An aerial photograph of a large crowd of people walking on a light blue floor. The image is mirrored across a central horizontal line, creating a symmetrical effect. The people are seen from above, and their shadows are cast on the floor. The overall scene is busy and captures a moment of public movement.

FEBRUARY 2017

BLACK SHEEP

A VOLTEFACE REPORT

Black Sheep: An Investigation into Existing Support for Problematic Cannabis Use

By Lizzie McCulloch

Contributors

Dr Adam Winstock- Consultant Psychiatrist and Addiction Medicine Specialist, Founder and Managing Director Global Drug Survey

Cheryl Irvine - Cannabis Worker, West Lothian Drug and Alcohol Service

Dr Chris Ford- Clinical Director, International Doctors for Healthier Drug Policies

Ben Holden- Young adult worker, Forward Leeds; and Trustee, Kosmicare UK

Claire Brown- Editor, Drink and Drugs News

Dr David Brewster- Lecturer in Criminology, University of the West of England

David Jaggs- Team Manager, Young Person's Substance Misuse Service, FWD

Elizabeth Nyarko- Substance Misuse Practitioner, Young Offender Service, FWD

Prof Harry Sumnall- Professor in Substance Use, Public Health Institute, Liverpool John Moores University

Ian Hamilton- Lecturer, University of York

Jackie Blackburn- Senior Housing Support Worker, Dual Diagnosis Project Worker

Jonathan Liebling- Political Director, United Patients Alliance

Dr Judith Yates, GP Birmingham SMMGP

Lou Boyd- Innovation & Partnerships Manager, Turning Point

Mark Hollingworth- Support Worker, Aspire, Community Links

Dr Mark Monaghan, Lecturer in Criminology and Social Policy, Loughborough University

Nick Hickmott- Early Intervention & Riskit Lead, Young Addaction

Nigel Brunson- Community Manager, HIT

Pamela Cuthill- Senior Young People's Substance Misuse Practitioner (part of the Phoenix Futures Group)

Paul Hayes- CEO, Collective Voice

Paul North- Team Leader, Lifeline

Robert Calder – Researcher, National Addiction Centre, King's College London

Raj Ubhi- National Head of Operations, change, grow, live (CGL) Young People's Services

Russell Webster- Drugs & Crime Specialist & Blogger

Shipon Hussain- Peer Education and Media Manager, Fitzrovia Youth in Action

Dr Will Haydock- Senior Programme Advisor, Public Health Dorset; Visiting Fellow, Bournemouth University

These people have contributed but the conclusions and recommendations of the report do not necessarily represent the individuals' views.

Statistical snapshot

- It has been estimated that 2.6% of the adult population (aged 16 or over) showed signs of cannabis dependence, which is up to 1,150,000 people, though it is expected that the actual number of people who meet the threshold for clinical dependence will be far lower.
- 21% of adults going through treatment are citing cannabis as a problematic substance
- 79.7% of adults listing cannabis as a problematic substance are entering treatment voluntarily
- New presentations among adults for cannabis treatment increased by 55.2% between 2005-2014
- Among adult non-opiate clients accessing treatment, cannabis users were the most likely to have unchanged use at the 6 month review, which equates to 42% of those who entered treatment
- Among people showing signs of cannabis dependence, only 14.6% had ever received treatment, help or support specifically because of their drug use, and 5.5% had received this in the past six months

Executive Summary

Cannabis is a neglected drug in public health discourses, a reality which is at odds with the growing number of people in England who are now seeking support for problematic cannabis use. The disparity of how cannabis is prioritised by drug and alcohol service providers, wider community services, local authority commissioners and public health bodies has limited the amount of support available and impeded quality.

- Among people experiencing problematic cannabis use, there is a perception that their needs will not be effectively met at treatment centres.
- Some drug and alcohol service providers and commissioners are being attentive to cannabis but overall, cannabis has not been appropriately prioritised.
- One to one interventions relating to cannabis are mostly confined to drug and alcohol treatment centres. Wider community services reported that they do not have the capacity or the ability to offer brief, initial interventions.
- There are limited amounts of public resources available, some of which are lacking in levels of quality and accessibility.

A wider structural barrier is that the sector does not have a clear strategy for linking people experiencing problematic cannabis use into support and guidance. With the current illegal and

unregulated market reducing the visibility of cannabis use, practitioners reported that *'we're just fumbling around in the dark trying to find them'*.

Responsibility for change does not just fall to drug and alcohol service providers, and a unified, multi-faceted approach is needed. Evidence of good practice within the sector and contributions from stakeholders and experts has been used to formulate sensible, innovative policy options tailored to the needs of people experiencing problematic cannabis use.

- Research into the social costs of problematic cannabis use by Public Health England would provide justification for commissioners to appropriately prioritise cannabis within treatment. Commissioner specification of cannabis would incentivise providers to utilise existing resources and supply innovations targeted towards people experiencing problematic cannabis use.
- A shift towards holistic service provision and promotion by drug and alcohol service providers and wider community services, would aim to increase interaction and engagement with support.
- A move towards a regulated market would offer a targeted dialogue with people experiencing problematic cannabis use, providing opportunities for harm reduction advice to be delivered at point of purchase and persons in need of support relating to their cannabis use to be linked into reformed public health measures. There would also be the emergence of wider opportunities for more public guidance, packaging controls, products which vary in potency, research into cannabis culture and consumption to improve interventions, and reduced stigma to enable access to services.

Effective support requires public health measures which appropriately prioritise the needs of people experiencing problematic cannabis use and a regulated market which targets these measures to their intended audience.

Background

It should be emphasised that cannabis is not as dangerous as many other drugs (Nutt et al, 2010; Amsterdam et al, 2015), with treatment centres historically focusing on opiates and crack cocaine which have higher associated harms¹. As with many other substances with a potential for dependence and misuse, most people do not develop a problematic relationship with their cannabis use (Hall and Pacula, 2014), but for a proportion of people, usage can become problematic and may stop them from living meaningful and fulfilling lives. It is these people who are the focus of this report².

Scale

The most recent Adult Psychiatric Morbidity Survey has estimated that 2.6% of the adult population (aged 16 or over) showed signs of cannabis dependence (McManus et al, 2016), which is estimated to

1

Adult treatment services in the UK have predominantly targeted problematic opiate and crack cocaine users. This is due both to the historic rarity of cannabis referrals in comparison to other drugs and the development of UK drug treatment policy, which in the 1980s prioritised responses to users of drugs most associated with blood borne viruses (National Treatment Agency, 2010). Attention was given to problematic cannabis use under the Blair government with cannabis specific services being commissioned. This emphasis was reduced in the 2008 Drug Strategy. Though the 2008 strategy supported recovery from all drug use, the implicit focus was on crack cocaine and opiates, particularly the latter (HM Government, 2008).

The 2010 strategy evolved treatment by reducing the focus on acquisitive crime and harm reduction, instead taking a moral position on 'recovery' and the need for abstinence, which was seen as a prerequisite for being a contributing member of society (HM Government, 2010).

² Drug and Alcohol practitioners were asked whether they felt that synthetic cannabinoids were a growing issue within the services. The overall response was that synthetic cannabinoids only affected a very small proportion of their clients and were perhaps more relevant in services which specifically target groups with complex needs where use is more prevalent, examples included ex-offenders and people experiencing homelessness.

be up to 1,150,000 people (Office for National Statistics, 2015)³. Caution should be taken with this figure, however, as the Adult Psychiatric Morbidity Survey defines signs of dependence as responding positively to any one of the five criteria for dependence it lists. It should be noted that responding to three or more of these criteria is closer to the threshold for drug dependence defined in ICD-10. Volteface have issued a Freedom of Information request to establish the figure corresponding to this tighter definition of dependence from the Adult Psychiatric Morbidity Survey, which is expected to be substantially lower than the survey's definition for signs of dependence. The 2015 England and Wales Crime Survey estimates 3.7% of 16-59 year olds in England and Wales are frequent cannabis users, which corresponds to 800,000 people, and only a subset of these will fit ICD-10 criteria for cannabis dependence (Lader, 2016). This is at least an indication of the smaller number of people likely to fit a tighter definition of cannabis dependence.

Explaining Problematic Cannabis Use

The International Statistical Classification of Diseases and Related Health Problems provide widely used clinical definitions of *cannabis use disorders* and *cannabis withdrawal* which have been integrated into the diagnostic criteria for substance misuse (DSM-5) (Genen, Haning and Burns, 2016). However, problematic cannabis use can be more widely defined as 'use leading to negative consequences on a social or health level, both for the individual user and for the larger community' (Preedy, 2016, p.182), with various other concepts encompassed within it such as misuse, abuse, and dependence (EMCDDA, 2008, p.31).

Winstock et al's guide on the assessment and management of problematic cannabis use in primary care (2010) highlights that the patient, will likely be a long term, heavy daily user, who may experience:

- 'Respiratory problems, such as exacerbation of asthma, chronic obstructive airways disease, wheeze or prolonged cough, or other chest symptoms
- Mental health symptoms, such as anxiety, depression, paranoia, panic, depersonalisation, exacerbation of an underlying mental health condition
- Problems with concentration while studying or with employment and relationships
- Difficulties stopping cannabis use

³ Authors of the Adult Psychiatric Morbidity Survey have highlighted that their estimates may be under representing true rates due to socially undesirable and stigmatised feeling resulting in underreporting and the sampling frame only covering those living in private households. It is clarified though that the proportion of people not living in private households would only have a small effect (2014, pp.350-352). Problematic cannabis use will be the preferred term used in this paper but cannabis dependence is also used commonly in the literature. The term cannabis dependence will be used when it is relevant to the methodology of the citation.

- Legal or employment problems (arising from use of cannabis)'

The exacerbation of schizophrenia (Gage et al, 2016), has been the most widely reported adverse effect of cannabis but less attention has been paid to the less severe mental health problems associated with problematic cannabis use, such as anxiety and depression, which are far more common (Curran et al, 2016).

Taylor et al have also concluded that after controlling for tobacco, 'significant respiratory symptoms and changes in spirometry occur in cannabis-dependent individuals at age 21 years, even though the cannabis smoking history is of relatively short duration' (2000, p.1669). The physical health impacts then become more pronounced when considering that the majority of cannabis users consume cannabis with tobacco (EMCDDA, 2016).

There are also wider social difficulties associated with problematic cannabis use, with international evidence cautiously indicating that people who are dependent on cannabis are also at greater risk of downward social mobility and financial difficulties when compared to those who use cannabis but are not dependent. The NZ Dunedin Longitudinal Study (Cerdeira et al, 2016) studied participants from birth to age 38 and found that those with regular cannabis use and persistent dependence experienced downward socioeconomic mobility, more financial difficulties, workplace problems, and relationship conflict in early midlife. It should be noted that this finding was modelled on a small sub-sample as only 23 participants were assessed as being dependent at all study waves.

Chris's story

"For me drugs are all about how a person is brought up. Growing up my parents didn't set boundaries and they didn't educate me to build resilience needed for adulthood. So, like many other of my mates I got drunk for the first time when I was 12, and smoked cannabis at the age of 13.

I was smoking cannabis during my time at the navy as there was plenty of trips ashore where you would be able to smoke, but it was just recreational. It wasn't really till I left the navy that I became a habitual smoker but I would never have considered it a problem, it was just part of the smoking culture.

But it was having a problem on my life. I was smoking and inhaling for longer so in terms of my health it was having an effect and I knew the quantities I was using wasn't good.

I was using cannabis to calm down the other drugs I was taking and I was blocking out the negative consequences of those drugs. It became a substance within all those other substances I had to deal with.

Your life revolves around getting up in the morning and playing cards and having a big spliff with your flatmate. There are other people that can wake up in the morning and take a spliff, but that didn't work for me. All drug taking has risk and cannabis is no different."

Rising demand for treatment

Between 2005-2014, new treatment presentations where cannabis was the primary drug of use have increased by 55.2% (see Figure 1.1)⁴.

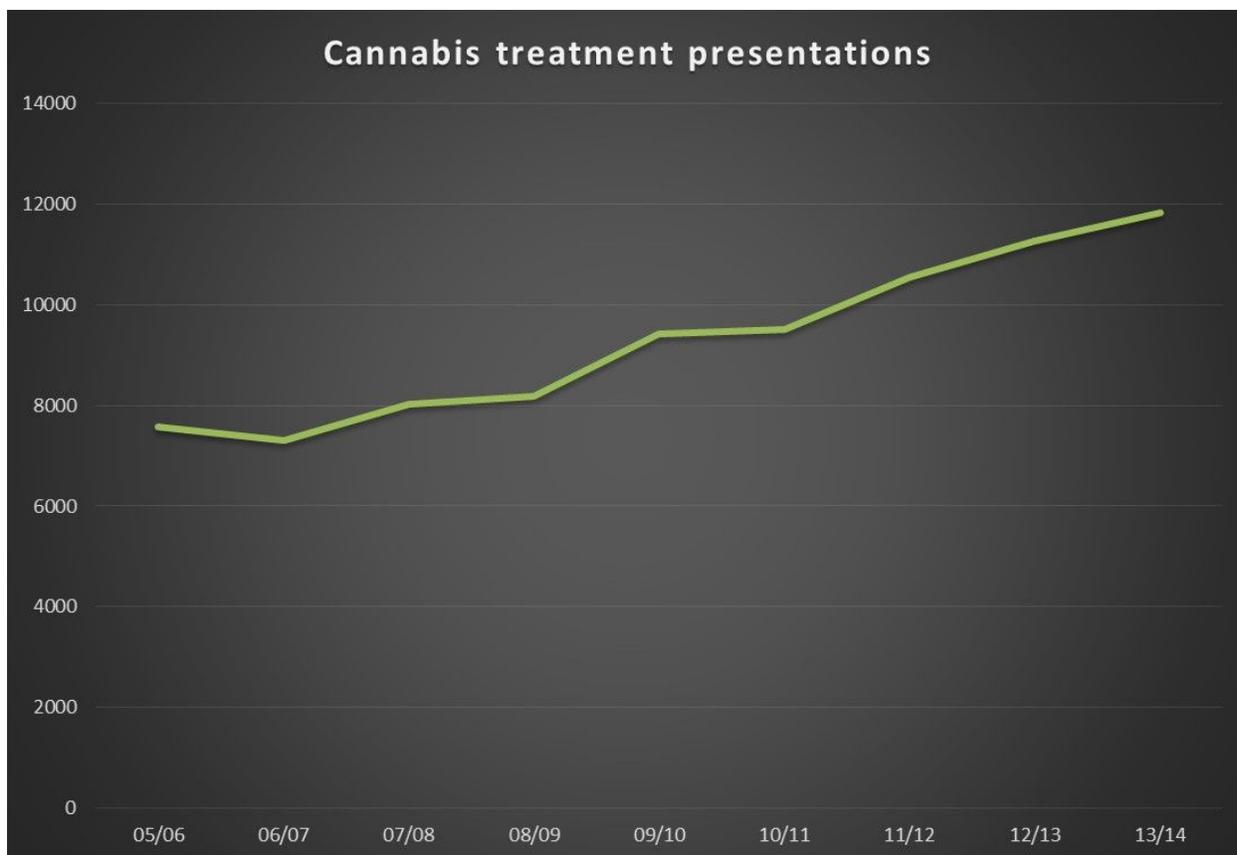


Figure 1.1 (Public Health England et al, 2014a)

There has been no clear agreement on why cannabis referrals have increased in recent years, and though many reasons have been espoused, none have been fully substantiated. Firstly, there is the 'build it and they shall come' explanation, with the argument that additional funding given under the Blair government and a declining number of opiate users in treatment has allowed services to accept more referrals for people experiencing problematic cannabis use.

⁴ Data reflects new treatment presentations rather than proportion of client group citing cannabis as a problematic substance. Cannabis primary presentations for 2014/15 and 2015/16 have not been published though it has been reported that the increase is levelling out.

However, though there was substantial funding given during the Blair government, the rise in referrals continued despite subsequent reductions in funding for cannabis related treatment. Moreover, even though there are fewer opiate users entering treatment, the aging heroin cohort have higher levels of complexities and require more resource and innovation from services to engage in treatment (ACMD, 2016).

The second commonly cited argument is that high potency cannabis use is associated with increased incidences of harm (Curran et al, 2016), with a correlation emerging between prevalence of high potency cannabis and numbers in treatment, as illustrated by Figure 1.2 (Freeman and Winstock, 2015). However, this evidence is not conclusive as there have only been three recorded data points on cannabis potency (Hardwick and King, 2008), and criticisms have been made of the data collection practices (Monaghan and Hamilton, 2016a).

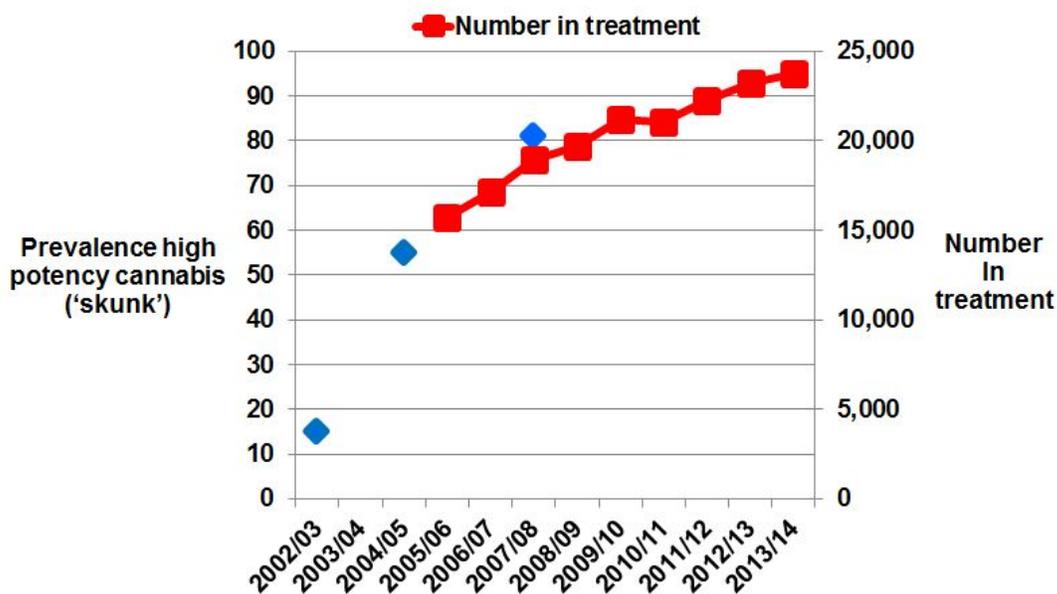


Figure 1.2 (Freeman and Winstock, 2015)

Referral Routes

What is known is that the 79.7% of adults listing cannabis as a problematic substance are entering treatment voluntarily. An FOI request showed that among the clients who cited cannabis as a problematic substance, the majority of referrals came from the client, family and friends (Volteface, 2016, see appendix), with recently released statistics from the National Drug Treatment Monitoring

System also confirming that non-opiate users were most likely to enter treatment voluntarily (Public Health England et al, 2016).

It is worth considering that the proportion of self referrals may be over estimated, as contributors reported that some clients may have been told by probation that they must seek treatment or other action would be taken. However, it was also noted that this example would only reflect a very small number of cases and it was rare for services to receive a referral for non-problematic use. Furthermore, a combined referral source of self, family, and friends does leave unanswered the question of whether significant numbers of clients are coerced by family or friends. While it is possible that some clients are being pressured into treatment, the client group are adults who are ultimately free to make their own decisions. Moreover, even if a person were coerced into treatment, this does not mean that there is no problem, nor that meaningful work cannot take place.

Proportion of client group

Though the increase in clients citing cannabis as a problematic substance is worthy of further investigation, the data which is perhaps of most interest is simply the proportion of people who are citing cannabis as a problematic substance in treatment centres. NDTMS data shows that cannabis accounts for 21% of all problematic substances cited in treatment centres (Public Health England et al, 2016). Contributors highlighted that many clients will be citing other substances such as alcohol, opiates, or crack cocaine, and their cannabis use (even though deemed problematic) might be incidental to them being in treatment. Even though cannabis may not be the primary need for many clients, it is being cited as a problematic substance by a significant proportion of clients and should not be disregarded even if it is a secondary need.

Methodology

Volteface undertook unstructured interviews with a broad range of stakeholders and experts to better understand the public health response these trends. Interviewees were asked how current public health measures were engaging people experiencing problem cannabis use and whether the measures were addressing the full spectrum of need. This paper reports on the key themes emerging from these discussions and consultations. Interviewees were selected through Volteface's network of contacts, including stakeholders who were not engaged with drug policy reform. A limitation to the research is that drug and alcohol service providers are operating in a competitive market and may have been reluctant to disclose information which could be viewed negatively by their commissioners or risk their reputation. To encourage interviewees to speak candidly, contributions have not been attributed to individual persons. Providers who offered specific examples of good practice have been named to enable information sharing within the sector.

After conducting an initial consultation with professionals and identifying key themes, a public survey of open questions was launched, asking people who had experienced a problematic relationship with cannabis, for their opinion on the validity of these findings. The survey received 41 responses⁵.

Drawing from these consultations and wider literature, this paper will examine the public health response to cannabis and identify the barriers and opportunities for effective support. Stakeholders who we believe will find this report useful include drug and alcohol service providers, commissioners, GP's, Public Health England, the Home Office, the Department of Health and the ACMD, with different sections of the report relevant for different audiences. The conclusions of this report are not intended as guidelines for clinicians but rather aim to highlight policies which would improve the public health response to problematic cannabis use. Though wider structural problems, such as cuts to service provision, do impede effective support, only findings which specifically relate to cannabis will be included in the paper. The first section will address how well the current system engages and supports adults experiencing problematic cannabis use, whilst the second section will make practical policy recommendations.

Existing public health measures

The relevant public health measures which emerged in the context of problematic cannabis use, were non-residential treatment centres offering formal support in the community, brief or informal interventions and publicly available resources to be used independently. Different levels of intensity of support are useful as they allow people to engage with the support and guidance which is appropriate to their level of need. Whilst some people may reach their goals relatively independently, others may require more support. The three forms of support will be examined below to assess how effectively they are engaging and supporting people experiencing problematic cannabis use.

Treatment centres

Treatment centres are the most common way in which people access some form of formal support for their problematic use. However, there is a tendency for cannabis to be given a low priority by providers and commissioners. Among people experiencing problematic cannabis use, there is a perception that their needs will not be effectively supported at treatment centres.

Clients

⁵ 28 of survey respondents were male, 2 preferred not to disclose their gender and 11 skipped the question. Though it has been reported that men are most likely to experience problematic cannabis use (EMCDDA, 2013b), women were underrepresented in this sample. There was a greater distribution of age with 25-44 year olds being the most common category, again reflective of the demography of problematic cannabis use (EMCDDA, 2013b).

An overarching theme emerging from an open survey conducted for this report was that people experiencing problematic cannabis use or who had experienced it in the past, are unlikely to perceive treatment centres as somewhere they would go to for help.

Any respondents who had not attended a treatment centre for support were asked how they would feel about attending. The responses revealed there was stigma against heroin users with respondents saying that they would be reluctant to enter a service that is associated with heroin users.

“I wouldn't [go] as these centres are associated with heroin addicts.”

Treatment centres highlighted examples of clients presenting to treatment for cannabis related support, fearing intimidation from other service users or using derogatory language about other service users.

One contributor commented that ‘cannabis users don’t want to mix with users of “harder drugs” as they have preconceived ideas of what kind of people they are’. Another contributor reported that cannabis users have said they ‘don’t want to sit with a bunch of junkies’ and people entering treatment for cannabis would prefer to access a centre which exclusively offers a service to cannabis users.

There was secondly the concern among people that there would be a stigma attached to them if they were to attend a treatment centre. Though there is evidence that cannabis has become normalized in certain sections of society (Monaghan et al, 2016), one respondent highlighted that, ‘it’s still a taboo to be a ‘pothead’ and is still looked at as the dregs of society are the users of this evil.’ Respondents have cited concerns that there would be a record they have used a controlled substance and the adverse impact this could have on their future prospects.

A third barrier to entering treatment was people’s own perception that their cannabis use wasn’t sufficiently problematic to warrant formal support. One respondent replied that if it was suggested that they attend a treatment centre, that ‘even if maybe I did [need it]. I would feel it’s probably a little extreme.’ These findings highlight the perception that the treatment centre model exclusively offers support to users with high complex needs, despite contributors highlighting examples of inclusive services not targeted towards opiate users.

These perceptions that treatment would be an inappropriate place for people experiencing problematic cannabis use coincided with a belief that austerity had reduced the effectiveness of service delivery or that service delivery was generally poor. A recent review of drug and alcohol commissioning has cited increasing concern over the sustainability of drug and alcohol services with commissioners facing uncertainty over resources and reporting concerns about the unstable political environment and how this may potentially impact on services (Public Health England and Association of Directors of Public Health, 2014b).

“Utterly opposed [to treatment] given that I know how poor drug treatment is.”

These responses highlight that the image of treatment centres could do more to appeal and engage people experiencing problematic cannabis use.

Commissioners

Despite rising numbers in treatment, Local Authorities are inconsistently prioritising problematic cannabis use among adults. A review of 12 current LA Drug and Alcohol strategies from across England found that only two Local Authorities raised cannabis as a substance which the borough should address among adults (Rochdale, 2013; Leeds, 2013)⁶. Contributors suggested that commissioners are not prioritising cannabis as it is not clear to them how problematic use has an impact on the wider community in terms of cost. Justifying an investment in an intervention requires the case to be made for how it will save costs for other local services. This lack of awareness can be attributed to the lack of guidance that is offered to commissioners, indeed Public Health England neglected to mention cannabis in its document entitled 'Alcohol and drugs preventions treatment and recovery: why invest?' (Public Health England, 2014b). This omission is in opposition to an ACMD report reiterating that cannabis has 'unquantified, but real, economic costs to society' (ACMD, 2008, p.21).

As drug and alcohol service providers are operating in a competitive market, there is little incentive for them to be attentive to problematic cannabis use and invest in interventions, particularly in the face of shrinking budgets, if there is no stipulation from commissioners for them to do so.

This neglect of cannabis is at odds with the attention commissioners are paying to smoking cessation in treatment centres, in response to research highlighting that smoking rates are far higher among people who require support with their substance use in comparison to the wider population (Cookson et al, 2014). This move reflects a broader trend, with NICE guidelines advising services to identify people who smoke, offer and arrange support, and implement a comprehensive smoke-free policy (NICE, 2013). Public Health England have requested that services begin collecting data on smoking.

It is reasonable for commissioners to pay greater attention to tobacco as smoking is highly prevalent among drug and alcohol users (Public Health England and Turning Point, 2015). However, it is inconsistent for commissioners to only be attentive to tobacco, when cannabis is most commonly consumed with tobacco (EMCDDA, 2016), making the two substances inherently interlinked in a treatment context.

"The only way I could stop smoking cannabis was to stop smoking cigarettes."

Put plainly, if a person is being encouraged to cease smoking, they should also be encouraged to cease using cannabis.

⁶ See appendix for reviewed Local Authority Substance Misuse Strategies.

Treatment practitioners

For the people who enter treatment for problems relating to cannabis, it was highlighted that some practitioners working in adult services will consider cannabis to be a low priority. The neglected state of cannabis has been observed both within and outside of England (Monaghan et al, 2016; Dennis et al, 2002), with contributors suggesting it was typically older practitioners, who had become accustomed to working with opiate or crack cocaine users, who were less likely to acknowledge cannabis as a problematic drug.

“There is a real variety of perceptions and knowledge around cannabis which can be dependent on age. Workers who have been around cannabis are more clued up.”

“Staff attitudes don’t help, they see it as ‘just a joint’ .”

Despite an ambivalence about problematic cannabis use, which is still prevalent in treatment centres, provider and non-provider sources have noted that in the past 2-3 years, high THC and low CBD strains of cannabis have changed practitioner perspectives and the nature of conversations they are having with their clients.

“Cannabis was previously seen as bottom priority but unpleasant new versions have changed the dialogue around cannabis.”

Moreover, one practitioner commented that due to the rise in referrals, there is a greater expectation that problematic cannabis users will enter the service. Out of the four survey respondents who indicated that they had attended a treatment centre, three highlighted that their key worker did recognise that cannabis had become a problem in their life and offered them support which met their needs. The remaining respondent felt that practitioners ‘do not have the experience necessary to empathise with someone who uses a substance as a crutch’. Though these responses highlight some good practice being undertaken in treatment, the response rate is not a representative sample.

Outcomes

When analysing outcomes data for people entering treatment, outcomes for people experiencing problematic cannabis use are relatively poor in comparison to other substances. Cannabis users are most likely to fall into the non-opiate client group and within this category, cannabis users are the most likely to have ‘unchanged’ consumption at the 6 month review and are one of the groups who are most likely to deteriorate. They are also one of the groups who are the least likely to be abstinent at the end of their 6 month review, although not reaching abstinence should not automatically be seen as a benchmark of failure.

By contrast, within the non-opiate category, cannabis users are the group who are most likely to show some level of improvement once hitting the 6 month mark.

The largest reduction of an average day's use was observed for cannabis, though the proportion of days reduced actually showed the smallest drop. Among users of other substances, average days of use drops by more than half, whereas for cannabis users, average days of use drops by less than half. The picture is mixed, and while there is clearly good work being undertaken in treatment, the figures do also show that more could be done to support people with their cannabis consumption (Public Health England et al, 2016).

	Reviewed clients using at start	Average days of use at start	Abstinent	Improve	Unchange	Deteriorate	Average days of use at review
Non-Opiate only	n	mean	%	%	%	%	mean
Crack use	591	12.8	58%	8%	30%	3%	4.7
Cocaine use	2572	9.9	65%	11%	24%	1%	2.5
Amphetamine use	863	14.2	60%	7%	31%	2%	5.6
Cannabis use	5827	22	38%	17%	42%	3%	11.3
Injecting	361	12.9	65%	5%	29%	2%	4.5

Figure 1.3 Outcome data (Public Health England et al, 2016)

Brief interventions

For people who do not engage with formal treatment or feel they do not require formalised treatment, there is an absence of informal, brief interventions for them to turn to.

Informal, brief interventions would most typically occur in a primary care setting, yet contributors have reported that in response to efficiencies, GP's do not have the time to offer these interventions in-house, with a recent BMA survey finding that 57% of GP's find their workload unmanageable (Kirkby, 2016).

“GP's not spending enough time with patients- it doesn't take 8 mins to understand a complex cannabis problem but they are swamped under pressure and don't have the time.”

Contributors also highlighted that GP's have not been given enough training to confidently support a person who is using cannabis problematically.

"GP's should have the knowledge to respond to problematic cannabis use and not just refer to a treatment center."

This is particularly problematic for medical cannabis users who use cannabis therapeutically and who are seeking guidance from their GP on how to manage their unwanted symptoms of cannabis consumption or how to consume cannabis most safely. Medical cannabis users have reported that managing their medical cannabis use has been an individual experience of trial and error.

Jacob's story

"The first time I had a hint of using cannabis as a medicine was in the hospital from the surgeon who performed on me. When he described to me that I would be facing a bit of discomfort in the future, he did the whole smoking gesture, and said if I ever feel a bit uncomfortable, just have a smoke. I thought he meant cigarettes, which didn't make any sense to me; obviously a couple of years later it did make sense.

I see cannabis as useful, as it is able to replace a lot of drugs which have bad effects on patients that take them, like opiates, but I need some support on taking it and how to control the negative side effects that it will, and does, bring. I get anxious, and obviously you lose your short term memory. You can do things to try and make that better, but it does affect your metabolism and it does affect your personality to a certain extent.

GP wise, no one's offered me support, they don't know what they're talking about and I've never met one that does. I've had to teach all my GPs everything they know about cannabis and most of them pushed me onto another doctor."

The situation is similar in non-substance community services, where understanding of how to support a person with their cannabis consumption is still specialised to treatment centres. As problematic cannabis use can encompass and be a symptom of a wide range of needs, the person may already be seeing a professional at a Job Centre Plus, accessing a mental health service or other community service. Yet contributors have reported that wider services are mostly not offering brief interventions, due to the perception that they do not have the capability to offer support relating to cannabis. This is unfortunate when considering there is evidence that brief interventions influence a recipient's likelihood of reporting abstinence, fewer cannabis related problems, and less concern about their cannabis use (Stephens, Roffman & Curtin, 2000; Copeland et al, 2001; Gates et al, 2016).

Publicly available resources

Information and self help resources

There are limited amounts of public resources available for people experiencing problematic cannabis use, with mixed levels of quality and accessibility. There are no leaflets which GP's can offer patients experiencing a problematic relationship with cannabis, though there are NHS webpages on cannabis (NHS Choice, 2014). It was reported that Talk To Frank is one of the sites GP's will signpost their patients to, yet the site was criticised by both practitioners and survey respondents for being filled with misinformation and lacking harm reduction advice.

"The public information cannot be trusted, ask Frank is obvious propaganda."

"Guidance would be helpful, i.e. not getting misinformation (Frank) and getting a positive balanced view from PHE / Govt sites."

"We stopped signposting due to the lack of harm reduction and some misinformation we have found over the years. There has also been a lack of updates, materials and joined up work with policy, health, and other services to promote or produce relevant and up to date information. We'd say that it is okay to have a quick look and reference but to always seek a second and third opinion, and if possible talk to an expert about the specific issue or scenario that is in question."

However, other contributors highlighted that there had been significant improvements to the website in the past few years, with more harm reduction information being offered.

Digital interventions and resources, such as Breaking Free Online, are being used by practitioners, yet contributors have reported that take up has been relatively low among practitioners despite a rise in new sites and recognition that digital interventions are a potentially effective and underutilised resource (Hoch et al, 2016; EMCDDA, 2015).

"I know they're useful [digital interventions] but I prefer to use paper."

"I don't use digital interventions, I'm not aware of them."

New or alternative media forms also have potential to be useful resources, examples including podcasts such as *Say Why To Drugs* (Gage, 2016) and web applications such as *The Drugs Meter* (Winstock, 2014) and *Safer Use Limits* (Winstock, 2015). Such resources could be more widely utilised, although it should be noted that these resources have not yet been independently evaluated for their efficacy, and so their utility is currently unknown.

Forums

A second site that GP's can refer their patients to is a UK based forum entitled 'Marijuana Anonymous'. This is a twelve step programme which offers users the opportunity to 'share your

experience, strength and hope or ask questions about the 12 Steps', with meeting times and public information also publicised. Online forums are useful as they can act as platforms for peer support, which can offer knowledge, social interaction, emotional assistance and practical help (Nesta and National Voices, 2015) for users, families and friends; while restricting incorrect or offensive information. Fitzrovia Youth in Action, a youth action charity, which offers drug and alcohol programmes, recommended peer support as a highly effective intervention for engaging people in support and guidance.

A criticism of the website is that a requirement for membership is the desire to stop using cannabis, which excludes any person who is looking to reduce their cannabis consumption. It is problematic that any benefits to be gained from using this website are advertised as exclusive to people who are seeking abstinence.

Alternatively, survey respondents reported that there is a plethora of useful guidance dispersed through forums within the online cannabis community.

"I generally find online forums to be the best way of delivering information as you can get feedback from other people."

As these forums were driven by people with lived experience, respondents explained that the forums were able to offer balanced guidance relating to cannabis. Research also indicates that anonymised user forums and online chat rooms 'encourage and facilitate information sharing about drug purchases and drug effects, representing a novel form of harm reduction for drug users' (Buxton, 2015, p.1).

However, there is also an issue of access as knowledge of these forums are confined to the online cannabis community, which limits the reach of any useful information and guidance. Moreover, as the information is unregulated, respondents have acknowledged that the quality of the information can be inconsistent, with practitioners reporting that their clients had been misled by information posted on online forums or other unregulated websites, also making them inadvisable sources of information for professionals.

"There is plenty of information [on forums] which should be consolidated into fewer sources of better quality."

There is a need for more accessible and better quality public resources relating to cannabis as practitioners have reported that the normalisation and benign image of cannabis in some communities has led to an acceptance of symptoms of problematic cannabis use (Monaghan et al, 2015). People with lived experience of problematic cannabis use highlighted that there is not enough information available on the negative effects of cannabis and how those effects can be managed, with 14 respondents reporting they thought cannabis was a harmless drug before it became a problem later in their lives.

"I thought what I was smoking was 'natural' which most street cannabis isn't."

Limited available public resources are not meeting the needs of people experiencing problematic cannabis use if they provide inconsistent levels of quality, and can be difficult to access.

Effectiveness of Support in an Unregulated Market

Each of the measures discussed offer different opportunities, yet the current illegal, unregulated market restricts their ability to engage people experiencing problematic cannabis use. As consumption and purchasing is currently an illegal activity, people who consume cannabis are less visible, making it difficult to target interventions and establish a dialogue with those most in need of support.

The Adult Psychiatric Morbidity Survey has highlighted that 'over a third of adults with current signs of dependence on 'other' drugs (36.2%) had received treatment, help or advice specifically because of their drug use at some point'. However, those experiencing cannabis dependence were half as likely to have received support (McManus, 2014, p.3).

Cannabis is a substance which requires a unique response as for other substances with a potential for dependence and misuse, service designs has been implemented which can operate effectively in the current legal framework.

During the interviews, needle syringe programmes were praised by practitioners as they gave drug injecting users a motivation to interact with treatment. Their incentive to enter the centres providing injecting equipment was to receive clean needles but during the interaction, the practitioner could offer harm reduction advice and, if appropriate, directly link them into support services. Reviews have highlighted that needle syringe services effectively offer harm reduction interventions, advice on safer injecting, prevent overdoses and reduce injection risk behaviours (National Treatment Agency, 2008, p.6; Jones et al, 2008, p.30).

By effectively creating a decriminalised space (where service users are not criminalized for using illegal drugs), needle syringe programmes are able to offer incentives for interaction and then utilise this opportunity to offer information, guidance and links to relevant services.

Needle syringe programmes operate successfully within the current legal framework because they are able to offer incentives for people to engage in their services. Yet due to the nature of cannabis and how it is consumed, there is not a similar 'carrot' which can be offered. Cannabis consumers may be interested in testing the potency and quality of their cannabis yet unlike the needle syringe programme, users are not facing an acute health risk if they chose to forego this service.

The few treatment centres who are attempting to link problematic cannabis users into support and guidance are frustrated that their services cannot reliably access cannabis users.

“Right now, we’re just fumbling around in the dark trying to find them.”

Providers reported that they would attempt to offer support and information at festivals and university events, yet they were unconvinced that these attempts resulted in successful engagement. Contributors also questioned whether untargeted outreach was reaching those who are genuinely affected or extending a net and bringing people in unnecessarily.

“Outreach hasn’t been effective as we don’t know where to target.”

There is no clear point of contact for cannabis users and while cannabis use remain hidden, public health responses are at risk of being untargeted.

Those who do have a regular dialogue with cannabis users are people who sell cannabis illegally with the EMCDDA reporting that ‘a significant minority of cannabis users consume the substance intensively’ (2013a, p.31). The people to whom professionals face difficulty offering support, are the same people who will have the most contact with criminal individuals and organisations, as well as being the same people from whom those criminal individuals and organisations stand to profit most. This can lead to exploitation of disadvantaged groups as research has found that frequent cannabis users are more likely to have lower socio-economic background and experience mental health problems (EMCDDA, 2013b).

Slim Pickings

The contributions have revealed that there has been an inadequate public health response to the rising demand of support for problematic cannabis use.

- Among people experiencing problematic cannabis use, there is a perception that their needs will not be effectively supported at treatment centres.
- Some drug and alcohol service providers and commissioners are being attentive to cannabis but overall, cannabis is not being appropriately prioritised.
- One to one interventions relating to cannabis are mostly confined to drug and alcohol treatment centres. Wider community services reported that they do not have the capacity or the ability to offer brief, initial interventions.
- There are limited amounts of public resources available, some of which are lacking in levels of quality and accessibility.
- Attempts to target public health measures to people experiencing problematic cannabis use can be best described as a shot in the dark, with the current illegal and unregulated market reducing the visibility of cannabis users.

Turning on the Light

Supporting problematic cannabis use requires a two stage approach: reforming existing public health measures to appropriately prioritize the needs of problematic cannabis users and the introduction of a regulatory framework that links these public health measures to their intended audience.

Prioritisation

Since the dissolution of the National Treatment Agency, commissioners have been given more freedom to mold public services around the needs of the Local Authority and purchase services which cater to those needs. As 21% of clients are citing cannabis as a problematic substance (Public Health England et al, 2016), commissioners have a responsibility to commission services which are attentive to those needs. Moreover, as cannabis is most commonly consumed with tobacco, commissioners cannot draw providers attention to smoking cessation without also focusing on cannabis, unless they choose to wilfully ignore cannabis consumption. Some Local Authorities are already recommending that smoking cessation and cannabis treatment should be considered as joint initiatives (Rochdale, 2013) and the EMCDDA has advised a synergy between cannabis control and tobacco control policies (2016). FWD, a young people's drug and alcohol service in Camden, highlighted that they will use smoking cessation as an entry point for initiating conversations about cannabis.

To ensure that cannabis is appropriately prioritised, more research is needed to investigate the social costs of cannabis, as has been done for heroin, crack cocaine and alcohol. Current publications which explain why commissioners should invest in drug and alcohol treatment make no reference to cannabis (Public Health England, 2014b).

With commissioner prioritisation of problematic cannabis use, would come an incentive for drug and alcohol providers to pay greater attention to problematic cannabis use, challenge perceptions that cannabis cannot be a problematic substance, and make better use of existing resources.

Providers would also be incentivised to innovate and improve cannabis interventions to stay competitive in the market. The EMCDDA (2015) have highlighted that digital interventions are a promising area for further development with a review from Hoch et al (2016) concluding that digital interventions can effectively reduce problematic cannabis use and can be used as a resource to overcome barriers to treatment.

A concern raised by some contributors was providers not sharing innovation, in a bid to remain competitive in the market.

“One provider is not going to approach another with an amazing group intervention, they’ll want to keep it secret to keep themselves competitive.”

This concern was not shared by other contributors, including providers, who asserted that any learning and innovation which benefited service users would always be made publically available. Whether or not information sharing is a concern, the chances of useful learning being confined to small pockets of services has declined owing to a greater practice of large scale commissioning under one service provider. For example, change, grow, live (CGL) is contracted to deliver all drug and alcohol services in Birmingham (2014).

While utilisation of the competitive market may risk unintended consequences, if there is purchaser expectation that services should meet the needs of problematic cannabis users, providers have an incentive to innovatively supply services which meet this need.

Holistic provision and promotion

No wrong door

Supporting problematic cannabis users requires a transition away from the traditional treatment centre model, where clients would expect to access a specifically ‘drug’ treatment service and the treatment centre is the only place they could go to receive that support.

Many people will not need to enter formal treatment to overcome their problematic use of cannabis and should be able to receive brief, informal interventions from non-substance specific community services. If a problematic cannabis user is presenting to a mental health service, their primary need may be mental health and it may be more appropriate for their key worker to offer low level support around cannabis rather than refer them to a treatment centre. A GP may be in the best position to offer holistic brief interventions as they can support the person around a range of needs and will likely be the first point of contact.

“It can be better for a GP to support in house rather than refer to a specialist.”

The EMCDDA offers a case study of how more holistic service provision is being offered in Finland:

‘In addition to the units providing specialised services for those with substance use problems, increasing numbers are treated within primary social and healthcare services, including social welfare offices, child welfare services, mental health clinics, health centre clinics, hospitals and psychiatric hospitals.’ (Schettino et al, 2016, p.48).

An initiative which started in North Yorkshire children's services was for there to be a 'no wrong door' policy, where a range of support was brought under one umbrella (North Yorkshire County Council, 2014). Under the ethos of 'no wrong door', change, grow, live (CGL) and the West Lothian Drug and Alcohol service have implemented outreach programmes to train other professional agencies to deliver initial interventions relating to cannabis, thus diversifying and dispersing skills sets.

"We want to empower other professional agencies so any service can respond to cannabis."

Drug and alcohol service provider Forward Leeds and mental health service Aspire have also both signed up to the Leeds Dual Diagnosis project. The project offers access to training and networking events, where mental health workers can become skilled in offering interventions relating to cannabis and drug and alcohol workers can become skilled in delivering mental health interventions.

A wider use of 'no wrong door' would aim to enhance professionals' confidence in delivering low-level interventions and increase the amount of people interacting with support and guidance. Public Health England are soon to release a briefing on brief psychosocial interventions for problematic cannabis use which will better support professionals' deliverance of brief interventions.

There is the concern that even after receiving training, professionals will not deliver brief cannabis interventions as it is not considered part of their 'core business'. For example, despite significant attention being given to alcohol Identification and Brief Advice (IBA), the extent of effective routine implementation has been questionable (The Alcohol Academy, 2015). A response to this implementation barrier has been the planned adoption of CQUIN contracts within primary care services, where a percentage of the total value of an NHS contract with a provider will be allocated in accordance of the sufficient delivery of a specified activity (Alcohol Policy UK, 2016). If this measure effectively moves people away from 'core business' thinking, it may be policy which can be appropriately transferred to brief interventions relating to cannabis.

Marketing

For those who require more formal treatment, contributors reported that clients would prefer to receive support from specialist cannabis services rather than present to existing general treatment centres. However, there is no evidence that specialist services produce better outcomes than general treatment (EMCDDA, 2015).

There has been a trend towards providers offering support which targets support towards the behavior, rather than the drug (Sumnall et al, 2006), with all drug and alcohol service providers contributing to this report highlighting that they are offering support which is grounded in building resilience and positive coping mechanisms.

Rather than syphon problematic cannabis users into separate services, providers would be best placed to ensure their marketing reflects the holistic service provision which is being offered. Turning Point advised that a move towards ‘hiding in plain sight’, where marketing language is grounded in skills sharing, resilience, wellbeing and positive coping mechanisms, and away from directly referring to substances, would challenge the perception that treatment centres are only places for people seeking support for opiates and crack cocaine, and lessen the attached stigma of attending a treatment centre. Excluding the 16 who skipped the question, half of the survey respondents agreed that they would be more likely to attend a treatment centre if it was advertised that they would receive support around a range of needs rather than just drug use.

“I would prefer a more general approach to my health, then to specifically focus on cannabis use.”

“Any support centre should look at the whole person and why they are using drugs.”

By moving beyond the constraints of the traditional treatment centre model, a public health response can be adopted which interacts and engages with a broader range of people.

Move towards an appropriately regulated market

A move towards a regulated market would offer a targeted dialogue with people experiencing problematic cannabis use, providing opportunities for harm reduction advice to be delivered at point of purchase and any person in need of support relating to their cannabis use to be linked into reformed public health measures. There would also be the emergence of wider opportunities for more public guidance, packaging controls, products which vary in potency, and research into cannabis culture and consumption to improve interventions.

Targeted interventions

Similar to initiatives such as needle syringe programmes, points of purchase would offer opportunities for harm reduction advice and support services to be directly targeted to their intended audience.

However, direct comparisons should not be made between the former and the latter. Needle syringe programmes rely on service users not being criminalised so that they may offer them services which mitigate against high risk harms like blood borne viruses. Decriminalisation would not offer this same opportunity for cannabis use because common problems associated with cannabis do not pose an immediate or acute risk which needs to be mitigated against.

A regulated market is the most effective model because the purchase of cannabis offers an incentive for consumers to interact with guidance and different public health measures, with those who consume the most having the most interaction. When respondents to Volteface’s survey on problematic cannabis use were asked if they thought cannabis should be regulated so that it can be

sold legally, 12 skipped the question, 3 were undecided and 26 agreed. No respondents disapproved of cannabis being a regulated substance.

“I think advice from a professional is far better than advice from a dealer.”

“I believe the policy of prohibition is more harmful than any drug or use of them.”

Regulatory public health models have been published that envision how a public health framework would be adopted if cannabis became a regulated substance. Transform’s framework for the regulation of cannabis (Rolles et al, 2016) has laid out mandatory, enforced, responsible vendor guidelines which ensure vendors act as gatekeepers to a controlled substance and deliver public health interventions and education during the customer interaction period. Volteface’s report on the online regulation of cannabis expands on this blueprint by mapping out a framework of age restrictions, health questionnaires, limits on users’ monthly purchase, and helplines and chatbots to direct those who felt their use was becoming problematic to local support services (Power, 2017, p.20)⁷.

When respondents to Volteface’s survey were asked if they would have managed their cannabis use better if advice and information had been available on point of purchase, 12 skipped the question, 3 were undecided, 18 approved of the initiative, with the remaining 8 feeling they did not want or need guidance, they would have preferred more choice instead, or that the advice would not have made a difference.

There is research from Burton et al (2016), who after undertaking a rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies, concluded that providing information and education does not produce sustained behavioural changes. However, due to contextual reasons, direct comparisons between alcohol and cannabis should be undertaken cautiously. Firstly, Burton et al clarified that any attempts to inform or educate may have been overshadowed by marketing from the alcohol industry. Comparisons may not apply as Transform have highlighted that ‘cannabis regulation offers a unique opportunity to build a regulated market model from the start, making decisions in the public interest’ and ensuring the mistakes from the past are not repeated (Rolles et al, 2016, p.10). Secondly, the normalised and benign image of cannabis among regular users, reported by practitioners and survey respondents (Monaghan et al, 2016), indicates there is a need for more information on the harms that cannabis can pose and how they can be managed. Thirdly, it is challenging to measure the effectiveness of an intervention in isolation when considering Michie, Atkins and West’s theory that behaviour change is a complex process that depends on interactions between necessary conditions for change: capability, motivation and opportunity (2014).

⁷ ‘Green Screen’, a Volteface publication authored by Mike Power, is due for release in March 2017.

Wider opportunities

The first of these wider opportunities is that regulation increases attention relating to cannabis and encourage more balanced, accessible, quality resources to be made available to the public. Volteface's survey respondents highlighted that more guidance would only be useful if it was driven by evidence and suggested that useful guidance would be to avoid mixing tobacco with joints and consuming cannabis which is low in CBD and high in THC, recommendations which have been approved by established or emerging literature (Winstock et al, 2010; Freeman et al, 2015).

There are also greater opportunities for consumers making informed purchases relating to strength and content and being able to chose from a broader range of greater quality products (Gnosh et al, 2016; Power, 2017; Rolles et al, 2016). Survey respondents highlighted concerns that 'street' cannabis is highly potent yet there is often little else to choose from.

"Do you think customers should buy super strength skunk made on the streets or organically, safely grown cannabis with varying strengths, allowing the consumer to make a healthy choice?"

Curran et al has recommended that 'if handled carefully from a harm-reduction standpoint, a regulated market might...inform accurately about dosage and increase the availability of more balanced cannabis (that is, with lower levels of $\Delta 9$ -THC and higher levels of CBD) to maintain desired effects while reducing the incidence of harms' (2016, p.303).

A regulated market would also aim to reduce the stigma surrounding cannabis consumption by removing the association with criminality. The social stigma that can be attached to cannabis was a reason why some people were reluctant to access support from professionals.

Finally, the emergence of new points of contact with cannabis users could be used as opportunities for research into cannabis culture and consumption, thus improving the quality of interventions. Contributors highlighted that the current legal state of cannabis has limited how much research has been undertaken into brief interventions.

Regulation concerns

Within the context of the regulation of cannabis, there is the concern that 'the increased availability that will accompany a regulated market, will lead to increased use and increased harm amongst those least able to cope' (Hayes, 2017). These concerns are grounded in alcohol and tobacco being legal substances which have the highest consumption among those in lower socioeconomic groups and those who are experiencing a mental health illness (Alcohol Concern, 2016; Action on Smoking and Health, 2016; NCSCT, 2014). Moreover, as problematic consumers are likely to be heavy users (Winstock et al, 2010) there would be an incentive for firms to target their product towards problematic users.

Yet in the current illegal market, there is already a high consumption of cannabis among certain disadvantaged groups (EMCDDA, 2013b), who criminal individuals and organisations have an incentive to target. One survey respondent highlighted that illegal growers only ‘care for quantity and profit.’ The difference between cannabis and regulated substances such as alcohol and tobacco, is that there is not a targeted public health infrastructure in place which regulates supply and purchasing.

There is also international evidence from regulatory models which suggests that increased consumption need not inevitably lead to increased harm. When considering cannabis regulation in Vermont, Caulkins et al (2015) state that in most cases the likelihood is that use will rise if sanctions are lifted, but this does not equate to harm and should not be a benchmark of policy failure.

Compton et al’s 2002-2014 analysis of annual cross sectional surveys highlighted that though consumption has increased across the US, cannabis use disorders have remained relatively stable among adults in the general population and have even decreased among regular users of cannabis (Compton et al, 2016). Hasin et al’s analysis of two nationally representative samples found similar results, with the prevalence of cannabis use disorder among cannabis users decreasing significantly from 2001-2002 to 2012-2013 (2015). This data should however be treated cautiously, as the reports were not able to assess the impact of state level regulatory cannabis laws.

When considering regulation we should be cautious; of course a move towards a regulated market poses risks, and it would be negligent to claim otherwise but it is worth considering that ‘our relationship with risk is frequently restrictive, driven more by the fear of getting things wrong. While this approach is a rational response.... it denies us many positive opportunities’ (Morgan, 2004, p.18). Certain groups who are least well served by the current system have the most to gain from an appropriately regulated market, regulation is a risk which needs to be taken.

Conclusion

A widening and diversification of support which utilises different opportunities for interaction would aim to better meet the ranging needs of problematic cannabis users and increase the number of interaction points.

Current interventions are mostly limited to formal treatment, a model which has barriers of accessibility, and inconsistently prioritises problematic cannabis use. Brief interventions from other community services are not being fully utilised as professionals lack the capability to offer these interventions. Publically available resources have had a limited presence in key frontline services and offer varying levels of quality and access. All of these challenges have impeded the support available to people experiencing problematic cannabis use.

A wider structural problem is that the current legal state of cannabis has constrained how different interventions can be targeted to people experiencing problematic cannabis use. Even with a sufficient public health response to cannabis, it would be challenging to offer targeted interventions as cannabis use is less visible in an illegal, unregulated market.

Attempts to target public health measures to people experiencing problematic cannabis use can be best described as a shot in the dark, with the current illegal and unregulated market reducing the visibility of cannabis users.

Policy options that recognise the needs of people experiencing problematic cannabis use are needed alongside the introduction of an appropriately regulated market. Research into the social costs of problematic cannabis use by Public Health England would justify to commissioners why cannabis should be prioritised. This would incentivise drug and alcohol service providers to be attentive to the needs of problematic cannabis users and to utilise existing resources that meet those needs. Offering a more holistic image of treatment centres would challenge ingrained, negative perceptions of the treatment centre model by 'hiding in plain sight', while the adoption of the 'no wrong door' policy would aim to increase the number of brief interventions being delivered, by ensuring that expertise is not confined to specialist services. A regulated market would increase accessibility to these reformed public health measures as users would be buying their cannabis from a retailer, where they would be able to receive harm reduction advice and be linked into a variety of interventions if their cannabis use began negatively impacting on their day to day lives.

Reforming existing provision within the framework of a regulated market would aim to have the effect of increasing exposure to public health measures which are responsive to the needs of people experiencing problematic cannabis use.

Appendix

Referral Routes

The figures provided, showing new presentations for adults who cited cannabis, are divided into 25+ years, 18-24 years, and those who are using opiates alongside cannabis and those not using opiates. All clients who cited cannabis among their problematic substances are included, regardless of whether it was the primary substance. Public Health England have suppressed figures totalling from 1-4 and rounded any subtotals and totals that would reveal these to the nearest 10 (indicated by the ~ symbol). The boxes highlighted in red indicates the most common referral route for any specific year or demographic (Volteface, 2016).

	11/12				12/13			
	18-24		25+		18-24		25+	
	Non-Opiates	Opiates	Non-Opiates	Opiates	Non-Opiates	Opiates	Non-Opiates	Opiates
Self, family and friends	2566	438	6198	2828	2733	416	6469	2858
Health	~910	100	~2620	688	~920	63	2892	695
Criminal justice	2297	374	2568	2296	2076	304	2804	2145
Substance misuse service	395	151	1464	1077	313	~100	1239	1088
Other	~1260	61	907	233	1292	55	~860	206
Total	7425	1124	~13760	7122	~7330	~940	~14260	6992
Missing/Unknown	55	16	104	87	109	15	147	71
Total	7480	1140	~13860	7209	~7440	~960	~14410	7063

	13/14				14/15			
	18-24		25+		18-24		25+	
	Non-Opiates	Opiates	Non-Opiates	Opiates	Non-Opiates	Opiates	Non-Opiates	Opiates
Self, family and friends	2697	~380	7048	2949	2615	~330	7136	3077
Health	1041	71	3126	637	909	60	~3070	641
Criminal justice	1958	~240	2934	2003	1615	~200	2510	1711
Substance misuse service	292	~80	1280	933	260	~60	1078	841
Other	1244	48	915	177	1224	~40	~900	178

Total	7232	814	15303	6699	6623	690	14693	6448
Missing/Unknown	134	8	152	80	47	9	104	58
Total	7366	822	15455	6779	6670	699	14797	6506

Local Authority Drug and Alcohol Strategies

Bury Council. 2015. Bury Drug & Alcohol Strategy 2015-2018, (online) Available at:<https://search3.openobjects.com/mediamanager/bury/directory/files/bury_drug_and_alcohol_strategy_2015.pdf> (Accessed 23 November 2016).

Coventry City Council. 2015. 2015 Drugs Strategy, (online) Available at:<http://www.coventry.gov.uk/downloads/file/16838/2015_drugs_strategy> (Accessed 1 December 2016).

Havering London Borough. 2013. Drug and Alcohol Strategy 2013 - 2016, (online) Available at:<<http://democracy.havering.gov.uk/documents/s9074/20131007%20Drugs%20and%20Alcohol%20Strategy%20V24%20incl%20consultation%20responses%20LD.pdf>> (Accessed 1 December 2016).

Leeds City Council. 2013. Leeds Drug and Alcohol Strategy and Action Plan (2013 – 2016), (online) Available at:<<http://democracy.leeds.gov.uk/documents/s104662/Drug%20and%20Alcohol%20Strategy%20251013.pdf>> (Accessed 1 December 2016).

London Borough of Barnet. 2015. Substance Misuse Strategy 2015-2020, (online) Available at:<<https://barnet.moderngov.co.uk/documents/s24980/Appendix%201%20Barnet%20substance%20misuse%20strategy.pdf>> (Accessed 23 November 2016).

Nottinghamshire County. 2012. Nottinghamshire Substance Misuse Strategy 2012 - 2015, (online) Available at:<[https://democracy.gedling.gov.uk/Data/Cabinet/201205031730/Agenda/\\$att6614.docx.pdf](https://democracy.gedling.gov.uk/Data/Cabinet/201205031730/Agenda/$att6614.docx.pdf)> (Accessed 23 November 2016).

Oxfordshire County Council. 2015. Oxfordshire Alcohol and Drugs Partnership Strategy 2015-2018, (online) Available at:<<https://mycouncil.oxfordshire.gov.uk/documents/s28516/Item%2010%20Draft%20Alcohol%20and%20Drugs%20Strategy.pdf>> (Accessed 1 December 2016).

Rochdale Safer Communities Partnership. Substance Misuse Strategy 2013-2015, (online) Available at:<<http://www.rochdale.gov.uk/pdf/2013-10-03-rochdale-substance-misuse-strategy-2013-2015.pdf>> (Accessed 23 November 2016).

Safer Communities Lincolnshire. 2014. Lincolnshire Alcohol and Drug Strategy, (online) Available at:<<http://www.boston.gov.uk/CHttpHandler.ashx?id=16507&p=0>> (Accessed 23 November 2016).

Safer Stockport Partnership. 2015. Stockport Drug and Alcohol Strategy: 2014-17, (online) Available at:<<http://www.saferstockport.org.uk/wp-content/uploads/2015/11/Stockport-Drug-and-Alcohol-Strategy.pdf>> (Accessed 1 December 2016).

Staffordshire County Council. 2011. Staffordshire Alcohol & Drugs Strategy 2010 - 2015, (online) Available at:<[http://moderngov.staffordshire.gov.uk/\(S\(pngtdxbysyfdrf55xqjkzteu\)\)/documents/s15338/Strategy%20Final%20Draft%202011%20version.pdf](http://moderngov.staffordshire.gov.uk/(S(pngtdxbysyfdrf55xqjkzteu))/documents/s15338/Strategy%20Final%20Draft%202011%20version.pdf)> (Accessed 1 December 2016).

Tower Hamlets. 2016. Tower Hamlets Substance Misuse Strategy 2016-2019, (online) Available at:<http://www.towerhamlets.gov.uk/Documents/Consultation/Substance_Misuse_Summary_2016_19.pdf> (Accessed 23 November 2016).

References

Action on Smoking and Health. 2016. Smoking Statistics, June.

Advisory Council on the Misuse of Drugs. 2008. Cannabis: Classification and Public Health. Home Office.

Advisory Council on the Misuse of Drugs. 2016. Reducing Opioid-Related Deaths in the UK. Home Office.

Alcohol Concern. 2016. Alcohol Statistics, 4 August. Alcohol Concern.

Alcohol Policy UK. Hospitals and mental health services to see IBA 'CQUIN' contracts, 28 November.
Alcohol Policy UK.

Asbridge, M., Duff, C., Marsh, D., Erickson P. 2014. Problems with the Identification of 'Problematic' Cannabis Use: Examining the Issues of Frequency, Quantity, and Drug Use Environment. *European Addiction Research*. 20(5), pp.254-267.

Amsterdam, J., Nutt, D., Phillips, L., Wim, B. 2015. European Rating of Drug Harms. *Journal of Psychopharmacology*. 29(6), pp.655–660.

Burton, R., Henn, C., Lavoie, D., O'Connor, R., Perkins, C., Sweeney, K., Greaves, F., Ferguson, B., Beynon, C., Belloni, A., Musto, V., Marsden, J., Sheron, N. 2016. A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective. *The Lancet*.

Buxton, J., Bingham, T. 2015. *The Rise and Challenge of Dark Net Drug Markets*. Global Drug Policy Observatory. Swansea University.

Caulkins, J., Hawken, A., Kilmer, B., Kleiman, M. 2012. *Marijuana Legalization: What Everyone Needs to Know*. New York: Oxford University Press.

Caulkins, J., Kilmer, B., Kleiman, M., MacCoun, R., Midgette, G., Oglesby, P., Pacula, R., Reuter, P. 2015. *Considering Marijuana Legalization: Insights for Vermont and Other Jurisdictions*. Santa Monica, CA: RAND Corporation.

Cerdá, M., Moffitt, T., Meier, M., Harrington, L., Houts, R., Ramrakha, S., Hogan, S., Poulton, R., Caspi, A. 2016. Persistent Cannabis Dependence and Alcohol Dependence Represent Risks for Midlife Economic and Social Problems: A Longitudinal Cohort Study. *Association for Psychological Science*. 4(6), pp.1028-1046.

Change, grow, live. 2014. CRI wins contract to deliver Drug and Alcohol services across Birmingham, 1 October.

- Compton, W., Han, B., Jones, C., Blanco, C., Hughes, A. 2016. Marijuana use and use disorders in adults in the USA, 2002–14: analysis of annual cross-sectional surveys. *The Lancet Psychiatry*. 3(10), pp.954-964.
- Cookson, C., Strang, J., Ratschen, E., Sutherland, G., Finch, E., McNeill, A. 2014. Smoking and its treatment in addiction services: Clients and staff behaviour and attitudes. *BMC Health Services Research*. 14(304).
- Cooper, K., Chatter, R., Kaltenthaler., Wong, R. 2015. Psychological and psychosocial interventions for cannabis cessation in adults: a systematic review short report. *Health Technology Assessment*. National Institute for Health Research. 19(56).
- Copeland, J., Swift, W., Roffman, R., Stephens. 2001. A randomized controlled trial of brief cognitive–behavioral interventions for cannabis use disorder. *Journal of Substance Abuse Treatment*. 21(2), pp.55-64.
- Curran, V., Freeman, P., Mokrysz, C., Lewis, A., Morgan, J., Parsons, H. 2016. Keep off the grass? Cannabis, cognition and addiction. *Nature Reviews Neuroscience*. 17(5), pp.293-306.
- Dennis, M., Babor, T., Roebuck, C., Donaldson, J. 2002. Changing the focus: the case for recognizing and treating cannabis use disorders. *Addiction*. 97(1) pp.4-15.
- European Monitoring Centre for Drugs and Addiction. 2008. *A cannabis reader: global issues and local experiences, Perspectives on cannabis controversies, treatment and regulation in Europe*. Lisbon. Luxembourg: Office for Official Publications of the European Communities.
- European Monitoring Centre for Drugs and Addiction. 2013a. *European Drug Report: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- European Monitoring Centre for Drugs and Drug Addiction. 2013b. *Perspectives on Drugs: Characteristics of frequent and high-risk cannabis users*. Luxembourg: Publications Office of the European Union.
- European Monitoring Centre for Drugs and Addiction. 2015. *European Drug Report: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- European Monitoring Centre for Drugs and Addiction. 2016. *European Drug Report: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- Freeman, T., Winstock, A. 2015. Examining the profile of high-potency cannabis and its association with severity of cannabis dependence. *Psychological Medicine*. 45(15), pp.3181–3189.

Gage, S., Jones, H., Burgess, S., Bowden, J. 2016. Assessing causality in associations between cannabis use and schizophrenia risk: a two-sample Mendelian randomization study. *Psychological Medicine*, pp.1-10.

Gage, S., 2016. Say Why To Drugs. [audio podcast] <https://www.acast.com/saywhytodrugs>

Gates, PJ., Sabioni, P., Copeland, J., Le Foll, B., Gowing, L. 2016. Psychosocial Interventions for Cannabis Use Disorder. *Cochrane Database of Systematic*. 5, CD005336.

Hall, W., Pacula, R. 2003. Cannabis use and dependence: Public health and public policy. Cambridge: Cambridge University Press.

Hardwick, S., King, L. 2008. Home Office Cannabis Potency Study. Home Office Scientific Development Branch.

Hasin, D., Tulshi, S., Kerridge, B., Goldstein, R., Chou, P., Zhang, H., Jung, J., Pickering, R., Ruan, J., Smith, S., Huang, B., Grant, B. 2015. Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013. *JAMA Psychiatry*. 72(12), pp.1235-1242.

Hayes, P. 2017. Inconvenient Truths. *Volteface*, 2 February.

Hoch, E., Preuss, U., Ferri, M., Simon, R. 2016. Digital Interventions for Problematic Cannabis Users in Non-Clinical Settings: Findings from a Systematic Review and Meta-Analysis. *European Addiction Research*. 22(5), pp.233-242.

HM Government. 2008. Drugs: Protecting Families and Communities. The 2008 Drug Strategy. HM Government.

HM Government. 2010. Drug Strategy 2010 Reducing Demand, Restricting Supply, Building Recovery: Supporting People to Live a Drug Free Life. HM Government.

Jones, L., Pickering, L., Sumnall, S., McVeigh, J., Bellis, M. 2008. A review of the effectiveness and cost-effectiveness of needle and syringe programmes for injecting drug users. Centre for Public Health, Liverpool John Moores University.

Kirkby, J. 2016. Patient safety at risk because of GPs' 'unmanageable' workloads, BMA survey finds. *The Independent*, 28 November.

Genen, L., Haning, W., Burns, J. 2016. Cannabis Related Disorders Clinical Presentation. *Medscape*, (online) Available at: <<http://emedicine.medscape.com/article/286661-clinical>> (Accessed 30 December 2016).

Lader, D. 2016. Drug Misuse: Findings from the 2015/16 Crime Survey for England and Wales. 2nd edition. Home Office. National Statistics.

McManus, S., Bebbington, P., Jenkins, R., Brugha, T. 2016. Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey (eds). Leeds: NHS Digital.

Michie, S., Atkins, L., West, R. 2014. The behaviour change wheel : a guide to designing interventions. Sutton: Silverback Publishing.

Monaghan, M., Hamilton, I., Lloyd, C. and Paton, K., 2016. Cannabis matters? Treatment responses to increasing cannabis presentations in addiction services in England. *Drugs: Education, Prevention and Policy*. 23(1) pp.54-61.

Monaghan, M., Hamilton, I. 2016a. Is cannabis really getting stronger? *The Conversation*, 1 August.

Monaghan, M., Hamilton, I. 2016b. Effective treatments for cannabis use hampered by “benign” image – conference told. *University of York*, 7 June.

Morgan, S. 2004. Positive risk-taking: an idea whose time has come. *Open Mind*.

National Treatment Agency. 2008. Improving services for substance misuse: Commissioning drug treatment and harm reduction services. Commission for Healthcare Audit and Inspection. Healthcare Commission. National Treatment Agency.

National Treatment Agency. 2010. Injecting Drug Use in England: A Declining Trend. National Treatment Agency.

Nesta., National Voices. 2013. Peer Support: What is it and does it work? Summarising evidence from more than 1000 studies. Nesta.

NHS Choice. 2014. Cannabis: the facts. NHS, (online) Available at:<<http://www.nhs.uk/Livewell/drugs/Pages/cannabis-facts.aspx>> (Accessed 30 December 2016).

NICE. 2013. Smoking: acute, maternity and mental health services. NICE, (online) Available at:<<https://www.nice.org.uk/guidance/ph48/chapter/1-recommendations>> (Accessed 12 October 2016).

North Yorkshire County Council. 2016. No Wrong Door: Re thinking for for Adolescents. North Yorkshire County Council.

Nutt, D., King, L., Phillips, K. 2010. Drug harms in the UK: a multicriteria decision analysis. *The Lancet*. 376(9752), pp.1558–1565.

Office for National Statistics. 2015. Population Estimates for UK, England and Wales, Scotland and Northern Ireland. Office for National Statistics.

Power, M. 2017. Green Screen. Volteface.

Preedy, V. 2016. Handbook of Cannabis and Related Pathologies. London: Academic Press.

Public Health England., University of Manchester., National Drug Evidence Centre., Department of Health. 2014a. Adult substance misuse statistics from the National Drug Treatment Monitoring System (NDTMS) 1 April 2013 to 31 March 2014. Public Health England.

Public Health England. 2014b. Alcohol and drugs preventions treatment and recovery: why invest? Public Health England.

Public Health England and Association of Directors of Public Health. 2014. Review of Drug and Alcohol Commissioning. A joint review conducted by Public Health England and the Association of Directors of Public Health. Public Health England.

Public Health England., Turning Point. 2015. Improving Smoking Cessation in Drug and Alcohol Treatment: Interim briefing on Turning Point's PHE-supported smoking cessation pilots. Public Health England.

Public Health England., University of Manchester., National Drug Evidence Centre., Department of Health. 2016. Adult substance misuse statistics from the National Drug Treatment Monitoring System (NDTMS) 1 st April 2015 to 31st March 2016. Public Health England.

Rolles, S., Barton, M., Eastwood, N., Lloyd, T., Measham, F., Nutt, D., Sumnall, H. 2016. A framework for a regulated market for cannabis in the UK: Recommendations from an expert panel. Transform.

Schettino, J., Leuschner, F., Kasten., L., Tossmann, P. 2015. Treatment of cannabis-related disorders in Europe. EMCDDA. Luxembourg: Publications Office of the European Union.

Stephens, R., Roffman, R., Curtin, L. 2000. Comparison of extended versus brief treatments for marijuana use. *Journal of Consulting and Clinical Psychology*. 68(5), pp.898-908.

Sumnall, H., Jones, L., Witty, K., Wareing, M., Woolfall, K., McVeigh, J., Bellis, M. 2007. Community-based interventions for the reduction of substance misuse among vulnerable and

disadvantaged young people. NICE. National Collaboration Centre Drug Prevention. Liverpool John Moores University: Centre for Public Health.

The Alcohol Academy. 2015. Alcohol brief intervention: where next for IBA? Lessons, ideas and actions for advancing alcohol brief interventions. Alcohol Research UK.

Volteface. 2016. Referral routes for clients citing cannabis as a problematic substance. Freedom Of Information Request.

Winstock, A., Ford, C., Whitton, C. 2010. Assessment and management of cannabis use disorders in primary care. British Medical Journal. 340, c1571.

Winstock, A., 2014. <https://www.drugsmeter.com/>

Winstock, A, 2015. <http://saferuselimits.co/>