Missed opportunities: a qualitative study of views and experiences of smoking cessation amongst adults in substance misuse treatment

Abstract

Background: Smoking rates amongst people with a substance use disorder are disproportionately high. This study aimed to explore views and experiences of smoking and smoking cessation amongst people in substance misuse treatment in order to uncover novel perspectives which could assist in addressing this disparity.

Methods: A qualitative research design was employed, using individual semi-structured interviews. The sample comprised 15 smokers and ex-smokers with a history of drug misuse who were recruited from four inner city substance misuse services. Interviews were audio recorded and analysed using the Framework method.

Results: Several themes were uncovered, including the influence of the environment, peers and staff on motivation to quit and quit attempts; a complex link between smoking and substance use and the impact of substance misuse treatment experiences on attitudes towards smoking cessation. A number of missed opportunities were revealed, as well as unique factors affecting access to smoking cessation treatment for this population, demonstrating support for provision of smoking cessation treatment within both generic and specialist health services.

Conclusions: People accessing substance misuse treatment seek to apply their learning from quitting illicit substances to smoking cessation. However, despite the availability of smoking cessation treatment including pharmacotherapy within substance misuse services and interest from service users, quit attempts were not encouraged or supported by substance misuse staff. Opportunities to quit within such services are minimal, inconsistent and not aligned or sustained across services.

Keywords

Smoking cessation · Substance misuse treatment · Substance-use disorder · Tobacco use disorder · Qualitative research
**Introduction**

The number of people smoking has fallen significantly in higher income countries in recent years (Jha et al. 2006), and in the UK is now at 15.8% (ONS 2017). However, amongst socially disadvantaged groups the number remains high, contributing to persistent health inequalities (Jha, et al. 2006, McNeill et al. 2012).

Reported smoking prevalence amongst people with a substance use disorder (SUD) is between 85.9-98% (Guydish et al. 2016). People with an SUD are at higher risk of premature mortality and morbidity in comparison to the general population and long-term tobacco use contributes substantially to this risk. Indeed smoking has been described as more potentially harmful to this population than their primary substance of misuse (Baca and Yahne 2009, Degenhardt and Hall 2012, Hurt et al. 1996).

Despite policy in the UK and beyond recommending smoking cessation treatment is offered within substance misuse treatment settings (NICE 2013, Guydish et al. 2011), it appears to remain a low priority.

An exploration of views and experiences providing insight into the high prevalence and low quit rates amongst people with an SUD is required. Evidence suggests that many smokers with an SUD do wish to quit and have attempted to do so (Martinez et al. 2015). Quantitative studies have looked at factors influencing smoking cessation from both substance misuse treatment staff and service user perspectives, and found a focus on other substance abstinence rather than smoking cessation, concern at risk of relapse to substance use if tobacco use ceases, staff smoking and negative attitudes towards smoking cessation, and lack of access to or promotion of smoking cessation treatment within services (Baca and Yahne 2009, Cookson et al. 2014, McHugh et al. 2017, Richter et al. 2002, Thurgood et al. 2015).

Themes identified in qualitative studies include low risk perception of smoking, lack of smoking cessation treatment provision and promotion within substance misuse services, but also the potential for overlap of skills developed to address substance use (Cooperman et al. 2015, Garner and Ratschen 2013, McCool and Richter 2003, Richter, et al. 2002, Wilson et al. 2016). A recent systematic review of qualitative studies of smoking cessation in substance misuse concluded that too little is done in substance misuse treatment settings to address the high prevalence of smoking, and that further research is required to develop the evidence base, which could then lead to specific smoking cessation treatments for these
smokers (Gentry et al. 2017). However, the review authors found the quality of reviewed studies moderate, and only one study was identified from the UK which focussed on smokers with an SUD who were also homeless (Garner and Ratschen 2013). People with an SUD are a widely heterogeneous group, and substance-specific issues may play a factor in an individual’s views and experiences of smoking cessation. For example, the legal status of tobacco in contrast to illicit drugs may affect how individuals perceive continued tobacco use. Evidence pertaining to smoking cessation during substance misuse treatment also presents some variation according to substance. Some evidence suggests that opioid-dependent smokers may find nicotine-replacement therapy less effective than other smokers (Miller and Sigmon 2015), and evidence regarding the impact of smoking cessation on substance misuse outcomes is mixed. Two recent reviews found that participation in smoking cessation treatment did not impact on substance misuse treatment outcomes (Apollonio et al. 2016, McKelvey et al. 2017). In contrast, Joseph (Joseph et al. 2004) found evidence of increased risk of relapse to alcohol post tobacco cessation. It may therefore be judicious to consider the views and experiences of people accessing substance misuse treatment for drug use separately to those with a history of solely alcohol use.

The aim of this study is to identify factors influencing smoking and smoking cessation amongst people with a drug misuse disorder accessing substance misuse services in the UK.

Design and methods

The study used a qualitative design, collecting data by individual semi-structured interviews.

Recruitment

Purposive sampling was employed to identify people with a history of drug use who also smoked, or had recently quit. Motivation to quit was not a criteria for inclusion. Substance misuse services were used for recruitment to provide insight into experiences which could inform smoking cessation practice in such services. To provide a focus on the influence of drug use on smoking cessation experiences, people with solely an alcohol misuse disorder were excluded.

Setting

Two large organisations providing substance misuse treatment funded by local authority in a large urban area were contacted. Within the two organisations, services were chosen that
were able to facilitate recruitment and provided maximum sample variation. The services comprised a detoxification (detox) unit, a residential rehabilitation service (rehab), a community service for people either homeless or in unstable accommodation, and a community group for women with additional complex social needs. All provided smoking cessation treatment and had implemented partial smoke-free policies. Prior to recruitment, the lead author (HW) met with a service user research consultation group to discuss the study design and to seek advice on recruitment and question style. Insight into the potential impact of discussing smoking cessation with this client group was provided.

**Study sample**

15 participants were recruited and interviewed between February and May 2016. A further five expressed an interest; two then declined and three did not meet inclusion criteria. Initial participants were all male, so an additional service was contacted and extra time was allocated to recruit female participants. The total of 15 participants was reached within available time resources, with an emphasis placed on gender balance rather than a larger sample. Interviews lasted on average 45 minutes.

Demographic information describing the sample is presented in Table 1. All participants were unemployed and had previous experience of substance misuse treatment; all smokers were daily, long-term smokers; some participants had spent time in prison. Participants have been assigned pseudonyms.

**Data collection**

An initial screening discussion took place with potential participants during which confidentiality was explained and informed consent for audio recording sought. HW (an experienced mental health nurse with research training) carried out the interviews which took place in a private area within the service. The interview schedule covered questions about smoking history, views of smoking in relation to drug use, views on smoking cessation and smoking cessation treatment, experiences of previous quit attempts and quit methods used; some participants additionally discussed their views and experiences of smoke free policies. The schedule was devised by the research team, and a pilot interview reviewed and the schedule adjusted before proceeding. The recorded interviews were transcribed by the interviewer then stored securely.
Reflexivity

To promote reflexivity in the interview and analysis process, the interviewer discussed each interview with the research team, making use of field notes from the interviews, though these were not used in data analysis. Where any potential bias was identified, this was discussed and resolved with the research team, but must also be taken into account in interpreting the findings of this study.

Analysis

Transcripts were analysed using NVivo 10 software and identifying information removed. One transcript was coded inductively by two authors and a good degree of correlation found. All three researchers developed and refined the final concepts. Framework was selected as an analysis process because it allows for movement between stages and across cases and themes, considered useful for this study as participants were recruited from a number of services (Gale et al. 2013, Webster et al. 2014). Quotations which vividly portrayed aspects of each theme were selected.

Results

Influence of environment

Participants described their smoking behaviour in the context of others’ behaviour, their environment and its’ social norms. For example, participants in detox reported that their smoking increased significantly on arrival. Reasons given included boredom and anxiety but smoking also facilitated social contact.

Marlene initially intended to quit during treatment;

*I’d have to be by myself [to quit] ... cos everybody in here smokes so it’s gonna be bloody hard! Everybody in here smokes, and I’d just feel a bit left out if I gave up* (Marlene, 47, detox)

Staff in treatment services were seen as role models, and their smoking behaviours, or use of e-cigarettes or NRT clearly influenced decisions made by participants. Participants were well aware of which staff smoked, and would use that to their advantage, e.g. asking a smoker to allow them a final cigarette even after the late curfew.

The detox environment provided many cues to smoking and provision for smokers was described in positive terms.
... they built this big shelter with like proper nice cushioned covers, and you could go and sit down and relax ... they’d gone out of their way to build this ... the least we could do was to use it! (Geoff, 42, rehab).

By contrast, Leroy described a previous experience in a totally smoke-free rehab. 

You’re in an environment where no-one smokes. So it’s not the norm. So you don’t have a chance to miss it, because no-one’s outside smoking ... no-one comes in smelling of a cigarette (Leroy, 44, detox).

Another participant described how the availability of smoking cessation treatment had triggered his quit attempt,

It’s at the hostel where I’m living at the moment, they’ve got a ... smoking adviser that comes in on Wednesdays, and it was just that I noticed that she was there, and I decided, yeah, I’ll have a go at that. (Eddie, 51, community)

Similarly participants who had spent time in prison described this as a supportive environment for quitting. Access to pharmacotherapy and behavioural support was readily available, and offered a means to save money otherwise spent on tobacco. Though initially ambivalent, participants found they were able to quit and maintain abstinence in this structured environment.

Complex interlink between smoking and substance use

Participants described a very potent association between smoking and both drug and alcohol use. For some, the ritual of preparing to smoke or inject heroin always included preparing hand rolled cigarettes. These were smoked at a specific point in the process, sometimes to get rid of the taste of heroin, or to enhance its’ effect.

By contrast when using alcohol, participants described an automated action of almost continual smoking, without being aware of how many cigarettes they were consuming.

...the minute you give me a bevvy [drink], I’m gonna pick up a ciggy, cos they go hand in hand ... the two of them fit each other like a hand in glove (Anthony, 42, detox)

The attachment of smoking to drug and alcohol use appears reinforced by the increase in cigarette consumption whilst using drugs and alcohol.

The physical harm caused by tobacco was acknowledged by most, and in some cases seen as more harmful than illicit substance use or alcohol use. However, the impact of substance misuse on many aspects of life made that a higher priority.
You know, you’re addicted to nicotine so I suppose it is really [a drug] but it’s just a drug that people don’t moan about (James, 57, rehab).

Drug use had multiple negative impacts, whereas the perceived impact of smoking was restricted to health.

Although participants may have expressed a desire to quit, some also felt ambivalent about the potential loss of smoking. Smoking represented something legal that they felt permitted to hold on to, having given up other substances sometimes in response to external pressures.

I think to myself: it’s the only luxury I’ve got left in life (Orla, 45, community)
I’m coming off everything else, give me something! (Leroy, 44, detox).

Experiential learning from substance misuse treatment

Though participants had varying views about the similarities of their smoking addiction to their substance addiction, they used their skills acquired in quitting substances when considering quitting smoking, with substitution being a key concept.

‘Cos instead of taking heroin I take methadone, instead of smoking cigarettes I take these patches and mints you see, so I’m substituting, it occurred to me one day … that’s the way to go about it (Eddie, 51, community)

All participants expected to use a form of pharmacotherapy in order to quit. Going ‘cold turkey’ was seen as unfeasible for them based on learning from previous drug or alcohol abstinence attempts. E-cigarettes were discussed by some, and identified as a means of substituting the behaviour of smoking with a less harmful alternative.

If I’ve got something I could replace as a cigarette, you’re still gonna have nicotine in the thing aren’t you? So it’s like I’ll still be smoking but I won’t actually be smoking a cigarette (Marlene, 47, detox).

Participants described a sense of self-efficacy gained from quitting drugs and alcohol, and told themselves if they could quit these, they could quit smoking. There was however limited recognition that smoking is highly addictive, so relapse to smoking became a source of self-criticism.
Missed opportunities

On arrival in detox, participants were asked whether they were interested in smoking cessation, to which they commonly responded with surprise and apprehension. However, their confidence boosted by having achieved abstinence from drugs or alcohol and their motivation in smoking cessation emerged after a few days, 
... a lot of people have said they’re smoking a lot more when they’re coming into detox, so I guess when someone is examining their life, their future, and when their health is involved, I think, you know, that having smoking cessation, or just planting that seed in this environment, I think that might be quite useful in getting a smoker to kind of re-evaluate the harm that smoking is doing (Brian, 29, detox).

However, staff were apparently unaware of any change in motivation since the first day, and participants often unaware that a smoking cessation adviser was available on site. No support or encouragement was offered at later stages in treatment. Participants expressed contrasting preferences for where they might access smoking cessation treatment. Some were satisfied with mainstream services such as a pharmacy, though not all were aware they may not need to pay for NRT if they were in receipt of free prescriptions. Others expressed a preference for receiving treatment via a health professional they already knew.

Geoff described being encouraged by his general practitioner to access smoking cessation treatment outside of the consultation,
... it’s just that little bit of I’ve got to go and do it with a person who I don’t know, and he [pharmacist] looks like he’s busy, making bags up with people’s medication, and I’m going ‘excuse me bruv, 5 minutes, I wanna give up smoking, what do I do?’ And I’ve gotta have a consultation with him ... if she [doctor] just turned round and went ‘right I’m giving you medication for your depression, I’m giving you medication for that, here’s some medication for your smoking’, I’d probably just go ‘right, ok, cool’ (Geoff, 42, rehab).

Several participants similarly reported they would trust only what their own doctor prescribed, and were unwilling to discuss their history with someone they didn’t know.

Women expressed specific concerns about disclosing tobacco and drug use. For example, when asked about accessing a mainstream smoking cessation service, Nadine stated she would be unlikely to, for fear of recrimination regarding her parenting role and capacity.
On the topic of a smoking cessation advisor attending the substance misuse service, Orla commented,

_Sometimes you're a bit wary of what can I mention to my doctor and what can't I, especially if you've got kids, but here [is different] (Orla, 45, community)_

The potential impact of gendered stigma is apparent. The perception that they wouldn’t be judged clearly enabled women to disclose and address substance use, which included tobacco, in a women-specific substance misuse service.

**Discussion**

In this study of views and experiences of smoking cessation amongst people in substance misuse treatment, a significant paradox has been highlighted. Participants describe motivation to quit which is enhanced by their experience of quitting other substances, they have immediate access to health professionals and cessation treatment and yet typically find their smoking rates increase. Despite expertise in quitting substances available from staff and peers alike, tobacco addiction appears to be neglected.

Twyman et al (2014) describe common features which affect all vulnerable groups in addressing smoking cessation, such as lack of support from health professionals, but also stresses the importance of understanding the unique challenges that each group faces, pertaining to their own cultural and socio-economic contexts (Twyman et al. 2014); the current study drew out some of these unique experiences and considered the potential to address both addictions simultaneously (Twyman et al. 2014).

The findings of the current study also reflect those of Gentry et al’s 2017 review; for example the complex interaction between substance and tobacco use which highlights the specific needs of this population, absence of support from healthcare professionals in making and sustaining quit attempts, and a wide variety of perceptions of smoking cessation treatment efficacy (Gentry, et al. 2017).

This study supports and adds greater depth to these themes, and provides novel findings such as the influence of the treatment environment; preferences, including timing, for accessing smoking cessation treatment and the experiences of women in services.

The influence of peers on both smoking and smoking cessation uptake identified in this study has been previously reported (Aschbrenner et al. 2015) as has the importance of peers within substance misuse treatment (Jason et al. 2006). The lack of advice and support
received by health professionals in substance misuse services has also been previously identified (Richter, et al. 2002). The implications of peer and staff influence are significant if smoking rates in this population are to be reduced.

Strong associations with drug and alcohol use reported in this study suggest that smoking behaviour is intricately embedded in both substance use and daily life for this population. This association may explain some of the challenges in quitting that this population faces, and warrants further exploration in order to optimise smoking cessation interventions.

Many participants referenced the legality and societal acceptance of tobacco in contrast to their primary substance of misuse, suggesting that this factor may have greater salience for people using illicit drugs.

This study found that smokers with an SUD generally viewed tobacco as a less challenging addiction, which meant they felt discouraged when they ‘failed’ to quit. Providing education around the nature of tobacco addiction as well as careful assessment is required in case this decrease in self-efficacy increases the risk of relapse to other substance use, as well as encouraging repeated quit attempts.

Though smokers in the general population may choose a variety of means to quit, this study suggests this population in particular support the use of pharmacotherapy, which may reflect experience and understanding of the rationale for substitution medication within substance misuse treatment. This contrasts with a previous qualitative study with marginalised groups which found that ‘cold turkey’ was viewed as the preferable quit method, although that study did not focus exclusively on people with an SUD (Pateman et al. 2016). Apollonio et al.’s 2016 Cochrane review established that tobacco cessation therapy which included pharmacotherapy was most highly associated with tobacco abstinence amongst this population, though the quality of evidence on this topic was considered low (Apollonio, et al. 2016). The review’s findings suggests that what works for the general population is what is likely to work for people with an SUD. The difference may lie in accessing such support. It is vital to ensure that smokers with an SUD are fully aware of how to access smoking cessation treatment, and that these treatment services are accessible, regular and aligned with existing services.

A number of missed opportunities throughout the recovery journey have been identified, the most conspicuous being within the detox period. Participants described how health professionals only ask about motivation to quit when service users arrive at detox, whereas
they appear more susceptible to a quit attempt later in the process when they have stopped their primary substance. The detox period therefore presents an opportunity for smokers to make use of their newly found self-efficacy in quitting substances. This would enable smokers to initiate pharmacotherapy and receive support from staff and peers alike around the clock, capitalising on the existing treatment environment as proposed by Bowman & Walsh (Bowman and Walsh 2003). We suggest that services ensure continued intervention on smoking cessation throughout the detox period.

Similarly, health professionals who refer a service user on to a specific smoking cessation service may miss the opportunity to address the behaviour straightaway. UK guidelines for smoking cessation interventions in primary care indicate pharmacotherapy should be prescribed by the practitioner if an individual is unwilling to accept a referral on to an intensive smoking cessation support service. This study has shown that people with an SUD may be reluctant to access such a service for a variety of reasons; primary care practitioners as well as specialist treatment providers need to be aware of this and capitalise on any opportunity to provide treatment (NICE, 2006).

For women who use substances, accessing mainstream services may present an additional challenge often due to concerns about their parenting capacity being questioned. Women with an SUD may therefore be under-represented in smoking cessation services, which could support previous research providing a rationale for women-specific services for both substance misuse and smoking cessation (Simpson and McNulty 2008, Torchalla et al. 2012).

The COM-B model proposes that for any behaviour to occur, the person must have the capability, opportunity and motivation to carry it out (Michie et al. 2011). If this model is applied to the behaviour of making a quit attempt in the context of substance misuse treatment, then this study highlights the significance of opportunity. For participants who found themselves in a setting where smoking cessation treatment was readily available, the opportunity appeared to trigger the quit attempt. For those who had planned to quit on arrival in treatment, the opportunity was not provided as due to the very high prevalence of smoking they found it very challenging to make a quit attempt. Despite existing motivation and increased perception of capability since quitting other substances, without the opportunity they were not able to make their quit attempt as planned.
Substance misuse services need to be able to support those making planned quit attempts, but also to recognise that given the right opportunity, smokers may make unplanned quit attempts, as many do in the general population (West and Sohal 2006). The study succeeded in recruiting a demographically broad sample, reflective of substance misuse treatment demographic patterns. The sample size is small however, reflecting the additional time required for gender balanced recruitment in this particular treatment setting. The variety of services accessed provides a range of experiences and views, but only a small number of participants were recruited from each and the majority from detox services, reflecting experiences early on in the treatment pathway. However, similarities in experiences across services were identified and sufficient data generated to allow for analysis between cases. Further research could explore quitting rates and quitting experiences within each setting and at each stage of treatment pathway; this study provides a range of experiences reflecting the breadth and heterogeneity of substance misuse services, which may be transferred to other substance misuse populations.

The professional nursing background of the interviewer could have introduced bias during the interview and analysis process with particular attention being paid to data pertaining to practice. The multi-disciplinary research team fostered a reflexive dialogue, which sought to address this potential bias.

The potential for response bias is also acknowledged, though care was taken to reiterate to participants that the interviewer was entirely separate to the clinical service. A wish to produce socially desirable answers to a healthcare professional in a substance misuse treatment context is also likely, and may have influenced participants’ stated intentions and self-efficacy regarding their substance use but also their smoking behaviours. The study recruited mostly smokers motivated to quit smoking, therefore represents only a proportion of views from smokers with an SUD. Further research is required to elicit perspectives of those unmotivated to quit which could provide insight into what other potential interventions could reduce tobacco-related harm in this population.

Conclusions

Smokers with an SUD who took part in this study were, with a single exception, motivated to quit; they had the opportunity to transfer skills acquired from quitting substances, and regularly accessed health services. Efforts are needed to ensure those health services
promote and support smoking cessation that the treatment environment supports cessation, and that provision of smoking cessation treatment is fully accessible. Further research is required to determine effective smoking cessation interventions for this population within a substance misuse treatment setting. This study suggests that the influence of the environment, peers and staff needs to be taken into account in such interventions, as well as optimising the potential for transferring skills acquired in quitting substances. Ensuring access to both pharmacotherapy and behavioural support is crucial in assisting this marginalised, high-risk population to reduce smoking-related harm.

Ethical approval
Ethical approval was given by the Kings’ College London Psychiatry, Nursing and Midwifery Research Ethics Subcommittee reference HR-15/16-2134. The approval required approaches to potential participants be made by staff only, which was adhered to throughout. Of the two organisations used to recruit participants, one provided gatekeeper approval, the second required a written submission for formal approval to the organisation’s R&D department. The research was carried out in accordance with the Code of Ethics of the World Medical Association (WMA 2013).

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Declaration of interests
There are no interests to declare.

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World Medical Association 2013: Declaration of Helsinki - Ethical principles for medical research involving human subjects