceived less social support (while they received more), more pressure to seek treatment and a more positive attitude towards treatment than those not seeking treatment. We found no differences in other substance use or age of cannabis use onset. This is in contrast with the only comparable study (Gates et al., 2012), possibly because that study included many non-dependent users.

4.2. Perceived treatment facilitators

Functional impairment (especially related to mental health) was the strongest perceived treatment seeking facilitator. Hence, attention to dual diagnoses remains a priority, also in mental health settings (Clark et al., 2008). In addition, other factors such as social pressure and financial considerations contributed to treatment seeking. However, the difference in facilitators reported spontaneously and using a pre-formulated list indicate that mental and/or physical impairment are decisive for treatment seeking, while multiple other reasons may just add a little bit to the decision to seek treatment.

4.3. Perceived treatment barriers

The desire for self-reliance was the most important perceived treatment barrier, both for dependent treatment precluders (50%) and for precluders with an 'objective treatment need' (47.6%). Therefore, non-treatment seeking cannabis dependent subjects should be invited for self-reliant interventions. Internet based interventions may be particularly suitable as a recent meta-analysis showed that these low-cost and easy accessible treatments effectively reduced cannabis use (Tait et al., 2013). The second most frequently mentioned treatment barrier was the preference to seek informal help (22.5%). As patients reported less social support while they more often asked for support from their friends/family and perceived more social pressure to seek treatment, the social network of dependent users could be an additional target for interventions. Proven effective examples are the use of Community Reinforcement And Family Training (CRAFT; Roozen et al., 2010),

Table 2
Barriers to seek treatment among dependent precluders, dependent users with objective and with subjective treatment need.

Open-ended	Dependent precluders $n = 160$		Dependent objective $n = 63$		Dependent subjective $n = 30$	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Desire to be self-reliant	80	50.0	30	47.6	11	36.7
Rather seek informal help	36	22.5	11	17.4	2	6.7
Treatment not needed	27	16.9	14	22.2	2	6.7
Treatment ineffective	22	13.8	8	12.7	5	16.7
Avoid stigma	13	8.1	5	7.9	4	13.3
Not for me	10	6.3	5	7.9	1	3.3
Only last resort	9	5.6	3	4.8	0	0
Miscellaneous	15	9.4 ^a	6	9.5	3	10.0
<i>Preformulated</i>						
Wanted to be self-reliant					21	70.0
Treatment is only for severe cases					12	40.0
Problem would resolve spontaneously					12	40.0
Got help from another health professional					9	30.0
Thought nobody could help me					8	26.7
No time/not convenient					8	26.7
No confidence in treatment services					7	23.3
Problems resolved without treatment					6	20.0
Worried about family/friends' opinion					6	20.0
Unaware of options					3	10.0
Access problems					1	3.3
Miscellaneous					8	26.7

Open ended question, categorised into a maximum of 3 barriers. *Dependent*: 160/241 dependent users who would (probably) not seek treatment if they had cannabis related problems. *Dependent objective*: subsample of 63/160 who had ≥ 5 cannabis dependence symptoms. *Dependent subjective*: 30/241 dependent users with a subjective treatment demand.

^a Miscellaneous responses related to time investment, denial of problems, privacy.

Adolescent Community Reinforcement Approach with Assertive Continuing Care (A-CRA/ACC; McGarvey et al., 2012), and Multidimensional Family Therapy (MDFT; Hendriks et al., 2011). The third most frequently reported barrier was: 'treatment is not needed'. Although this may be true for certain (less severely) dependent users, others may still benefit from interventions. Again, these non-treatment seekers may be more willing to accept light versions of traditional treatments, such as e-health or telephone support (Rooke et al., 2013). Finally, participants with a subjective treatment need (i.e. those who thought they need treatment) often felt that treatment is ineffective and wanted to avoid stigma. Communication about the success of current treatments and strategies to tackle stigma may therefore improve engagement in treatment and reduce the current treatment gap.

4.4. Strengths and limitations

To our knowledge, this is the first study to examine barriers to specialised addiction treatment exclusively in dependent cannabis users. However, differences in treatment accessibility and attitudes towards cannabis or cannabis treatment may limit extrapolation of our findings to other countries, although barriers to (other) mental health services in the Netherlands have been found to be similar to those in the USA and Canada (Sareen et al., 2007).

4.5. Conclusions

In the current study, dependence severity, social impairments and comorbid mental disorders were much more prevalent in cannabis dependent patients than in non-treatment seeking cannabis users in the community. The lack of perceived treatment need in the group of non-treatment seeking cannabis dependent users might thus be based on a valid judgement of the objective need for treatment. To test this hypothesis, it is important to prospectively assess whether dependent users correctly self-select into treatment. Especially because Grella and Stein (2013) suggest that substance dependent users enrol themselves in treatment when impairment reaches a critical threshold, and less severe cannabis dependent users, with lower levels of impairment and less comorbidity, show high natural remission (Calabria et al., 2010; White, 2012). At the same time, it would be important to know whether short, low-threshold and non-stigmatising interventions are appropriate for some of these people to prevent escalation, or to slowly engage them in more demanding treatments. Important aspects of such interventions are elements of self-reliance and the use of informal types of care. In addition, a better communication about the nature and treatment success of cannabis dependence is needed and work on destigmatisation should be supported. Finally, benefits could be obtained from the support of families and other social networks of dependent users.

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Contributors

M. van Laar, W. van den Brink, D.J. Korff and R. de Graaf designed the study and wrote the protocol. N. Liebrechts and P. van der Pol collected the data, and P. van der Pol managed the literature searches

and summaries of previous related work, undertook the statistical analysis, and wrote the first draft of the manuscript. All authors contributed to and have approved the final manuscript.

Conflicts of interest

All authors declare that they have no conflicts of interest.

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