

Role of general practitioners in provision of brief interventions for cannabis use-related difficulties

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Introduction

Cannabis is the most commonly used illicit substance worldwide,¹ and contributes to approximately 10 per cent of the burden of disease and injury relating to all illicit drug use in Australia.² Although most users do not require treatment, a minority of individuals suffer from serious health concerns including dependence, and require treatment.³ As cannabis use is so common, this minority represents a significant issue from a public health perspective.⁴ Cannabis users in need of treatment are known to most commonly seek help from a General Practitioner (GP) or other physician.⁵ Importantly, however, research relating to GP-delivered cannabis use interventions is scarce.

One notable exception is an annual cross-sectional study of approximately 1,000 GPs throughout Australia which has been provided since 1998 by the Bettering the Evaluation And Care of Health (BEACH) program.⁶ Frewen et al.⁷ analysed the BEACH data between April 2000 and March 2007 and showed that GPs managed illicit drug use approximately 55,000 times per year and of these, cannabis made up 3.2 per cent of all encounters which specified an illicit drug. The most common response was to offer counselling (approximately 52.7% of cannabis encounters) and referral (approximately 22.5% of cannabis encounters) while recommending a medication for a specific cannabis-related problem was less common (approximately 9.3% of cannabis encounters).

There is initial evidence suggesting that GPs can offer brief and feasible cannabis use screening, intervention and referral.⁸ Unfortunately, the perceived legitimacy of GPs in treating substance use health concerns is unclear, with some GPs in favour of delivering screening and intervention, while others believe their role should be to offer referral to specialist treatments.^{9, 10 11-13} A small body of research has identified four commonly held concerns by GPs regarding the delivery of substance use treatment. First, the content of GP interventions is not well known,¹⁰ and commonly disregarded as ineffective.^{12, 14} Second, GPs report avoiding discussions about substance use due to an anticipated negative reaction from patients or the belief that the patient will not be honest about their substance use.¹² Third, GPs are not typically well trained or resourced to provide substance use interventions and have a limited time to do so.^{9, 12, 14-19} Fourth, GPs may have a negative view of a substance user and find it challenging to intervene on their behalf.^{20, 21}

While the majority of research focuses on the GP's behaviours and attitudes toward substance use intervention and screening, minimal research has investigated the perspective of the client. This scant research highlights that encounters with GPs tend to be perceived as difficult and unproductive for the patient.²²⁻²⁵ Unfortunately, this research does not specify which substances these encounters were associated with, and no research is specific to the clients' perspective on GP encounters regarding cannabis-related concerns.

Two studies were conducted in order to contribute to the limited research on client and GP perspectives on cannabis use screening and intervention. First, a quantitative investigation of a cannabis using client's satisfaction with, and pre-encounter expectations of their GP was conducted via online survey. Additional analyses were conducted to identify factors which were significantly associated with the client's expectation of the GP and their satisfaction ratings. Second, a qualitative investigation targeting the GP's thoughts and experiences regarding cannabis-related presentations in their practice was completed via self-report and face-to-face survey.

Methods

Procedure

Following ethical approval from the University of New South Wales, recruitment for the first study component included online advertisements and poster advertisements placed in University and TAFE medical centres throughout Australia and in New South Wales Cannabis Clinics and several primary-care health clinics. This recruitment began in March, 2011 and was concluded in May, 2012. Interested individuals were asked to complete a brief online questionnaire detailing their most recent encounter with a GP regarding a cannabis-related concern. Those interested were directed to click on a link to the survey from the National Cannabis Prevention and Information Centre website (www.ncpic.org.au). This link would direct the individual to an online information and consent form. Those interested could indicate their consent to participate and continued to a series of screening questions. These questions ensured the interested individuals (n=288) were over 18 years of age (8 ineligible), had smoked cannabis in the previous 12 months (17 ineligible), had a cannabis-related concern or wished to reduce cannabis use (164 ineligible), and had spoken to a GP in the previous 12 months (58 ineligible). Those who did not meet the inclusion criteria were informed that they were ineligible to participate and were redirected to the NCPIC website. Eligible participants (n=41) went on to complete the survey and were given the option to leave contact details for a chance to win a lottery style reimbursement of one of ten \$50 gift vouchers.

Recruitment for the second component began in March, 2012 and was concluded in April, 2012. This recruitment included random presentation to Sydney metropolitan GP clinic reception staff to request an interview with any interested GPs. A total of 80 clinics were targeted and while the majority were too busy or not interested to participate, 32 GPs were interviewed (40% response rate). Paper surveys were generally left with the receptionist or the practice manager for them to pass on.

Surveys

Component one – Online survey

Participant demographic questions were adapted from the National Minimum Data Set for Clients of Alcohol and Other Drug Treatment Services.²⁶ Next, a series of purpose-built questions were asked of participants to identify their experience with their General Practitioner. The remaining questions were taken from validated scales. The Treatment Expectancies Scale²⁷ (a 12-item scale which showed good internal consistency; $\alpha=0.910$) was selected to describe the extent to which the participants felt the GP would be able to assist them with their cannabis-related concern. This scale produced scores ranging from 12 to 120 with higher scores indicating more positive expectancies. The Client Satisfaction Scale^{28, 29} (an 8-item scale which also showed good internal consistency; $\alpha=0.945$) was selected to describe the participants' satisfaction with their GP regarding how the GP responded to their cannabis-related concern. This scale produced scores ranging from 8 to 32, with higher scores indicating greater satisfaction. Finally, the participants indicated on a series of 11-point Likert scales adapted from the Devaluation-Discrimination Scale³⁰

and the Self-Stigma of Seeking Help Scale³¹ to describe the levels of stigma the participants believed is associated with cannabis and injecting drug use, and with accessing the GP, outpatient, or inpatient treatments for cannabis-related concerns (See Appendix A).

Component two – GP survey

A short GP survey was used to obtain information on GPs' views of cannabis use as it presents in their practices and attitudes towards brief interventions. The survey consisted of four sections of purpose built questions – 'GP demographics' (e.g. age, gender, additional training), 'patient demographics' (e.g. proportion of patients screened/have a cannabis-related issue), 'patient presentation' (e.g. what makes the GP think that cannabis is relevant in a consultation) and 'GP recommendations' (e.g. how valuable GPs view cannabis use intervention) (See Appendix B).

Data analyses

The quantitative and qualitative data in this study were analyzed using PASW Statistics 18, Release Version 18.0.0 (SPSS, Inc., 2009, Chicago, IL, www.spss.com). Qualitative data from the GP survey were coded and organised into categories using the open coding techniques from grounded theory.³² The means, medians, range, and standard deviations of quantitative data (and recoded qualitative data) were explored using frequency and descriptive analysis. Additionally, a variable depicting socio-economic status was computed by the addition of three indicators of relative advantage or disadvantage; the presence or absence of employment, tertiary education, and property ownership.³³ One-way analysis of variance was conducted to determine any significant associations between survey variables and the expectations of and satisfaction with the GP encounter. Given the number of analyses conducted and to control for the probability of false positive findings, an alpha level of $\alpha < 0.01$ was considered statistically significant.

Results

Component one – Online survey

Participants

The total sample of 41 participants was 61% male (n=25), and reported a mean age of 35.6 years (SD=13.4). Further demographic details are depicted in Table 1.

Table 1 Participants' demographic details

Demographic factors (n=41)	%	n
Australian born	82.9	34
Aboriginal or Torres Strait Islander	2.4	1
Income		
Full-time	51.2	21
Part-time	19.5	8
Temporary benefit	19.5	8
Other income	9.8	4
Education		
Less than or including year 10	19.5	8
Up to and including year 12	22	9
Tertiary education	58.5	24
Marital status		
Single	58.5	24

Demographic factors (n=41)	%	n
Defacto relationship	17.1	7
Married	24.4	10
Living situation		
Renting	61.0	25
Home owner	29.3	12
Other	9.8	4

The majority of participants smoked cannabis daily (58.5%; n=24) or weekly (19.5%; n=8), with fortnightly (9.8%; n=4), or less frequent use (12.2%; n=5) not as commonly reported.

Approximately three quarters of the sample (73.2%; n=30) reported a concern regarding their use, with the remaining quarter unconcerned but nonetheless interested in reducing their cannabis use (26.8%; n=11).

Participants reported visiting their GP an average of 8.2 times (SD=10.6; range = 1-56) in the past year. The participants' initial discussion involving cannabis use occurred a number of years ago for the majority of participants (56.1%; n=23). Other less common responses included first discussing cannabis with their GP a matter of days ago (4.9%; n=2), weeks ago (2.4%; n=1), months ago (29.3%; n=12), or about a year ago (7.3%; n=3).

Most recent encounter with the GP

The participants' GP was typically operating in a city or metropolitan area (75.6%; n=31), with rural practices less common (24.4%; n=10). Most participants reported having a regular GP (78%; n=32) and it was with this regular GP that cannabis use was discussed (90.6%; n=29).

Approximately half of participants raised their cannabis use concern with their GP unprompted (51.2%; n=21), and around one third raised their concern following prompting from the GP (34.1%; n=14). It was not common for GPs to raise the issue of cannabis use without prior discussion (2.4%; n=1), or with prior discussion (9.8%; n=4). One participant was unsure as to who raised the issue first (2.4%; n=1).

Participants typically did not have any additional substance use concerns when they spoke with their GP about cannabis (58.5%; n=24). A minority of participants also mentioned concurrent: alcohol use (19.5%; n=8), ecstasy use (7.3%; n=3), methamphetamine use (4.9%; n=2), cocaine use (2.4%; n=1), opiate use (4.9%; n=2), hallucinogen use (7.3%; n=3), or tobacco use (9.8%; n=4).

The cannabis-related concern held by the participants was regarding their: mental health (58.5%; n=24), physical health (48.8%; n=20), a need to reduce use (43.9%; n=18), financial issues (22%; n=9), relationship problems (19.5%; n=8), legal problems (9.8%; n=4), use of medical marijuana (7.3%; n=3), or other concerns (4.8%; n=2). In total, the participants reported an average of 2.1 of these concerns (SD=1.1; range 1-6).

Table 2 depicts the different actions that were expected of the GP by the participant pre-encounter and those that were actually enacted by the GP as reported post-encounter. In addition, for each action, those occasions where what the participant expected would happen pre-encounter matched what actually did happen, is presented as a ratio and as a percentage.

Table 2. Expected and actual outcomes in discussing cannabis use with a general practitioner

GP actions	Participants' expectation		Actual GP response		Ratio of expected to actual outcome	
	%	n	%	n	Match (n): no match (n)	Correct matches (%)
Intervention or treatment	24.4	10	7.3	3	2:9	22.2
Referral to counsellor/psychiatrist	29.3	12	34.1	14	6:14	42.9
Referral to D&A	12.2	5	9.8	4	2:5	40.0
Referral to cannabis specific	17.1	7	2.4	1	0:8	0.0
Prescribe a medication	29.3	12	19.5	8	4:12	33.3
Be supportive and listen	63.4	26	34.1	14	12:16	75.0
Chastise me	0	0	12.2	5	0:5	0.0
Just say "don't do it"	0	0	14.6	6	0:6	0.0
Other outcomes	17.1	7	36.6	15	5:12	41.7

Participants' expectations of the GP

The participants reported an average expectation score of 67.5 (SD=26.1) out of 132, indicating that they did not typically have high expectations of the GPs' ability to address their cannabis-related concerns. Expectation scores were consistent regardless of participant demographics or any of the assessed factors relating to the GP encounter (all $p > 0.01$).

Participants' satisfaction with the GP

Participants reported an average CSQ score of 18.5 (SD=6.7) out of 32, indicating low satisfaction with their most recent visit to the GP. In addition, most participants (63.4%; $n=26$) reported that there was something that the GP could have done differently to improve their encounter. The most commonly reported concerns were that the GPs should have had a greater knowledge of the issues (42.3%; $n=11$), offered greater support (38.5%; $n=10$) and spent more time (23.1%; $n=6$).

Two factors moderated satisfaction scores. First, if the GP offered the participant emotional support the participant was significantly ($F_{1,39}=17.3$, $p < 0.001$) more satisfied with the service than those who were not offered emotional support (23.6 [SD=5.2] compared to 15.9 [SD=5.8]). Second, satisfaction with the GP was significantly ($F_{1,39}=35.2$, $t=5.9$, $p < 0.001$) predicted by their expectations of the GP. That is, for every increase in one unit on the GP expectation scale, the satisfaction score increased by 0.2 units ($B=0.176$).

Perceived stigma associated with substance use and substance use treatments

Participants expressed a significantly greater stigma associated with injecting drug use (average score of 15.9 [SD=4.2] out of 22) compared with cannabis use ($t=-8.7$, $p < 0.001$; average score of 10.2 [SD=5.0]). Participants also reported significantly greater stigma associated with utilising inpatient treatment (average score of 21.0 [SD=9.7] out of 44) for assistance with cannabis-related concerns compared to outpatient treatment ($t=-4.0$, $p < 0.001$; average score of 18.1 [SD=8.2]) or visiting the GP ($t=-3.5$, $p = 0.001$; average score of 16.9 [SD=7.5]). No significant difference was observed in the stigma scores relating to accessing outpatient treatment or accessing the GP for cannabis use concerns ($p = 0.253$). These stigma scores were consistent regardless of participant demographics or any of the assessed factors relating to the GP encounter (all $p > 0.01$).

Component two – GP survey

Participants

The majority of the 32 GPs who participated in the survey were over 50 years of age, and most of them had been a GP for more than 25 years. This may be a reflection on younger doctors who may not have felt experienced enough to answer the survey questions – at one GP practice the receptionist said *‘the other doctor didn’t fill out the survey as she didn’t feel that she’s been a GP for long enough to answer these questions’*. It is interesting to note that there was a marked overrepresentation of male doctors compared to female doctors who completed the survey, as the GP practices approached had generally equal numbers of male to female doctors. This may be because female doctors were less interested in completing the survey (perhaps due to a greater likelihood of working part time and therefore being less interested in a non-income generating activity), or that the male doctors had more interest in cannabis-related issues. Around half of the GPs had undertaken additional drug-specific training. Completion of the survey may also have depended on GPs’ perception of the harms associated with cannabis use.

‘Do you think cannabis use is really that big an issue?’

The proportion of GPs who reported screening for their patient’s level of cannabis use varied greatly. The majority of GPs reported screening less than 20% of their patients reporting that – ‘[cannabis was] not routinely screened for’, ‘only on request’ and ‘only if [patients] give history of drug use’. One GP, whilst filling out the survey, asked ‘Do you think cannabis use is really that big an issue?’ This may reflect that many GPs did not consider cannabis to be relevant during their consultations, or that it was not an issue in their practice. GPs with additional training or specialisation in mental health were more likely to screen their patients (80-100% of patients screened). Other GPs screened patients based on age – ‘15-40’, ‘mostly teenagers/young adults’.

Most GPs thought that, ‘very few’ ‘<1%’ ‘very rare’ ‘unknown’ ‘5%’ and ‘none’, of their patients have cannabis-related conditions or are cannabis dependent. Responses to these questions may also depend on GPs’ interpretation of the question, as one GP answered, ‘about half, if you include non-problematic use’ to the question about how many of their patients have a cannabis-related condition.

Patient Presentation

GPs on the whole, thought that cannabis being relevant during a consultation was ‘case dependent’, based on factors such as – ‘young patients’, ‘20-40 years old’, ‘lacking motivation’, ‘male’, ‘history of drug use’, ‘mood changes/behaviour’, ‘erratic lifestyle’ and ‘mental health issues [such as schizophrenia]’. Mental health issues and age were the most commonly reported factors. Regarding bringing up the issue of cannabis use, GPs generally ‘just ask[ed] directly’, ‘asked about drug use as part of general assessment process’ or as part of ‘ETOH and cigarette use’. There was an even distribution of GPs who did and did not think that their patients were seeing them because they had been coerced to. How relevant, and whether or not GPs bring up the issue of cannabis use, may also depend on how valuable they consider cannabis use interventions to be.

GP Recommendations

GPs varied extensively in how they valued GP-delivered cannabis interventions. The responses ranged from – ‘totally useless in teenagers’, ‘not at all to my practice’, and ‘little value’ – to – ‘very important’ and ‘very valuable’. Other GPs mentioned – ‘May be useful if provided quick and effective process for identification and evidence-based treatment’, ‘ONLY valuable if patient accepts it is a problem’ and ‘Well, we have some guidelines from NCPIC, for example, but overall learning to engage with people and practice health promotion is important.’ There was no

observable trend on whether or not older or more experienced GPs viewed cannabis interventions to be more valuable.

If cannabis was found to be an issue, GPs primarily took ‘long consultations’ which lasted approximately ‘20mins’. Referral to alcohol and other drug (AOD) centres, counselling and psychologists were also recommended by most GPs. A few GPs mentioned the Langton Centre (a specialist AOD centre) and CARITAS, the psychiatric service at St. Vincent’s hospital; this may also be due to the proximity of these services to their practice.

The most useful information and effective actions GPs found for their patients included – ‘trust, non-judgmental approaches’, ‘counselling through drug and alcohol centres’, ‘hypnotics and antidepressants (e.g. Avanza ‘mirtazepine’), ‘telling patients the side effects of cannabis’, ‘do not confront or antagonise people’, ‘giving information on difference between hydro [hydroponically grown cannabis] and bush buds [natural product]’, ‘counselling’, ‘referral’, ‘discussion of mental health issues with THC’.

Interestingly, many GPs stated they used Internet websites such as ‘beyond blue’, ‘Reach Out, Headspace’ and ‘Australia’s quitter website’ as resources to assist patients with their cannabis use goals, but were not fully aware of the range of NCPIC resources, such as the NCPIC web-based intervention – ‘[Reduce your use](#)’. Pamphlets were also used by some GPs – for example from NCPIC and other drug and alcohol services at local hospitals. Other resources included ‘educational leaflets and group therapy’ and ‘psychologist referral for support of underlying problems’. Given the vast range of health concerns that a GP has to consider when examining their patients, and the amount of material they receive on many health topics, it is perhaps unsurprising that resources on apparently less prevalent health concerns may attract less attention.

GPs varied in how satisfied they felt their patients were with their interventions. It is important to note that many GPs felt it was ‘difficult to answer’ as they did ‘not have sufficient cases to answer’. For example, a GP reported they have had ‘no such cases in the last 10 years’ where they had to provide a cannabis-related intervention.

Discussion

This study investigated the thoughts and experiences of clients and practitioners regarding cannabis-related presentations in general practice. That is, a total of 41 frequent cannabis users (61% male, with a mean age of 36 years) completed an online survey regarding their access to a general practitioner (GP; typically their regular GP operating in a metropolitan area) regarding cannabis-related health concerns. In addition, a total of 32 GPs (typically males over 50 years) completed a qualitative interview on their experiences with cannabis use presentations. Overall, cannabis users seeking help did not report high expectations of, or satisfaction with, their most recent GP encounter. This encounter was perceived to evoke comparable stigma as accessing outpatient treatment, but significantly less stigma than accessing inpatient treatments. In addition, GPs in the Sydney metropolitan area did not commonly report the belief that cannabis dependence was an issue among their clients and many reported having never intervened with a client presenting with cannabis use problems. Further, the GPs typically did not screen for its use unless the client was male, with an erratic lifestyle and had a history of other drug use, or mental health issues. The frequency of screening was, however, greater among those who reported additional training or specialisation in mental health concerns.

Summary of findings

- GP cannabis use interventions were typically reported to involve counselling across a long consultation (≥ 20 mins) and referral to AOD services and psychologists, as well as to web-based services

- although one quarter of participants expected that the GP would provide a brief cannabis use intervention, only 7% of participants reported that this outcome actually occurred
- cannabis-using individuals did not commonly report high satisfaction with GP-delivered interventions and GPs did not commonly perceive them to be valuable
- open-ended questions revealed that 39% of participants suggested GPs would best improve cannabis-related encounters by showing greater empathy and emotional support
- GPs who reported greater cannabis-related training were also more likely to report offering emotional support for cannabis-using clients
- over one third (37.2%) of cannabis-related presentations to GPs were reported by clients to result in a negative outcome (such as being chastised or receiving a blanket “just stop” message)
- despite a lack of any formally recommended withdrawal medications, 29% of participants expected to receive such a medication and 20% reported being prescribed with a withdrawal medication

Implications

GPs are the most commonly accessed health professionals, which places them in an ideal position to deliver a brief cannabis intervention or make a referral to specific treatments.⁵ Unfortunately, the reality of circumstance is that the majority of GPs are in time-pressured situations where encounters typically last 5-10 minutes and patients do not frequently approach with concerns that are identified to be due to cannabis use. As such, it is unsurprising that GPs largely believed that they did not encounter many patients with cannabis use disorders, less than twenty per cent actually screened for cannabis use and the typical response to a cannabis encounter was to provide referral to non-specific substance use treatments. Finally, there was a great variation in how valuable GPs considered a brief cannabis intervention to be. Clearly, there is a need for increased GP education and training before these health professionals can appropriately take advantage of their positioning and increase rates of GP-delivered screening or referral to existing cannabis specialist services.

Limitations

The findings from this study should be considered in the context of some limitations. First, despite extensive recruitment efforts, the sample size was small for this pilot study. Although the results were largely descriptive, the sample size was limited and analysis of the quantitative online survey by one-way analysis of variance was not adequately powered to include the moderating variables into a single overall model. Second, the external validity of the study may have been compromised by a bias sample of participants. That is, participants of the online survey with more palatable experiences with their GP may have been disproportionately motivated to complete the survey. Further, GPs from smaller practices with more spare time, or greater interest in the qualitative interview may have also been disproportionately motivated to complete the survey. Finally, the GP survey was largely self-completed and face-to-face interviews were infrequent given the nature of GP practice. As such, the self-completed surveys may have been bereft of detail and could have otherwise been improved had the researcher been present. Regardless, the findings are an important first step to including the opinions of patients and GPs in a growing evidence base which identifies a clear need to enhance substance use training and support for GPs.

Conclusions

To summarise, accessing GPs for cannabis-related concerns is common practice among treatment seekers even despite frequent reports of low satisfaction with, and low expectations toward, their encounter. In contrast, the majority of GPs report limited experience with clients presenting with

cannabis-related concerns. Moreover, the assistance typically provided by GPs as described by patients is not consistent with best practice including brief intervention and referral to cannabis-specific services. There is a clear need for the enhanced dissemination of relevant NCPIC information to GPs, and training and support for an increase in screening for cannabis use-related difficulties, intervention and referral. Notably, clinical guidelines advocating this practice have been developed and several links to existing treatment resources are provided below.

Treatment resources

Telephone based information and treatment at the Cannabis Information and Helpline
1800 30 40 50

Resources specific for GPs: <http://ncpic.org.au/workforce/gps/>, GP guidelines <http://ncpic.org.au/workforce/gps/factsheets-for-gps-and-patients/article/gp-guidelines-for-the-assessment-and-management-of-cannabis-use-disorder> and manual for delivering brief intervention <http://ncpic.org.au/static/pdfs/quik-fix/ncpic-quick-fix-treatment-manual.pdf>

Resources for users: <http://ncpic.org.au/ncpic/links/information/>, links to treatments <http://ncpic.org.au/ncpic/links/treatment/>, resources tailored to young people <http://ncpic.org.au/youngpeople/> and self-help booklets <http://ncpic.org.au/static/pdfs/resources/whats-the-deal-on-quitting-a-do-it-yourself-guide-to-quitting-cannabis.pdf>, <http://ncpic.org.au/static/pdfs/training-and-workshops/strategy-workbook.pdf>, <http://ncpic.org.au/static/pdfs/training-and-workshops/quitting-cannabis-workbook.pdf>

Resources for concerned parents: <http://ncpic.org.au/static/pdfs/resources/whats-the-deal-cannabis-facts-for-parents.pdf>, <http://ncpic.org.au/static/pdfs/resources/whats-the-deal-talking-with-a-young-person-about-cannabis.pdf>, <http://ncpic.org.au/static/pdfs/resources/fast-facts-on-mental-health-and-cannabis.pdf>

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