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Understanding recruitment and retention in the NHS community pharmacy stop smoking service: perceptions of smoking cessation advisers

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ABSTRACT

Objectives: To understand views of pharmacy advisers about smoker recruitment and retention in the National Health Service community pharmacy stop smoking programme.

Design: Thematic framework analysis of semi-structured, in-depth interviews applying the Theoretical Domains Framework and COM-B behaviour change model. We aimed to identify aspects of adviser behaviour that might be modified to increase numbers joining and completing the programme.

Participants: 25 Stop Smoking Advisers (13 pharmacists and 12 support staff).

Setting: 29 community pharmacies in three inner east London boroughs.

Results: Advisers had preconceived ideas about smokers likely to join or drop out and made judgements about smokers' readiness to quit. Actively recruiting smokers was accorded low priority due in part to perceived insufficient remuneration and anticipated challenging interactions with smokers. Suggestions to improve smoker recruitment and retention included developing a more holistic and supportive approach using patient-centred communication. Training counter assistants was seen to be important as was flexibility to extend the programme duration to fit better with smokers needs.

Conclusions: Cessation advisers feel they lack the interpersonal skills necessary to engage well with smokers and help them to quit. Consultation skills training for all pharmacy workers including those not formally trained as cessation advisers could potentially boost numbers recruited into the stop smoking programme. Adjustments to the remuneration structure to incentivise recruitment and to allow personalisation of the programme for individual smokers should also be considered.

Keywords: Smoking cessation, Community Pharmacies, Qualitative research, Patient recruitment, Retention, Health Behaviour, Communication, Psychological Theory

Word count: 4,089

Strengths and weaknesses

- This is the first study to provide insight into smoker recruitment and retention in the NHS community pharmacy stop smoking programme from the adviser's perspective and therefore fills an important gap in knowledge.
- We used the Theoretical Domains Framework and COM-B behaviour change model to identify attitudes and behaviours that could potentially be modified, thus providing a unique insight into smoker recruitment and retention in this clinical setting.
- In our analysis we achieved high inter-rater reliability between two independent coders and high agreement with a health psychologist about mapping thematic data onto constructs of the Theoretical Domains Framework.
- Whilst our sample size was relatively small, our data collection was adequate since theoretical saturation was achieved.
- Our findings will not be generally applicable, but could nevertheless be transferable to community pharmacies delivering the stop smoking programme in other socio-economically deprived communities.

INTRODUCTION

Improving public health through extending community pharmacy services has become a key part of UK National Health Service (NHS) operating strategy.[1-2] Smoking cessation is a public health priority[3] since smoking is the most important cause of premature morbidity and mortality worldwide.[4] In the UK, smoking cessation through pharmacy-led stop smoking services is now a key element of the Department of Health's tobacco control strategy.[2]

Community pharmacies are accessed by people both in health and illness, hence community pharmacy stop smoking advisers are well placed to reach large numbers of smokers.[5] Behavioural counselling/support, or a combination of nicotine replacement therapy and counselling by trained pharmacy staff are effective in helping smokers to quit.[2, 4, 6] However, the overall effectiveness of the pharmacy stop smoking programme does not only depend on the quit rates achieved but also on the number of smokers who participate and adhere to the programme.[7-8] In 2012-2013 of the estimated two million smokers in England,[9] only 149,034 smokers set a quit date in the pharmacy NHS stop smoking programme. Of these, 48% successfully quit at four weeks compared to the target of 70%.[2, 10] Quit rate was slightly lower than that achieved by the stop smoking services in primary care (50%) and lower than specialist stop smoking services (56%).[10] This apparent poor performance may result from differences in case-mix, however variations in staff training and environmental factors in pharmacies may make high cessation rates harder to achieve than in other settings. Nevertheless there are considerable disparities in quit rates between pharmacies suggesting potential for improvement.[2]

A recent review[6] suggested that pharmacists only target those they perceive to be ready to quit, thus reducing recruitment potential. Retention within the service is also poor, for example only 35% of the 4500 people who joined the stop smoking programme in one inner London borough, successfully quit (i.e. quit status biochemically verified by carbon monoxide testing at four weeks from the quit date)[11] and the remainder were lost to follow up.[12] Thus in addition to optimising quit rates, improving recruitment and retention to the stop smoking programme might raise overall numbers successfully giving up smoking.

In a systematic review of pharmacist views on delivery of public health services pharmacists recognised they should be more active in smoking cessation, however a number of barriers were suggested such as lack of time, staff and a designated space. Knowledge and skills were thought to be lacking and patients did not expect to receive health promotion advice from pharmacists. In addition there was reluctance to initiate conversations about health promotion because of fears of generating negative responses.[13]

No detailed investigation of stop smoking advisers' views on factors affecting recruitment and retention in the NHS stop smoking service has been published to date. This is the first such UK qualitative study aiming to: (1) understand stop smoking advisers' views relating to smoker recruitment and retention in the NHS stop smoking programme in community pharmacies; (2) identify factors that might be targeted in an intervention to increase smoker recruitment and retention to maximise the effectiveness of the programme.

The results of this study will contribute to development of a complex intervention to promote uptake and increase the effectiveness of the NHS pharmacy smoking cessation service. This intervention will be evaluated in a cluster randomised trial in east London as part of the STOP programme (Smoking Treatment Optimisation in Pharmacies).

METHODS

Study design

We conducted semi-structured, in-depth interviews with stop smoking advisers (comprising both pharmacists and pharmacy support staff). For roles and responsibilities of staff and an outline of the stop smoking programme see Box 1.

We used thematic framework analysis[14-15] applying the Theoretical Domains Framework [16] within the COM-B model of behaviour change.[17] The Theoretical Domains Framework is synthesised from multiple behaviour change theories and comprises 14 domains of theoretical constructs that explain possible influences on behaviour.[16] Each domain fits within one of the three components of the COM-B model - Capability Opportunity and Motivation.[17-18] For example, 'Skills' in the Theoretical Domains Framework maps on to 'Capability' in the COM-B model, 'Professional Role and Identity' to 'Motivation', 'Environmental Context and Resources' to 'Opportunity'.[18] COM-B provides a basis for designing interventions aimed at behaviour change by helping to identify the behavioural target and the components of the behaviour system needing to be changed.[17]

Setting and participants

The study was conducted in three inner east London boroughs: Tower Hamlets; Newham; City and Hackney. These boroughs include south Asian and African/Caribbean communities with high levels of tobacco use and persistent health problems linked to social and economic inequalities.[12, 25-26] Smoking prevalence in these deprived boroughs is close to the UK national average (20%), or higher (Newham 21%, 23% in Hackney, 37% in Tower Hamlets).[12, 25-26] We recruited smoking cessation advisers from pharmacies in these three boroughs using purposive sampling to obtain a diverse

range of views.[27] Pharmacies were sent a letter and information sheet and contacted by telephone to arrange a face-to-face meeting in the pharmacy. A member of the research team (CR) or a research assistant obtained written informed consent.

Data collection

Individual interviews were conducted from January to June 2014 by an experienced female qualitative researcher (RS, VM) using an interview schedule (Box 2). The interviewer was not known to the study participants and was not involved in recruiting participants to the qualitative study. Advisers were informed that study aim was to improve programme recruitment, retention and quit rates. Interviews took place in the consultation room of the community pharmacy and lasted 30-60 minutes. Recruitment and interviews continued until data saturation was achieved. All interviews were audio-recorded and fully transcribed. Nvivo10 was used for organisation of data and to facilitate analysis.

Data analysis and interpretation

A thematic framework analysis[14-15] was conducted. This method starts deductively with *a priori* codes from the study aims and objectives however, subsequent analysis is inductive and grounded in the accounts of the participants.[14] Researcher (RS) read and re-read the transcripts for familiarisation and data immersion. A thematic framework was formed following line-by-line coding and comprised useful memos or descriptive statements to develop categories. Comparisons were made within and between transcripts based on the thematic framework. The data were then lifted and charted across the thematic categories. This process was carried out initially with a few transcripts and discussed with the study team (CR, RW, LS) to assess reliability and agreement between two coders and to check validity of the analysis. Inter-rater reliability was 90.9% (kappa agreement) between the two coders (RS, CR) on 20% of the transcripts. Subsequently, the emergent themes were mapped (by RS) onto behavioural constructs of the TDF and the COM-B model, where applicable, to generate analytical themes.

The mapping was discussed and agreed with a health psychologist (LS) to ensure the mapped thematic data fitted with the domain definition and its content (Supplementary file 1). This process generated analytical themes or key domains influencing the engagement and retention behaviour of advisers and helped us to identify domains that might be targeted to optimise adviser behaviour. Emergent themes are exemplified below with direct participant quotations.

RESULTS

Twenty-five interviews were conducted following approaches to 44 advisers in 29 community pharmacies. Reasons for non-participation were lack of interest (n=14) or unavailable/no answer (n=5). Characteristics of the participants are shown in Table 1.

In the analysis the emergent themes mapped on to five of 14 TDF constructs with one independent theme. Figure 1 illustrates this using COM-B as headings and TDF as subheadings (italics). The independent theme and its potential relation to COM-B is highlighted with dashed lines. See supplementary file 1 for full definition of the COM-B and TDF constructs. In the text that follows the higher level heading is from the COM-B model and the subheadings represent relevant domains from the Theoretical Domains Framework.

Table 1 Characteristics of study participants

* This code is used to identify the source of quotations in the text.

Motivation

(1) Professional role and identity

Many participants felt proud of their work and were satisfied that through their role as advisers they were able to help people quit smoking, which in turn helped with the health and well-being of the wider community.

> *I mean, you are always happy that you've helped someone do something. And there are many times that, this guy (client who has quit) will always pop in. …and say "Oh, I'm just passing and I thought let me just say hi to you!" And there are many times … This lady, it's nice. I mean, why would this lady bring her son over for me to advise? It's like they appreciate it and you have that feeling that, oh, you've also managed to help someone and it's great to do that.* (Study ID S08A071, Pharmacist)

Identification and engagement of smokers into the programme

Advisers identified potential clients through: GP referrals; recommendations from people who had quit; opportunistically during medicine review or while conducting risk assessment; and when people bought products from the pharmacy, picked up regular prescriptions or bought over the counter medication. Despite this, many advisers selected and recruited only those smokers who mentioned their readiness to quit because they thought that these smokers were less likely to drop out. A few said they only recruited those who specifically asked for smoking cessation advice and were not interested in actively recruiting smokers to the NHS SSP.

> *She's like I'm not in the right frame of mind but I really want to give up smoking. So in that way we just tell them look, … So we told her and with smoking you have to make sure that they're in the right frame of mind otherwise there's no point them joining the programme. Otherwise they'll join and then quit after a week and there's no point.* (S24A231, Pharmacy support staff)
>
> *I would say the recruitment. I mean it's a bit hard, most of it has to be walking and…yeah. Or maybe they see the poster. But we're not doing that much.* (S19A182, Pharmacist)

Some participants said that recruitment into the programme was low priority. Advisers wanted to prioritise patients with long-term conditions or those that they thought had life-threatening conditions. One adviser felt giving up smoking was the responsibility of the smoker.

> *…so smoking is more or less a very very little part of our actual work here. We actually have people who have life threatening conditions, you can be dead tomorrow. So that's of a*

greater priority than smoking. Smoking is by choice, you want to give up, you don't want to give up. (A01A001, Pharmacy support staff)

Several participants also said they believed that all the advice, support and products they provided could only help a smoker quit if the smoker was mentally prepared and had the willpower to follow through the advice and make the necessary lifestyle/environmental changes conducive to stopping smoking. Advisers felt they had most success with this type of client.

… we're pretty straight with them (potential clients), … if they're motivated to quit then they've got a better chance of succeeding, things like …NRT Champed (sic) only helps to a certain extent … and if they don't have the willpower it's not going to work… (S09A082, Pharmacist)

Encouragement and motivation to ensure attendance and adherence

Some participants stated that encouraging clients to continue attending the programme sessions was important. One adviser mentioned that to prevent dropouts and indeed when engaging with clients who had relapsed, identifying the reasons for stopping smoking and relapse were important.

Oh I think you are always going to get that (people dropping out). …I mean you are talking about 1 in 2 not getting through so you just have to keep motivating and telling them you know I mean you've been smoking for 20 or 30 years, you are not going to give up in 6 to 12 weeks, it's a long term process. And I think if you have like help, if you have re-started again, again the important thing is to find the reasons why because I think if you can get to the bottom of that and work on that rather than just giving them NRT and thinking, you know so really that is most important. The NRT helps but you need to know why you want to stop smoking. (S03A021, Pharmacist)

A few participants did not see following up clients who missed sessions as part of their role. Some said that they simply accepted it if smokers mentioned they were finding it difficult to not smoke when they spoke to them by telephone or in person.

Two persons I've seen, they can't manage (to quit), that's it. Sometimes if they come for their medicines to pick up or anything, they can say, "Oh, sorry, I didn't come back, because I can't manage at the moment, I'm not all right." So we say, "OK, whenever you feel OK."
(S02A012, Pharmacy support staff)
…when they don't come back it's like well, did you give them the wrong products? They didn't suit them, they could've phoned us, we could've spoken to them, we could've swapped it. We

are pretty flexible. But if they don't come back to us there's no way of knowing, is there? (S25A241, Pharmacy support staff)

Some advisers acknowledged that more smoker engagement would result in higher quit rates. The following were suggested to boost service recruitment and retention: identify potential smokers for the service e.g. when they bought cough syrup; engage, inform, encourage and recommend the programme to smokers e.g. through use of poster adverts; explain how the programme and adviser involvement could help with quitting; place a holistic focus on the person.

So if you're focused on the client rather than the process you're going to get a bigger outcome rather than saying this is a tick form, I've got to tick this, I've got to fill this in, I've got to fill that in and oh, I've missed out here, we've got to do a CO reading sort of thing. (S26A253, Pharmacist)

(2) Reinforcement

Remuneration

This process of remuneration was acknowledged as an issue by the adviser participants who were a mix of owner pharmacists, employed pharmacists and other pharmacy support staff. Among the owner pharmacists, a few said that the current remuneration for quitters was reasonable, while some others felt that the remuneration did not take into account the time they spent with smokers encouraging them to join and adhere to the service.

One owner pharmacist mentioned that the current payment system was a disincentive to spend time with smokers, and needed revisiting by commissioners; payment based on quitters might influence which smokers staff are willing to support.

And things, we get penalised for non-quitters which are not really our fault.

Interviewer: …How do you mean penalised?

So currently we may spend three or four hours actually going through these patients, and because they don't quit we don't get the full £40 or £35. We end up with about £20. That's the disincentive. There are certain health authorities now are saying that if a patient doesn't quit there's no fees. So there is a lot of disincentives for a pharmacist to say look, I only get a 50 per cent success rate, I'm not going to spend three or four hours at a time and get nothing for it. So they're (pharmacies are) not going to take on new clients and the way that the health authorities and CCGs think about these programmes needs to change. (S26A253, Pharmacist)

Another owner pharmacist stated that perhaps smokers should be incentivised to attend their stop smoking appointments as it could mean saving money for the NHS in the long run and some pharmacy support staff suggested providing incentives/rewards to their clients that could be given at programme completion.

> *And I think if you can perhaps issue vouchers, but issue vouchers that are redeemable at the end of the process, yeah? So it makes no sense for them to come to two or three consultations, accumulate vouchers and then miss the fourth one, yeah, you know? So I think there should be vouchers that can be redeemed for cash at the end of it, because most people don't want to be restricted as to what they can do with a voucher or cash or anything. That is one thing I think…..at the end of the day, we need to put it in the balance; I mean, the government feels that getting people to stop smoking leads to a greater saving on the NHS, so it's something they should look at.* (S29A281, Pharmacist)

Several of the employed pharmacists and support staff acknowledged that delivery of the programme was part of their job, although a few highlighted that if their pharmacy were to receive an increase in the current remuneration for quitters then they might be allowed to spend more time engaging with and following up clients to continue and complete the programme.

> *I think so as well, because it (current remuneration) is a kind of barrier. You do encourage them (smoker) to stop smoking, but then three weeks you spend with them, although they don't stop smoking … And for one engagement they give you (payment), but after that, if they keep on giving us the money we (can) encourage more people, … So if they encourage me, I mean the pharmacy, by providing with more money or anything, no barriers regarding money, then we can do more, much more.* (S26A251, Pharmacy support staff)

(3) Beliefs about capabilities

Interaction with smokers

Some advisers mentioned that engaging with smokers and motivating clients who enjoyed smoking or who were not interested in quitting was a challenge to programme recruitment and retention. In addition, one participant was unsure about the protocol to follow when a client smoked a cigarette at the end of 12 week programme.

> *It's more of a challenge when they say oh, but I love smoking, I love the taste of smoking. Then it's a bit of a challenge because they've already got in their mind that…there's like a mental block. Whatever you're going to say to me, I don't really care sort of thing. ..* (S24A231, Pharmacy support staff)

In contrast, a few participants felt confident to handle some of the above mentioned issues by talking about the harmful effects of smoking, showing the tar jar to smokers and suggesting to smokers they were available to support them when they are ready to quit.

> *Yeah, I mean there's no harm in recommending it (the service). You recommend it to everyone. I don't see anything bad about that. It's just whether they'll actually sign up or not. … The only way we can deal with that is through awareness, like the tar outside and posters and our TV advert. That's the only way you're going to get those kind of people.* (S26A252, Pharmacy support staff)

Capability

(4) Skills

Skills training

Several suggestions were given to improve the skill set of advisers (including counter assistants) to help with recruitment and retention in the stop smoking programme, such as reinforcement of motivational and communication skills, including how to approach people about smoking without causing offence, how to be supportive. Most suggestions were features of person-centred care such as, how to personalise advice, how to elicit from smokers which things had worked and which did not work, how to work with smokers to identify from them what targets they would like to achieve and how they would achieve them.

> *Pharmacies are very prescriptive and I think when you're asking people to give up smoking you have to think about how they need to change their behaviour, and I think it's those … skills that you need to apply, and that is very crucial and very important. Getting it out there. What is it they're able to do? You know what they need to do. It's only when they come up with solutions themselves they're more likely to follow it through.* (S01A001, Pharmacy support staff)

In addition, a few participants stated there was need for regular training, some others suggested that it might be useful to include in any future training items such as visual scenarios, role plays or mock interviews to learn and practice their skills. Two participants also wanted to see experts in action with a client to help them learn and improve their skills.

> *I think sometimes you get a bit complacent. When you're doing it and you think everything's fine you give them the NRTs, tell them to come back next week if they have any problems. But they might actually have a bit of problems that they want to tell you but they can't for*

whatever reason or they feel like if they tell you that they've failed then… So trying to get the best out of their patients, so someone that could come in like a specialist to actually help, that would be good. Because you always learn something when you're shadowing someone, always. (S24A231, Pharmacy support staff)

Opportunity

(5) Environmental context and resources

The study participants mentioned a number of structural/organisational challenges that affected smoker recruitment and retention in the programme:

Lack of time because of delivery of other services

Participants mentioned that they forgot to remind clients about their appointment or they were unable to keep tabs on clients' programme adherence. A few pharmacists, on account of being busy, said they were reluctant to recruit smokers, if they were unable to provide details about the programme and the procedure involved; this seemed to affect recruitment.

Especially someone who says, "Can I join the scheme now?" and sometimes it's not possible; when I'm so busy here, I can't leave the place and come in here. There's no way I can leave it, so I have to give them an appointment. But sometimes people are not happy with that; it's like they really want to join now! You get the point, they really want to join, so if you can't do it for me now, then I can't come, so it's an issue. (S08A071, Pharmacist)

In contrast, one pharmacy support staff participant, to avoid losing clients, started engaging people on the same day of their pharmacy visit instead of giving them an appointment for a later date; this strategy helped them to improve recruitment into the stop smoking programme. Another staff member wanted a reminder system to enable client follow-up to help with retention.

…if somebody comes in now, generally we do it straight away. That's how we found it works better. If you give them a date they don't turn up because within this time they've got a different commitment. (S11A102, Pharmacy support staff)

To make time for smoker engagement, one pharmacist mentioned that having counter assistants to help with the recruitment process or more staff to share with their dispensing workload could lead them to engage and offer the stop smoking programme more frequently to smokers.

Inflexibility of the programme

Several participants felt that the duration of the programme was insufficient for some clients to quit and remain abstinent. One participant suggested that clients who relapsed going through the programme should be allowed to continue with the programme instead of asking them to re-join the programme, normally after a few weeks. In contrast, another participant mentioned that allowing dropouts to re-join the programme as soon as they were ready instead of using the "after six months" rule was not helpful in improving quit rates.

> *Other issues I've had have been people who kept coming back, like two or three times a year, and it's obvious that they are not serious, or I don't know. In the past, with the NRT, they used to say they can't do it again until after six months, but now as often as they want. But then with the Champix, I got people coming two or three times a year: stop/start, stop/start.* (S11A103, Pharmacist)

Working with budget cuts

The facility to offer two treatments concurrently to clients had been stopped due to budget cuts despite evidence of its effectiveness. In one of the participating boroughs the varenicline (Champix) license for pharmacists to prescribe had been taken away; one participant stated that this had affected recruitment into the programme.

> *Champix, the tablets. We haven't got a PGD (patient group direction) for it right now, so I had one person yesterday, she was a bit upset, she was like oh, I want the tablets, I want the tablets. And we don't have the licence for it. I think the whole of Newham, all the pharmacies…I think hopefully we'll be getting it back soon enough, … So that's a problem, we've lost a few people… but we could've had those people as clients. So that's one thing, hopefully we'll try and get that back. If the providers can help us with that then that would be great.* (S24A231, Pharmacy support staff)

Failing to take advantage of national campaigns

One participant felt that the 'Stoptober' campaign helped with smoker recruitment but not retention because they perceived smokers were not really committed to giving up smoking and only joined because of the advertisement. Some other participants felt that the No Smoking Day campaign went by too quickly to enable smoker recruitment.

> *Having it (No Smoking Day) spread over a week means you can maybe put up a lot more balloons up, you can put a lot more signs up, you can market it better, it gives you a longer time to market it and it will give you that whole week to engage with people. Because*

> *sometimes you might only see them once a day, but if you've missed that opportunity…tomorrow's not a non-smoking day. Oh, I'm not doing it then.* (S25A242, Pharmacist)

Other organisational factors such as inadequate stock of nicotine replacement products to meet client demand, having only one consultation room that was often occupied were mentioned as restrictions on smoker recruitment by two participants.

> *...the room that I'm using is constantly being used up. I've got this one room. You know? And things like that again – having resources [unclear] how to manage that.* (S01A001, Pharmacy support staff)

(6) Advisers' perceived characteristics of service 'joiners', 'non-joiners' and 'dropouts'

Advisers' characterised smokers as those likely to join, not join or drop out of the stop smoking programme. This categorisation of smokers then affected how likely the adviser would be to recruit them into the stop smoking programme.

Eleven participants stated that 'Joiners' (including those who relapsed and wanted to quit again) were those who were motivated, willing or determined to give up smoking to improve health/quality of life, and were clear of their reasons for wanting to give up.

> *Yeah, always ask them as well what's in your mind. Why do you want to do this (quit smoking)?... So once they have that (reasons) in mind I will tell them okay, so have that in mind, so even when the cravings come just hang onto that, because at least you have something you want to achieve because of that. … in fact, if you don't have it, for me you are more likely to fail…* (S19A182, Pharmacist)

'Non-joiners' were characterised by eight participants as those who did not suffer from any health related problems and hence were not ready or motivated to quit, they were either not interested or in denial, thinking that they would not suffer any health-related consequences perhaps because people they knew had been smoking for years and their health seemed unaffected. In contrast, smokers living with a long-term condition such as cancer felt that it was too late for them to change their behaviour as their illness progressed.

> *Because like I said, in many years, I've seen so many patient …, when they're smoking, end up with a cancer. He was still coming to see me, went to the doctors, diagnosed cancer, came in and said I'm not doing it (stopping smoking). Why? Because I've got cancer, what the hell, I'm going to die.* (S19A181, Pharmacy support staff)

'Dropouts,' according to seven participants, were those who were fighting more than one addiction or going through some personal crisis and therefore were not ready to give up smoking. Such people, the participants suggested, might be easily tempted into smoking by family/friends who smoke, or might not perceive any benefits or might not be interested in quitting.

> *He was determined (to quit) because he got it from the GP, the letter, so I thought yeah, he's going to give up smoking. But he just…the first week I supply and then the second week I didn't see him there. Called him and he said no, I can't give up, it's not holding me now. So he wasn't ready really, I don't think he was ready. …* (S04A032, Pharmacy support staff)

DISCUSSION

Statement of principal findings

Recruitment and retention of smokers in the NHS stop smoking programme may be influenced by advisers' preconceived ideas about smoker types likely to join, not join or drop out of the programme. This early categorisation of smokers influenced perceived readiness to quit. Active smoker recruitment was often a low priority, partly because advisers considered the remuneration they received for each quitter was insufficient to justify use of time and because they anticipated challenging interactions with some smokers. There were also perceived structural/organisational challenges involving programme delivery.

To improve the programme, advisers suggested that they should adopt a more holistic and supportive approach. They further suggested that strengthening their belief in the importance of engagement with both new and relapsed clients would help to improve uptake of the programme and retention of smokers within the service. An increase in remuneration for quitters was also thought to be beneficial. Advisers would welcome improvement in structural and organisational delivery of the programme and more regular training in person-centred communication. The inclusion of counter assistants in training programmes might help to improve recruitment of smokers.

Comparison to other studies

The Theoretical Domains Framework and COM-B models have been used previously in studies of dental health professionals[28-29] and midwives.[30] A barrier to delivering smoking cessation services in these clinical settings was that healthcare workers did not consider smoking cessation part of their primary role. In contrast, all participants in our study were trained stop smoking advisers and wholeheartedly embraced the smoking cessation role. Nonetheless some

advisers identified the need for more training, particularly to build capability in the recruitment process, to maximise engagement with smokers and to bolster their communication skills. This need for training was also felt by dental health professionals and midwives. The fear of negative patient response, inadequate staffing, and lack of confidence in delivery of health behaviour advice which we identified in our study has also been reported in other settings.[13, 31-32]

In line with the recent review on the effectiveness of pharmacy smoking cessation interventions,[6] we found that many advisers were mostly accepting smokers who wanted to quit because they did not want to risk dropouts. The National Centre for Smoking Cessation and Training also recommends that if the smoker is not ready to make a serious quitting attempt, the adviser should provide the programme's contact details and ask them to get in touch when they are ready.[33] Another explanation for selection of those likely to quit may be pressure from service targets.[34]

The perceived opportunity cost of engaging with smokers who did not express a desire to quit or who fitted stereotypes that advisers associated with failure to quit, appeared to affect adversely the recruitment of smokers into the service. Hoving[35] compared 'active' recruitment (i.e. "asking each individual's smoking status and inviting smokers to participate in the service") and passive (i.e. "leaving participation up to the smoker's initiative") in a community pharmacy setting. The former approach was suggested as a way of increasing the total number of quitters. It has been suggested elsewhere that passive recruitment strategies might reduce the likelihood of a quit attempt. [36]

In addition to lack of time for health promotion which has been reported previously,[13, 31, 32, 37] problems with delivery of medicines and promotional material, linked to national stop smoking campaigns, were perceived by advisers to affect smoker recruitment and retention. Addressing these issues is crucial to facilitate adviser engagement behaviour,[38-39] and could add to the success of national campaigns in increasing the number of people attempting to quit and permanently quitting.[38, 40-41]

Implications for clinical practice and policy makers

Advisers' perceptions of types of smokers who are likely not to join or to drop out of the programme and some advisers' experience of challenging interactions with smokers have been reported previously[32] including in socially deprived areas.[42-43] However, the community pharmacy stop smoking services in east London are effective in reaching socio-economically deprived communities[34] and the smokers in these communities are just as motivated to quit smoking as smokers in more affluent areas,[34, 44] and to want help with quitting.[45] Smokers' stage of change[46] and economic disadvantage should not preclude the use of active recruitment[8, 34, 44] and retention strategies.

Recent changes to the pharmacy smoking cessation services in one of the participating boroughs meant that pharmacists were no longer able to recommend co-therapy (nicotine patch plus gum/lozenge/inhalator) or varenicline to clients which advisers considered a problem. It seems likely that restricting access to effective treatment and thus compromising patient choice could adversely affect engagement of smokers and quit rates. In addition, several advisors felt the duration of the stop smoking programme was not long enough for some smokers to quit and to remain abstinent and suggested having flexibility in the programme to allow continuity of care, where appropriate to suit clients' needs, for example after relapse.

The remuneration for programme delivery is determined by commissioners on the basis of clear criteria e.g. the time and duration of intervention and treatment provided, carbon monoxide (CO) monitoring and data reporting. The payment is made to the pharmacy owner i.e. a contractor who may be a pharmacist sole trader, a partner with other pharmacists or who may appoint a superintendent pharmacist[2, 47] No payment is made to employed pharmacists or to pharmacy support staff. The current payment system appears to provide a disincentive to spend time with smokers - and this has been acknowledged in the community pharmacy stop smoking services guidance.[2]

The pharmacy cessation advisers derived professional satisfaction in helping individual smokers to quit and also saw their role in smoking cessation as benefitting the whole community. Advisers thought about wider aspects of the scheme and took a professional interest in how the scheme might develop – for example suggesting a voucher scheme and tailoring the duration of the smoking cessation programme to individual smokers. This source of intrinsic motivation may distinguish cessation advisers from other healthcare professionals and could be drawn upon further in pharmacy adviser training programmes.

Implications for future research

More research is needed with a broader range of participants including female advisers and advisers of other ethnicities delivering the programme in deprived and non-deprived areas. In addition, studies to understand in more detail the effects of the remuneration structure for pharmacists and support staff on smoker recruitment is warranted.

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Contributors RW conceived the study. RS was involved in the data collection, data analysis and interpretation and writing the manuscript. VM was involved in the data collection. CR and LS were involved in the data analysis and interpretation. CR, VM, LS, EE, VK, CG, ST, SE and RW were involved in revising the article critically for important intellectual content. RW is the guarantor.

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Ethics approval Ethical approval for the study was obtained from the NRES Committee South Central - Berkshire B (reference number: 13/SC/0189).

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Data sharing statement This study analyses qualitative data and the advisors did not consent to have their full transcripts made publicly available. The advisors consented for their data to be stored for five years, as part of the 5-year programme grant project and to be used in this or other studies directly linked to the 5-year project. Supporting excerpts from the raw data (quotes from participant interviews) are available with the text of the paper. Full transcripts of the interviews (with identifying information removed) will be available, following completion of the project, on request from the study guarantor, Robert Walton, r.walton@qmul.ac.uk

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Figure legends

Box 1. Outline of the stop smoking training and the community pharmacy stop smoking programme

Box 2. Interview schedule

Figure 1. Illustration of behavioural factors affecting adviser engagement and retention behaviour (modified from the COM-B model)

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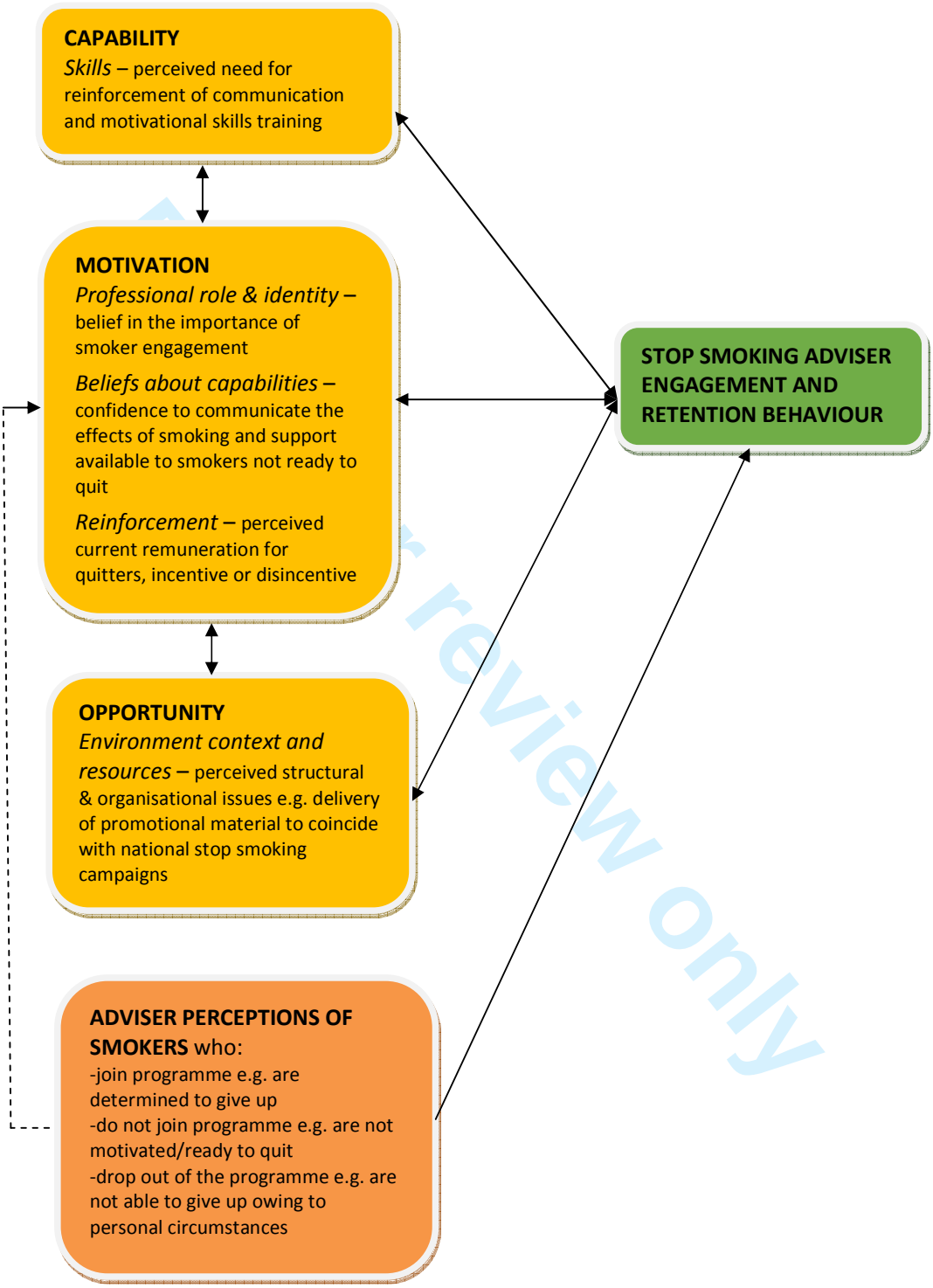

Box 1 Outline of the stop smoking training and the community pharmacy stop smoking programme

Training in smoking cessation[19-22]
The National Centre for Smoking Cessation and Training (NCSCT) offers a range of training, assessment and certification programmes for both clinical and non-clinical health and social care workers to become more skilled in smoking cessation. The training programme is built around evidence-based behaviour change techniques that provide an understanding of the factors involved in smoking and smoking cessation.
The training includes:
(1) Level 1 training or Very Brief Advice in Smoking Cessation training – this (online) training enables promotion of smoking cessation and can be undertaken as a minimum by health care professionals e.g. doctors, nurses, pharmacists including staff who advise people on how to quit smoking.
(2) Level 2 training or Training and Assessment programme - this (online and face to face) training is for equipping health care professionals, who intend to become *stop smoking advisers*, with knowledge and skills to provide intensive one to one support in smoking cessation through delivery of the NHS Stop Smoking Programme (see below).

Delivery of the NHS Stop Smoking Programme in community pharmacy[23-24]
The pharmacy owners (contractors) are contracted by clinical commissioning groups and local authorities to deliver public health services including the NHS stop smoking services to meet the needs of the local population. The stop smoking services cover the range of activities from the proactive promotion of smoking cessation through to provision of the NHS Stop Smoking Programme.
In community pharmacy, the stop smoking programme can be delivered by stop smoking advisers who might be:
- Pharmacists: qualified experts in the use of medicines for treatment of disease. They offer a range of services such as Medicines Use Review and Prescription Intervention Service; New Medicine Service; Appliance Use Review Service; Public health services e.g. Stop smoking services, NHS Health Checks.
- Pharmacy support staff such as medicines counter assistant, dispenser, dispensing assistant, pharmacy technician and accredited checking technician who support the pharmacist in the selling of medicines and delivery of services.

Content of the NHS Stop Smoking Programme[2, 20]
The content includes delivery of behavioural support together with pharmaceutical treatments comprising Nicotine Replacement Therapy (NRT) e.g. patches, prescribed medication e.g. varenicline (Champix) or a combination of NRT and prescribed medication to help a smoker quit smoking.
The duration of the programme, dependent upon commissioners, ranges between 6-12 weeks with quit status to be recorded at 4 weeks, verified by carbon monoxide (CO) monitoring and sent for NHS England statistics.

- Week 1

- Introduction and set planned Quit Date (approx. ½ hour meeting)
- Stop Smoking Adviser explains programme process
- Gives service user/smoker information about 3 types of medication available (NRT, Champix (varenicline) tablets and Zyban (bupropion) tablets)
- Discuss which is most suitable for service user
- Adviser takes and records service user carbon monoxide (CO) reading

- Week 2-4

- Brief meetings to check progress (each approx. ¼ hour and informal). Quit status CO monitoring is recorded at week 4 for NHS England statistics.[2]

- Week 5/6

- Longer meeting to discuss motivations and techniques to avoid relapse.

- Week 6/7-12

- Programme available to service user but the adviser is not obliged to follow up.

Box 2 Interview schedule

THE CONSULTATIONS

1. What helps/what do you do that makes smokers join the service (recruit)?

2. What helps/do you do that makes them keep coming back (retain)?

PROCESS

3. Can you describe the main issues involved in delivering the Stop Smoking Programme?

4. What prevents people from joining the stop smoking service?

5. What are the characteristics of people that do not join the service/ who join the service and quit/ who join the service and do not quit?

6. We know that many advisers select smokers most motivated to quit. What would make you take on the less motivated/interested?*

TRAINING

7. What would you like that is different to training you have had so far? (that can help more smokers to join the stop smoking service)

* This question was added after analysis had begun as an issue emerging from the data.

Supplementary file 1 Theoretical Domains Framework (TDF) - Domain definitions

TDF (definition)	Theoretical Constructs	Possible Example
Knowledge *An awareness of the existence of something*	Knowledge (including knowledge of condition /scientific rationale); procedural knowledge; knowledge of task environment	Knowledge of why important to ask people if smoke; knowledge of nicotine patches so can deliver service well
Skills *An ability or proficiency acquired through practice*	Skills; Skills development; competence; ability; interpersonal skills; practice; skill assessment	Communication skills
Memory, attention and decision processes *The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives*	Memory; attention; attention control; decision making; cognitive overload/tiredness	Remembering to deliver different parts of service
Behavioural regulation *Anything aimed at managing or changing objectively observed or measured actions*	Self-monitoring; breaking habit; action planning	Are there systems which help monitor whether something has been done or not
Environmental context and resources *Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behaviour*	Environmental stressors; resources/material resources; organisational culture/climate; salient events/critical incidents; person x environment interaction; barriers and facilitators	The lack of a consulting room impedes consultations
Social influences *Those interpersonal processes that can cause individuals to change their thoughts, feelings or behaviours*	Social pressure; social norms; group conformity; social comparisons; groups norms; social support; power; intergroup conflict; alienation; group identity; modelling	Senior pharmacist not prioritising smoking cessation
Professional/social role and identity *A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting*	Professional identity; professional role; social identity; identity; professional boundaries; professional boundaries; professional confidence; group identity; leadership; organisational commitment	Identification that behaviour change is within a pharmacists remit
Beliefs about capabilities *Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use*	Self-confidence; perceived competence, self-efficacy; perceived behavioural control; beliefs; self-esteem; empowerment; professional confidence	Confidence that can raise question of smoking in non-threatening manner
Optimism *The confidence that things*	Optimism, pessimism; unrealistic optimism; identity	Belief that with support most people can give up smoking

will happen for the best or that desired goals will be attained		
Beliefs about consequences *Acceptance of truth, reality, or validity about outcomes of a behaviour in a given situation*	Beliefs; outcome expectancies; characteristics of outcome expectancies; anticipated regret; consequents	If don't stop smoking will die from cancer
Intentions *A conscious decision to perform a behaviour or a resolve to act in a certain way*	Stability of intentions; stages of change model; transtheoretical model and stages of change	Intention to give up smoking
Goals *Mental representations of outcomes or end states that an individual wants to achieve*	Goals (distal/proximal); goal priority; goal/target setting; goals (autonomous/controlled) ; action planning; implementation intention	Wanting to achieve increased uptake by x amount
Reinforcement *Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus*	Rewards (proximal/distal, valued/not valued, probable/improbable); incentives; punishment; consequents; reinforcement; contingencies; sanctions	Financial reward
Emotion *A complex reaction pattern, involving experiential, behavioural and physiological elements by which the individual attempts to deal with a personally significant matter or event*	Fear, anxiety; affect; stress; depression ; positive/negative affect; burn-out	Discussing smoking raises distress due to family members recent smoking related death

Definitions of the COM-B model.

Capability

i) Physical Capability e.g. not having lost voice during smoking cessation consultation,

ii) Psychological Capability e.g. having knowledge of NRT products to talk about them

Opportunity

i) Physical Opportunity afforded by environment involving time, resources, locations, cues e.g. pharmacist having sufficient time to speak with clients

ii) Social Opportunity afforded by interpersonal influences, social cues, cultural norms influence way think about things e.g. pharmacist allows counter assistant time to become trained in stop smoking

Motivation

i) Reflective Motivation involving plans (intentions) and evaluations (beliefs about what is good and bad) e.g. intention to give up smoking because believe bad for health

ii) Automatic Motivation includes automatic processes which involve emotional reactions, desires (wants and needs), impulses, inhibitions, drive states and reflex responses.

Research Checklist: Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

No Item Guide questions/description

Domain 1: Research team and reflexivity

Personal Characteristics

1. Interviewer/facilitator - Which author/s conducted the interview or focus group?
Author RS and VM conducted the interviews
2. Credentials - What were the researcher's credentials? E.g. PhD, MD
Author RS and VM have a PhD
3. Occupation - What was their occupation at the time of the study?
Author VM was one of the qualitative researchers who conducted 11 interviews and left during the course of the study. Author RS joined the study team as a qualitative researcher and conducted 14 interviews.
4. Gender - Was the researcher male or female?
Both RS and VM are female.
5. Experience and training - What experience or training did the researcher have?
Both RS and VM have expertise in qualitative research methods through education/training courses.

Relationship with participants

6. Relationship established - Was a relationship established prior to study commencement?
No. The interviewers were not known to the study participants prior to study commencement and they were not involved in participant recruitment.
7. Participant knowledge of the interviewer - What did the participants know about the researcher? e.g. personal goals, reasons for doing the research
The participants were made aware by the study team that a researcher would contact them to arrange the interview. Prior to the start of the interview the purpose of the study and interview was explained to each participant.
8. Interviewer characteristics - What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic
The participants only knew that the interviewers were study researchers.

Domain 2: study design

Theoretical framework

9. Methodological orientation and Theory - What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis
We used thematic framework analysis applying the Theoretical Domains Framework (TDF) within the COM-B (Capability, Opportunity, Motivation-Behaviour) model of behaviour change.

Participant selection

10. Sampling - How were participants selected? e.g. purposive, convenience, consecutive, snowball
We used smoking cessation advisers from pharmacies in these three boroughs using purposive sampling to obtain a diverse range of views.
11. Method of approach - How were participants approached? e.g. face-to-face, telephone, mail, email
Pharmacies were sent a letter and information sheet and contacted by telephone to arrange a face-to-face meeting in the pharmacy.
12. Sample size - How many participants were in the study?
Twenty-five participants were in the study.
13. Non-participation - How many people refused to participate or dropped out? Reasons?
Nineteen advisers refused to participate. Reasons for non-participation were lack of interest (n=14) or unavailable/no answer (n=5).

Setting

14. Setting of data collection - Where was the data collected? e.g. home, clinic, workplace
The setting was the consultation room of the community pharmacy
15. Presence of non-participants - Was anyone else present besides the participants and researchers?
No. Non-participants were not present.
16. Description of sample - What are the important characteristics of the sample? e.g. demographic data, date

The following are characteristics of the study sample: whether interviewee/stop smoking adviser was a pharmacist or other pharmacy support staff, gender, ethnic group, language fluency, level 1 and/or level 2 smoking cessation training and duration of being a stop smoking adviser

Data collection

17. Interview guide - Were questions, prompts, guides provided by the authors? Was it pilot tested?
A semi-structured interview guide was used to conduct the interviews. A question was added after conduct of a few interviews as an issue emerging from the data.
18. Repeat interviews - Were repeat interviews carried out? If yes, how many?
No repeat interviews were carried out.
19. Audio/visual recording - Did the research use audio or visual recording to collect the data?
Digital audio-recording was used to collect the data.
20. Field notes - Were field notes made during and/or after the interview or focus group?
Yes. Some field notes were made after the interview which comprised noting down a summary of what was covered in the interview including noting down some contextual details.
21. Duration - What was the duration of the interviews or focus group?
Duration of the interviews lasted 30-60 minutes.
22. Data saturation - Was data saturation discussed?
Yes. The study stopped recruitment once no new knowledge was being obtained from the interviews.
23. Transcripts returned - Were transcripts returned to participants for comment and/or correction?
The transcripts (typed per verbatim) were not returned to participants for comment and/or correction but it was available on request.

Domain 3: analysis and findings

Data analysis

24. Number of data coders - How many data coders coded the data?
There were two data coders. RS coded all the data collected and author CR coded 20% of the data which was assessed using kappa agreement. In addition, the emergent themes from the data collected was mapped onto the behavioural theory to generate analytical themes. The mapping the conducted by RS and was checked and discussed with author LS (health psychologist) to ensure the mapped thematic data fitted with the domain definition and its content. See supplementary file 1 for full definition of the COM-B and TDF constructs.
25. Description of the coding tree - Did authors provide a description of the coding tree?
Yes, the description of the coding leading to the formation of categories and themes has been provided in the manuscript as per the thematic framework analysis.
26. Derivation of themes - Were themes identified in advance or derived from the data?
As per the thematic framework analysis, this method starts deductively with a priori codes (not themes) from the study aims and objectives however, subsequent analysis is inductive and grounded in the accounts of the participants. So the themes were identified from the data and not identified in advance.
27. Software - What software, if applicable, was used to manage the data?
Nvivo software was used to manage the data
28. Participant checking - Did participants provide feedback on the findings?
This was not planned in this study.

Reporting

29. Quotations presented - Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. participant number
Yes. Participant quotations have been presented to illustrate the themes. Yes each quotation can be identified by the study ID given in Table 1 of the manuscript.
30. Data and findings consistent - Was there consistency between the data presented and the findings?
Yes. The data analysis that included mapping onto theory to generate analytical themes led to the study findings, exemplified by participant quotations. The study findings include themes/high level finding from the COM-B model and the subheadings represent relevant domains from the Theoretical Domains Framework.
31. Clarity of major themes - Were major themes clearly presented in the findings?
Yes. The emergent themes mapped on to five of 14 TDF constructs have been clearly presented in the findings and has been illustrated in Figure 1 of the manuscript.
32. Clarity of minor themes - Is there a description of diverse cases or discussion of minor themes?

Yes. An independent theme emerged following the analysis that was not mapped onto the TDF constructs and yet was an important finding and has been clearly presented and illustrated in Figure 1 of the manuscript.

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Understanding recruitment and retention in the NHS community pharmacy stop smoking service: perceptions of smoking cessation advisers

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Understanding recruitment and retention in the NHS community pharmacy stop smoking service: perceptions of smoking cessation advisers

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ABSTRACT

Objectives: To understand views of pharmacy advisers about smoker recruitment and retention in the National Health Service community pharmacy stop smoking programme.

Design: Thematic framework analysis of semi-structured, in-depth interviews applying the Theoretical Domains Framework and COM-B behaviour change model. We aimed to identify aspects of adviser behaviour that might be modified to increase numbers joining and completing the programme.

Participants: 25 Stop Smoking Advisers (13 pharmacists and 12 support staff).

Setting: 29 community pharmacies in three inner east London boroughs.

Results: Advisers had preconceived ideas about smokers likely to join or drop out and made judgements about smokers' readiness to quit. Actively recruiting smokers was accorded low priority due in part to perceived insufficient remuneration to the pharmacy and anticipated challenging interactions with smokers. Suggestions to improve smoker recruitment and retention included developing a more holistic and supportive approach using patient-centred communication. Training counter assistants was seen to be important as was flexibility to extend the programme duration to fit better with smokers needs.

Conclusions: Cessation advisers feel they lack the interpersonal skills necessary to engage well with smokers and help them to quit. Addressing advisers' behaviours about active engagement and follow-up of clients, together with regular skills training including staff not formally trained as cessation advisers could potentially boost numbers recruited and retained in the stop smoking programme. Adjustments to the pharmacy remuneration structure to incentivise recruitment and to allow personalisation of the programme for individual smokers should also be considered.

Keywords: Smoking cessation, Community Pharmacies, Qualitative research, Patient recruitment, Retention, Health Behaviour, Communication, Psychological Theory

Word count: 4,077

Strengths and weaknesses

- This is the first study to provide insight into smoker recruitment and retention in the NHS community pharmacy stop smoking programme from the adviser's perspective and therefore fills an important gap in knowledge.
- We used the Theoretical Domains Framework and COM-B behaviour change model as a framework to identify adviser attitudes and behaviours that could potentially be modified, thus providing a unique insight into smoker recruitment and retention in this clinical setting and facilitating development of interventions.
- In our analysis we achieved theoretical saturation, high inter-rater reliability and high agreement with a health psychologist about mapping thematic data onto constructs of the Theoretical Domains Framework.
- Whilst recruitment and retention are clearly two separate behaviours we analysed them together because we were interested in the combined result – namely increased throughput in the service. Future studies might profitably separate these behaviours to examine their unique motivations.
- Our findings will not be generally applicable, but could nevertheless be transferable to community pharmacies delivering the stop smoking programme in other socio-economically deprived communities across the UK. Certain findings such as low self-efficacy in consultation skills and the need to train all pharmacy staff to increase service throughput may well be transferrable to other healthcare systems, however this would need to be examined in the different settings.

INTRODUCTION

Improving public health through extending community pharmacy services has become a key part of UK National Health Service (NHS) operating strategy.[1-2] Smoking cessation is a public health priority[3] since smoking is the most important cause of premature morbidity and mortality worldwide.[4] In the UK, smoking cessation through pharmacy-led stop smoking services is now a key element of the Department of Health's tobacco control strategy.[2]

Community pharmacies are accessed by people both in health and illness, hence community pharmacy stop smoking advisers are well placed to reach large numbers of smokers.[5] Behavioural counselling/support, or a combination of nicotine replacement therapy and counselling by trained pharmacy staff are effective in helping smokers to quit.[2, 4, 6] However, the overall effectiveness of the pharmacy stop smoking programme does not only depend on the quit rates achieved but also on the number of smokers who participate and adhere to the programme.[7-8] In 2012-2013 of the estimated two million smokers in England,[9] only 149,034 smokers set a quit date in the pharmacy NHS stop smoking programme. Of these, 48% successfully quit at four weeks compared to the target of 70%.[2, 10] Quit rate was slightly lower than that achieved by the stop smoking services in primary care (50%) and lower than specialist stop smoking services (56%).[10] This apparent poor performance may result from differences in case-mix, however variations in staff training and environmental factors in pharmacies may make high cessation rates harder to achieve than in other settings. Nevertheless there are considerable disparities in quit rates between pharmacies suggesting potential for improvement.[2]

A recent review[6] suggested that pharmacists only target those they perceive to be ready to quit, thus reducing recruitment potential. Retention within the service is also poor, for example only 35% of the 4500 people who joined the stop smoking programme in one inner London borough, successfully quit (i.e. quit status biochemically verified by carbon monoxide testing at four weeks from the quit date)[11] and the remainder were lost to follow up.[12] Thus in addition to optimising quit rates, improving recruitment and retention to the stop smoking programme might raise overall numbers successfully giving up smoking.

In a systematic review of pharmacist views on delivery of public health services pharmacists recognised they should be more active in smoking cessation, however a number of barriers were suggested such as lack of time, staff and a designated space. Knowledge and skills were thought to be lacking and patients did not expect to receive health promotion advice from pharmacists. In addition there was reluctance to initiate conversations about health promotion because of fears of generating negative responses.[13]

No detailed investigation of stop smoking advisers' views on factors affecting recruitment and retention in the NHS stop smoking service has been published to date. This is the first such UK qualitative study aiming to: (1) understand stop smoking advisers' views relating to smoker recruitment and retention in the NHS stop smoking programme in community pharmacies; (2) identify factors that might be targeted in an intervention to increase smoker recruitment and retention to maximise the effectiveness of the programme.

The results of this study will contribute to development of a complex intervention to promote uptake and increase the effectiveness of the NHS pharmacy smoking cessation service. This intervention will be evaluated in a cluster randomised trial in east London as part of the STOP programme (Smoking Treatment Optimisation in Pharmacies).

METHODS

Study design

We conducted semi-structured, in-depth interviews with stop smoking advisers (comprising both pharmacists and pharmacy support staff). For roles and responsibilities of staff and an outline of the stop smoking programme see Box 1.

We used thematic framework analysis[14-15] applying the Theoretical Domains Framework [16] within the COM-B model of behaviour change.[17] The Theoretical Domains Framework is synthesised from multiple behaviour change theories and comprises 14 domains of theoretical constructs that explain possible influences on behaviour.[16] Each domain fits within one of the three components of the COM-B model - Capability Opportunity and Motivation.[17-18] For example, 'Skills' in the Theoretical Domains Framework maps on to 'Capability' in the COM-B model, 'Professional Role and Identity' to 'Motivation', 'Environmental Context and Resources' to 'Opportunity'.[18] We used COM-B as a lens through which to view our data because it provides a practical basis for designing interventions aimed at behaviour change, helping to identify the behavioural target and the components of the behaviour system needing to be changed.[17]

Box 1 Outline of the stop smoking training and the community pharmacy stop smoking programme

Training in smoking cessation[19-22]
The National Centre for Smoking Cessation and Training (NCSCT) in NHS England offers a range of training, assessment and certification programmes for both clinical and non-clinical health and social care workers to become more skilled in smoking cessation. The training programme is built around evidence-based behaviour change techniques that provide an understanding of the factors involved in smoking and smoking cessation.
The training includes:
(1) Level 1 training or Very Brief Advice in Smoking Cessation training – this (online) training enables promotion of smoking cessation and can be undertaken as a minimum by health care professionals e.g. doctors, nurses, pharmacists including staff who advise people on how to quit smoking.
(2) Level 2 training or Training and Assessment programme - this (online and face to face) training is for equipping health care professionals, who intend to become *stop smoking advisers*, with knowledge and skills to provide intensive one to one support in smoking cessation through delivery of the NHS Stop Smoking Programme (see below).

Delivery of the NHS Stop Smoking Programme in community pharmacy[23-24]
The pharmacy owners (contractors) are contracted by NHS England clinical commissioning groups and local authorities to deliver public health services including the NHS stop smoking services to meet the needs of the local population. The stop smoking services cover the range of activities from the proactive promotion of smoking cessation through to provision of the NHS Stop Smoking Programme.
In community pharmacy, the stop smoking programme can be delivered by stop smoking advisers who might be:
- Pharmacists: qualified experts in the use of medicines for treatment of disease. They offer a range of services such as Medicines Use Review and Prescription Intervention Service; New Medicine Service; Appliance Use Review Service; Public health services e.g. Stop smoking services, NHS Health Checks.
- Pharmacy support staff such as medicines counter assistant, dispenser, dispensing assistant, pharmacy technician and accredited checking technician who support the pharmacist in the selling of medicines and delivery of services.

Content of the NHS Stop Smoking Programme[2, 20]
The content includes delivery of behavioural support together with pharmaceutical treatments comprising Nicotine Replacement Therapy (NRT) e.g. patches, prescribed medication e.g. varenicline (Champix) or a combination of NRT and prescribed medication to help a smoker quit smoking.
The duration of the programme, dependent upon commissioners, ranges between 6-12 weeks with quit status to be recorded at 4 weeks, verified by carbon monoxide (CO) monitoring and sent to NHS England for reporting of statistics, monitoring ad commissioning purposes.

- Week 1

- Introduction and set planned Quit Date (approx. ½ hour meeting)
- Stop Smoking Adviser explains programme process
- Gives service user/smoker information about 3 types of medication available (NRT, Champix (varenicline) tablets and Zyban (bupropion) tablets)
- Discuss which is most suitable for service user
- Adviser takes and records service user carbon monoxide (CO) reading

- Week 2-4

- Brief meetings to check progress (each approx. ¼ hour and informal). Quit status CO monitoring is recorded at week 4 for NHS England statistics.[2]

- Week 5/6

- Longer meeting to discuss motivations and techniques to avoid relapse.

- Week 6/7-12

- Programme available to service user but the adviser is not obliged to follow up.

Setting and participants

The study was conducted in three inner east London boroughs: Tower Hamlets; Newham; City and Hackney. These boroughs include south Asian and African/Caribbean communities with high levels of tobacco use and persistent health problems linked to social and economic inequalities.[12, 25-26] Smoking prevalence in these deprived boroughs is close to the UK national average (20%), or higher (Newham 21%, 23% in Hackney, 37% in Tower Hamlets).[12, 25-26] Purposive sampling was used to obtain a diverse range of views.[27] We selected stop smoking advisers who differed by gender and duration of being an adviser. Independent community pharmacies were sent a letter and information sheet and contacted by telephone to arrange a face-to-face meeting in the pharmacy. Within pharmacies the pharmacist usually suggested the adviser (usually themselves or a member of other pharmacy support staff i.e. stop smoking adviser for interview). A member of the research team (CR) or a research assistant obtained written informed consent.

Data collection

Individual interviews were conducted from January to June 2014 by an experienced female qualitative researcher (RS, VM) using an interview schedule (Box 2). The interviewer was not known to the study participants and was not involved in recruiting participants to the qualitative study. Advisers were informed that study aim was to improve programme recruitment, retention and quit rates. Interviews took place in the consultation room of the community pharmacy and lasted 30-60 minutes. Recruitment and interviews continued until data saturation was achieved. All interviews were audio-recorded and fully transcribed. Nvivo10 was used for organisation of data and to facilitate analysis.

Box 2 Interview schedule

THE CONSULTATIONS

1. What helps/what do you do that makes smokers join the service (recruit)?

2. What helps/do you do that makes them keep coming back (retain)?

PROCESS

3. Can you describe the main issues involved in delivering the Stop Smoking Programme?

4. What prevents people from joining the stop smoking service?

5. What are the characteristics of people that do not join the service/ who join the service and quit/ who join the service and do not quit?

6. We know that many advisers select smokers most motivated to quit. What would make you take on the less motivated/interested?*

TRAINING

7. What would you like that is different to training you have had so far? (that can help more smokers to join the stop smoking service)

* This question was added after analysis had begun as an issue emerging from the data.

Data analysis and interpretation

A thematic framework analysis[14-15] was conducted. This method starts deductively with *a priori* codes from the study aims and objectives however, subsequent analysis is inductive and grounded in the accounts of the participants.[14] Researcher (RS) read and re-read the transcripts for familiarisation and data immersion. A thematic framework was formed following line-by-line coding and comprised useful memos or descriptive statements to develop categories. Comparisons were made within and between transcripts based on the thematic framework. The data were then lifted and charted across the thematic categories. This process was carried out initially with a few transcripts and discussed with the study team (CR, RW, LS) to assess reliability and agreement between two coders and to check validity of the analysis. Inter-rater reliability was 90.9% (kappa agreement) between the two coders (RS, CR) on 20% of the transcripts. Subsequently, the emergent themes were mapped (by RS) onto behavioural constructs of the TDF and the COM-B model, where applicable, to generate analytical themes.

The mapping was discussed and agreed with a health psychologist (LS) to ensure the mapped thematic data fitted with the domain definition and its content (Supplementary file 1). This process generated analytical themes or key domains influencing the engagement and the retention behaviour of advisers and helped us to identify domains that might be targeted to optimise adviser behaviour. Emergent themes are exemplified below with direct participant quotations.

RESULTS

Twenty-five interviews were conducted following approaches to 44 advisers in 29 community pharmacies. Reasons for non-participation were lack of interest (n=14) or unavailable/no answer (n=5). The participants were drawn from 15 pharmacies with six pharmacies contributing two or three interviewees. Over half of the advisers were of Asian ethnicity (56%) and a small proportion (20%) of pharmacies provided a multi-lingual service. Characteristics of the participants are shown in Table 1. All participants were smoking cessation advisors trained to level 2.

In the analysis the emergent themes mapped on to five of 14 TDF constructs with one independent theme. Figure 1 illustrates this using COM-B as headings and TDF as subheadings (italics). The independent theme and its potential relation to COM-B is highlighted with dashed lines. See supplementary file 1 for full definition of the COM-B and TDF constructs. In the text that follows the higher level heading is from the COM-B model and the subheadings represent relevant domains from the Theoretical Domains Framework that explain two separate adviser behaviours, recruitment and retention.

Table 1 Characteristics of study participants

Study ID*	Pharmacist or support staff	Gender	Duration being stop smoking adviser
S11A101	Pharmacist	Female	Not given
S19A182	Pharmacist	Female	3 years
S08A071	Pharmacist	Male	Not given
S13A121	Pharmacist	Male	10 years
S29A281	Pharmacist	Male	4 years
S04A031	Pharmacist	Male	Not given
S09A081	Pharmacist	Male	10 years
S23A221	Pharmacist	Male	Not given
S25A242	Pharmacist	Male	7 years
S26A253	Pharmacist	Male	Not given
S03A021	Pharmacist	Male	Not given
S05A041	Pharmacist	Male	5-6 years
S11A103	Support staff	Female	9 years
S02A012	Support staff	Female	Not given
S25A241	Support staff	Female	1 year
S26A251	Support staff	Female	7 years
S09A082	Support staff	Female	5 years
S25A243	Support staff	Female	Not given
S26A252	Support staff	Male	4 years
S01A001	Support staff	Male	Not given
S04A032	Support staff	Male	6 years
S11A102	Support staff	Male	4 years
S19A181	Support staff	Male	12 years
S24A231	Support staff	Male	Not given

* This code is used to identify the source of quotations in the text.

Motivation

(1) Professional role and identity

Many participants felt proud of their work and were satisfied that through their role as advisers they were able to help people quit smoking, which in turn helped with the health and well-being of the wider community.

> *I mean, you are always happy that you've helped someone do something. And there are many times that, this guy (client who has quit) will always pop in. …and say "Oh, I'm just passing and I thought let me just say hi to you!" And there are many times … This lady, it's nice. I mean, why would this lady bring her son over for me to advise? It's like they appreciate it and you have that feeling that, oh, you've also managed to help someone and it's great to do that.* (Study ID S08A071, Pharmacist)

Identification and engagement of smokers into the programme

Advisers identified potential clients through: GP referrals; recommendations from people who had quit; opportunistically during medicine review or while conducting risk assessment; and when people bought products from the pharmacy, picked up regular prescriptions or bought over the counter medication. Despite this, many advisers selected and recruited only those smokers who mentioned their readiness to quit because they thought that these smokers were less likely to drop out. A few said they only recruited those who specifically asked for smoking cessation advice and were not interested in actively recruiting smokers to the NHS SSP.

> *She's like I'm not in the right frame of mind but I really want to give up smoking. So in that way we just tell them look, … So we told her and with smoking you have to make sure that they're in the right frame of mind otherwise there's no point them joining the programme. Otherwise they'll join and then quit after a week and there's no point.* (S24A231, Pharmacy support staff)
>
> *I would say the recruitment. I mean it's a bit hard, most of it has to be walking and…yeah. Or maybe they see the poster. But we're not doing that much.* (S19A182, Pharmacist)

Some participants said that recruitment into the programme was low priority. Advisers wanted to prioritise patients with long-term conditions or those that they thought had life-threatening conditions. One adviser felt giving up smoking was the responsibility of the smoker.

> *…so smoking is more or less a very very little part of our actual work here. We actually have people who have life threatening conditions, you can be dead tomorrow. So that's of a*

greater priority than smoking. Smoking is by choice, you want to give up, you don't want to give up. (A01A001, Pharmacy support staff)

Several participants also said they believed that all the advice, support and products they provided could only help a smoker quit if the smoker was mentally prepared and had the willpower to follow through the advice and make the necessary lifestyle/environmental changes conducive to stopping smoking. Advisers felt they had most success with this type of client.

… we're pretty straight with them (potential clients), … if they're motivated to quit then they've got a better chance of succeeding, things like …NRT Champed (sic) only helps to a certain extent … and if they don't have the willpower it's not going to work… (S09A082, Pharmacist)

Encouragement and motivation to ensure attendance and adherence

Some participants stated that encouraging clients to continue attending the programme sessions was important. One adviser mentioned that to prevent dropouts and indeed when engaging with clients who had relapsed, identifying the reasons for stopping smoking and relapse were important.

Oh I think you are always going to get that (people dropping out). …I mean you are talking about 1 in 2 not getting through so you just have to keep motivating and telling them you know I mean you've been smoking for 20 or 30 years, you are not going to give up in 6 to 12 weeks, it's a long term process. And I think if you have like help, if you have re-started again, again the important thing is to find the reasons why because I think if you can get to the bottom of that and work on that rather than just giving them NRT and thinking, you know so really that is most important. The NRT helps but you need to know why you want to stop smoking. (S03A021, Pharmacist)

A few participants did not see following up clients who missed sessions as part of their role. Some said that they simply accepted it if smokers mentioned they were finding it difficult to not smoke when they spoke to them by telephone or in person.

Two persons I've seen, they can't manage (to quit), that's it. Sometimes if they come for their medicines to pick up or anything, they can say, "Oh, sorry, I didn't come back, because I can't manage at the moment, I'm not all right." So we say, "OK, whenever you feel OK."
(S02A012, Pharmacy support staff)
…when they don't come back it's like well, did you give them the wrong products? They didn't suit them, they could've phoned us, we could've spoken to them, we could've swapped it. We

are pretty flexible. But if they don't come back to us there's no way of knowing, is there? (S25A241, Pharmacy support staff)

Some advisers acknowledged that more smoker engagement would result in higher quit rates. The following were suggested to boost service recruitment and retention: identify potential smokers for the service e.g. when they bought cough syrup; engage, inform, encourage and recommend the programme to smokers e.g. through use of poster adverts; explain how the programme and adviser involvement could help with quitting; place a holistic focus on the person.

So if you're focused on the client rather than the process you're going to get a bigger outcome rather than saying this is a tick form, I've got to tick this, I've got to fill this in, I've got to fill that in and oh, I've missed out here, we've got to do a CO reading sort of thing. (S26A253, Pharmacist)

(2) Reinforcement

Remuneration

This process of remuneration was acknowledged as an issue by the adviser participants who were a mix of owner pharmacists, employed pharmacists and other pharmacy support staff. Among the owner pharmacists, a few said that the current remuneration for quitters was reasonable, while some others felt that the remuneration did not take into account the time they spent with smokers encouraging them to join and adhere to the service.

One owner pharmacist mentioned that the current payment system was a disincentive to spend time with smokers, and needed revisiting by commissioners; payment based on quitters might influence which smokers staff are willing to support.

And things, we get penalised for non-quitters which are not really our fault.

Interviewer: …How do you mean penalised?

So currently we may spend three or four hours actually going through these patients, and because they don't quit we don't get the full £40 or £35. We end up with about £20. That's the disincentive. There are certain health authorities now are saying that if a patient doesn't quit there's no fees. So there is a lot of disincentives for a pharmacist to say look, I only get a 50 per cent success rate, I'm not going to spend three or four hours at a time and get nothing for it. So they're (pharmacies are) not going to take on new clients and the way that the health authorities and CCGs think about these programmes needs to change. (S26A253, Pharmacist)

Another owner pharmacist stated that perhaps smokers should be incentivised to attend their stop smoking appointments as it could mean saving money for the NHS in the long run and some pharmacy support staff suggested providing incentives/rewards to their clients that could be given at programme completion.

> *And I think if you can perhaps issue vouchers, but issue vouchers that are redeemable at the end of the process, yeah? So it makes no sense for them to come to two or three consultations, accumulate vouchers and then miss the fourth one, yeah, you know? So I think there should be vouchers that can be redeemed for cash at the end of it, because most people don't want to be restricted as to what they can do with a voucher or cash or anything. That is one thing I think…..at the end of the day, we need to put it in the balance; I mean, the government feels that getting people to stop smoking leads to a greater saving on the NHS, so it's something they should look at.* (S29A281, Pharmacist)

Several of the employed pharmacists and support staff acknowledged that delivery of the programme was part of their job, although a few highlighted that if their pharmacy were to receive an increase in the current remuneration for quitters then they might be allowed to spend more time engaging with and following up clients to continue and complete the programme.

> *I think so as well, because it (current remuneration) is a kind of barrier. You do encourage them (smoker) to stop smoking, but then three weeks you spend with them, although they don't stop smoking … And for one engagement they give you (payment), but after that, if they keep on giving us the money we (can) encourage more people, … So if they encourage me, I mean the pharmacy, by providing with more money or anything, no barriers regarding money, then we can do more, much more.* (S26A251, Pharmacy support staff)

(3) Beliefs about capabilities

Interaction with smokers

Some advisers mentioned that engaging with smokers and motivating clients who enjoyed smoking or who were not interested in quitting was a challenge to programme recruitment and retention. In addition, one participant was unsure about the protocol to follow when a client smoked a cigarette at the end of 12 week programme.

> *It's more of a challenge when they say oh, but I love smoking, I love the taste of smoking. Then it's a bit of a challenge because they've already got in their mind that…there's like a mental block. Whatever you're going to say to me, I don't really care sort of thing. ..* (S24A231, Pharmacy support staff)

In contrast, a few participants felt confident to handle some of the above mentioned issues by talking about the harmful effects of smoking, showing the tar jar to smokers and suggesting to smokers they were available to support them when they are ready to quit.

> *Yeah, I mean there's no harm in recommending it (the service). You recommend it to everyone. I don't see anything bad about that. It's just whether they'll actually sign up or not. … The only way we can deal with that is through awareness, like the tar outside and posters and our TV advert. That's the only way you're going to get those kind of people.* (S26A252, Pharmacy support staff)

Capability

(4) Skills

Skills training

Several suggestions were given to improve the skill set of advisors (including counter assistants) to help with recruitment and retention in the stop smoking programme, such as reinforcement of motivational and communication skills, including how to approach people about smoking without causing offence, how to be supportive. Most suggestions were features of person-centred care which all health care professionals are expected to follow.[28] These were: how to personalise advice, how to elicit from smokers which things had worked and which did not work, how to work with smokers to identify from them what targets they would like to achieve and how they would achieve them.

> *Pharmacies are very prescriptive and I think when you're asking people to give up smoking you have to think about how they need to change their behaviour, and I think it's those … skills that you need to apply, and that is very crucial and very important. Getting it out there. What is it they're able to do? You know what they need to do. It's only when they come up with solutions themselves they're more likely to follow it through.* (S01A001, Pharmacy support staff)

In addition, a few participants stated there was need for regular training, some others suggested that it might be useful to include in any future training items such as visual scenarios, role plays or mock interviews to learn and practice their skills. Two participants also wanted to see experts in action with a client to help them learn and improve their skills.

> *I think sometimes you get a bit complacent. When you're doing it and you think everything's fine you give them the NRTs, tell them to come back next week if they have any problems.*

> *But they might actually have a bit of problems that they want to tell you but they can't for whatever reason or they feel like if they tell you that they've failed then… So trying to get the best out of their patients, so someone that could come in like a specialist to actually help, that would be good. Because you always learn something when you're shadowing someone, always.* (S24A231, Pharmacy support staff)

Opportunity

(5) Environmental context and resources

The study participants mentioned a number of structural/organisational challenges that affected smoker recruitment and retention in the programme:

Lack of time because of delivery of other services

Participants mentioned that they forgot to remind clients about their appointment or they were unable to keep tabs on clients' programme adherence. A few pharmacists, on account of being busy, said they were reluctant to recruit smokers, if they were unable to provide details about the programme and the procedure involved; this seemed to affect recruitment.

> *Especially someone who says, "Can I join the scheme now?" and sometimes it's not possible; when I'm so busy here, I can't leave the place and come in here. There's no way I can leave it, so I have to give them an appointment. But sometimes people are not happy with that; it's like they really want to join now! You get the point, they really want to join, so if you can't do it for me now, then I can't come, so it's an issue.* (S08A071, Pharmacist)

In contrast, one pharmacy support staff participant, to avoid losing clients, started engaging people on the same day of their pharmacy visit instead of giving them an appointment for a later date; this strategy helped them to improve recruitment into the stop smoking programme. Another staff member wanted a reminder system to enable client follow-up to help with retention.

> *…if somebody comes in now, generally we do it straight away. That's how we found it works better. If you give them a date they don't turn up because within this time they've got a different commitment.* (S11A102, Pharmacy support staff)

To make time for smoker engagement, one pharmacist mentioned that having counter assistants to help with the recruitment process or more staff to share with their dispensing workload could lead them to engage and offer the stop smoking programme more frequently to smokers.

Inflexibility of the programme

Several participants felt that the duration of the programme was insufficient for some clients to quit and remain abstinent. One participant suggested that clients who relapsed going through the programme should be allowed to continue with the programme instead of asking them to re-join the programme, normally after a few weeks. In contrast, another participant mentioned that allowing dropouts to re-join the programme as soon as they were ready instead of using the "after six months" rule was not helpful in improving quit rates.

> *Other issues I've had have been people who kept coming back, like two or three times a year, and it's obvious that they are not serious, or I don't know. In the past, with the NRT, they used to say they can't do it again until after six months, but now as often as they want. But then with the Champix, I got people coming two or three times a year: stop/start, stop/start.* (S11A103, Pharmacist)

Working with budget cuts

The facility to offer two treatments concurrently to clients had been stopped due to budget cuts despite evidence of its effectiveness. In one of the participating boroughs the varenicline (Champix) license for pharmacists to prescribe had been taken away; one participant stated that this had affected recruitment into the programme.

> *Champix, the tablets. We haven't got a PGD (patient group direction) for it right now, so I had one person yesterday, she was a bit upset, she was like oh, I want the tablets, I want the tablets. And we don't have the licence for it. I think the whole of Newham, all the pharmacies…I think hopefully we'll be getting it back soon enough, … So that's a problem, we've lost a few people… but we could've had those people as clients. So that's one thing, hopefully we'll try and get that back. If the providers can help us with that then that would be great.* (S24A231, Pharmacy support staff)

Failing to take advantage of national campaigns

One participant felt that the 'Stoptober' campaign helped with smoker recruitment but not retention because they perceived smokers were not really committed to giving up smoking and only joined because of the advertisement. Some other participants felt that the No Smoking Day campaign went by too quickly to enable smoker recruitment.

> *Having it (No Smoking Day) spread over a week means you can maybe put up a lot more balloons up, you can put a lot more signs up, you can market it better, it gives you a longer time to market it and it will give you that whole week to engage with people. Because*

> *sometimes you might only see them once a day, but if you've missed that opportunity…tomorrow's not a non-smoking day. Oh, I'm not doing it then.* (S25A242, Pharmacist)

Other organisational factors such as inadequate stock of nicotine replacement products to meet client demand, having only one consultation room that was often occupied were mentioned as restrictions on smoker recruitment by two participants.

> *...the room that I'm using is constantly being used up. I've got this one room. You know? And things like that again – having resources [unclear] how to manage that.* (S01A001, Pharmacy support staff)

(6) Advisers' perceived characteristics of service 'joiners', 'non-joiners' and 'dropouts'

Advisers' characterised smokers as those likely to join, not join or drop out of the stop smoking programme. This categorisation of smokers then affected how likely the adviser would be to recruit them into the stop smoking programme.

Eleven participants stated that 'Joiners' (including those who relapsed and wanted to quit again) were those who were motivated, willing or determined to give up smoking to improve health/quality of life, and were clear of their reasons for wanting to give up.

> *Yeah, always ask them as well what's in your mind. Why do you want to do this (quit smoking)?... So once they have that (reasons) in mind I will tell them okay, so have that in mind, so even when the cravings come just hang onto that, because at least you have something you want to achieve because of that. … in fact, if you don't have it, for me you are more likely to fail…* (S19A182, Pharmacist)

'Non-joiners' were characterised by eight participants as those who did not suffer from any health related problems and hence were not ready or motivated to quit, they were either not interested or in denial, thinking that they would not suffer any health-related consequences perhaps because people they knew had been smoking for years and their health seemed unaffected. In contrast, smokers living with a long-term condition such as cancer felt that it was too late for them to change their behaviour as their illness progressed.

> *Because like I said, in many years, I've seen so many patient …, when they're smoking, end up with a cancer. He was still coming to see me, went to the doctors, diagnosed cancer, came in and said I'm not doing it (stopping smoking). Why? Because I've got cancer, what the hell, I'm going to die.* (S19A181, Pharmacy support staff)

'Dropouts,' according to seven participants, were those who were fighting more than one addiction or going through some personal crisis and therefore were not ready to give up smoking. Such people, the participants suggested, might be easily tempted into smoking by family/friends who smoke, or might not perceive any benefits or might not be interested in quitting.

> *He was determined (to quit) because he got it from the GP, the letter, so I thought yeah, he's going to give up smoking. But he just…the first week I supply and then the second week I didn't see him there. Called him and he said no, I can't give up, it's not holding me now. So he wasn't ready really, I don't think he was ready. …* (S04A032, Pharmacy support staff)

DISCUSSION

Statement of principal findings

Recruitment and retention of smokers in the NHS stop smoking programme may be influenced by advisers' preconceived ideas about smoker types likely to join, not join or drop out of the programme. This early categorisation of smokers influenced perceived readiness to quit. Active smoker recruitment was often a low priority, partly because advisers considered the remuneration that the pharmacy received for each quitter was insufficient to justify use of time and because they anticipated challenging interactions with some smokers. There were also perceived structural/organisational challenges involving programme delivery.

To improve the programme, advisers suggested that they should adopt a more holistic and supportive approach. They further suggested that strengthening their belief in the importance of engagement with both new and relapsed clients would help to improve uptake of the programme and retention of smokers within the service. An increase in pharmacy remuneration for quitters was also thought to be beneficial. Advisers would welcome improvement in structural and organisational delivery of the programme and more regular training in person-centred communication including for counter assistants.

Comparison to other studies

The Theoretical Domains Framework and COM-B models have been used previously in studies of dental health professionals[29-30] and midwives.[31] A barrier to delivering smoking cessation services in these clinical settings was that healthcare workers did not consider smoking cessation part of their primary role. In contrast, all participants in our study were trained stop smoking advisers and wholeheartedly embraced the smoking cessation role. Nonetheless some advisers identified the need for more training, particularly to build capability in the recruitment

process, to maximise engagement with smokers and to bolster their communication skills. This need for training was also felt by dental health professionals and midwives. The fear of negative patient response, inadequate staffing, and lack of confidence in delivery of health behaviour advice which we identified in our study has also been reported in other settings.[13, 32-33]

In line with the recent review on the effectiveness of pharmacy smoking cessation interventions,[6] we found that many advisers were mostly accepting smokers who wanted to quit because they did not want to risk dropouts. The National Centre for Smoking Cessation and Training also recommends that if the smoker is not ready to make a serious quitting attempt, the adviser should provide the programme's contact details and ask them to get in touch when they are ready.[34] Another explanation for selection of those likely to quit may be pressure from service targets.[35]

The perceived opportunity cost of engaging with smokers who did not express a desire to quit or who fitted stereotypes that advisers associated with failure to quit, appeared to affect adversely the recruitment of smokers into the service. Hoving[36] compared 'active' recruitment (i.e. "asking each individual's smoking status and inviting smokers to participate in the service") and passive (i.e. "leaving participation up to the smoker's initiative") in a community pharmacy setting. The former approach was suggested as a way of increasing the total number of quitters. It has been suggested elsewhere that passive recruitment strategies might reduce the likelihood of a quit attempt.[37]

In addition to lack of time for health promotion which has been reported previously,[13, 32, 33, 38] problems with delivery of medicines and promotional material, linked to national stop smoking campaigns, were perceived by advisers to affect smoker recruitment and retention. Addressing these issues is crucial to facilitate adviser engagement behaviour,[39-40] and could add to the success of national campaigns in increasing the number of people attempting to quit and permanently quitting.[39, 41-42]

Implications for clinical practice and policy makers

Advisers' perceptions of types of smokers who are likely not to join or to drop out of the programme and some advisers' experience of challenging interactions with smokers have been reported previously[33] including in socially deprived areas.[43-44] However, the community pharmacy stop smoking services in east London are effective in reaching socio-economically deprived communities[35] and the smokers in these communities are just as motivated to quit smoking as smokers in more affluent areas,[35, 45] and to want help with quitting.[46] Smokers' stage of change[47] and economic disadvantage should not preclude the use of active recruitment[8, 35, 45] and retention strategies.

Recent changes to the pharmacy smoking cessation services in one of the participating boroughs meant that pharmacists were no longer able to recommend co-therapy (nicotine patch plus gum/lozenge/inhalator) or varenicline to clients which advisers considered a problem. It seems likely that restricting access to effective treatment and thus compromising patient choice could adversely affect engagement of smokers and quit rates. In addition, several advisors felt the duration of the stop smoking programme was not long enough for some smokers to quit and to remain abstinent and suggested having flexibility in the programme to allow continuity of care, where appropriate to suit clients' needs, for example after relapse.

The remuneration for programme delivery is determined by commissioners on the basis of clear criteria e.g. the time and duration of intervention and treatment provided, carbon monoxide (CO) monitoring and data reporting. The payment is made to the pharmacy owner i.e. a contractor who may be a pharmacist sole trader, a partner with other pharmacists or who may appoint a superintendent pharmacist[2, 48] No payment is made to employed pharmacists or to pharmacy support staff. The current payment system for pharmacies appears to provide a disincentive to spend time with smokers - and this has been acknowledged in the community pharmacy stop smoking services guidance.[2]

The pharmacy cessation advisers derived professional satisfaction in helping individual smokers to quit and also saw their role in smoking cessation as benefitting the whole community. Advisers thought about wider aspects of the scheme and took a professional interest in how the scheme might develop – for example suggesting a voucher scheme and tailoring the duration of the smoking cessation programme to individual smokers. This source of intrinsic motivation may distinguish cessation advisers from other healthcare professionals and could be drawn upon further in pharmacy adviser training programmes.

Implications for future research

More research is needed with a broader range of participants including female advisers and advisers of other ethnicities delivering the programme in deprived and non-deprived areas. In addition, studies to understand in more detail the effects of the remuneration structure for pharmacists and support staff is warranted. We took recruitment and retention together in the analysis since we were interested in the joint outcome of these two behaviours, which leads to an increase in the total number of people completing the smoking cessation programme. Whilst this seems justified given the purpose of our work this is a potential limitation of our study since clearly the two behaviours may have different antecedents. Future work could usefully examine recruitment and retention separately leading to individual insights into these behaviours and how they might be modified to strengthen the NHS smoking cessation service.

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Contributors RW conceived the study. RS was involved in the data collection, data analysis and interpretation and writing the manuscript. VM was involved in the data collection. CR and LS were involved in the data analysis and interpretation. CR, VM, LS, EE, VK, CG, ST, SE and RW were involved in revising the article critically for important intellectual content. RW is the guarantor.

Competing interests None.

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Participant consent Written informed consent obtained.

Ethics approval Ethical approval for the study was obtained from the NRES Committee South Central - Berkshire B (reference number: 13/SC/0189).

Provenance and peer review Not commissioned; externally peer reviewed

Data sharing statement This study analyses qualitative data and the advisors did not consent to have their full transcripts made publicly available. The advisors consented for their data to be stored for five years, as part of the 5-year programme grant project and to be used in this or other studies directly linked to the 5-year project. Supporting excerpts from the raw data (quotes from participant interviews) are available with the text of the paper. Full transcripts of the interviews (with identifying information removed) will be available, following completion of the project, on request from the study guarantor, Robert Walton, r.walton@qmul.ac.uk

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Figure legends

Figure 1. Illustration of behavioural factors affecting adviser engagement and retention behaviour (modified from the COM-B model)

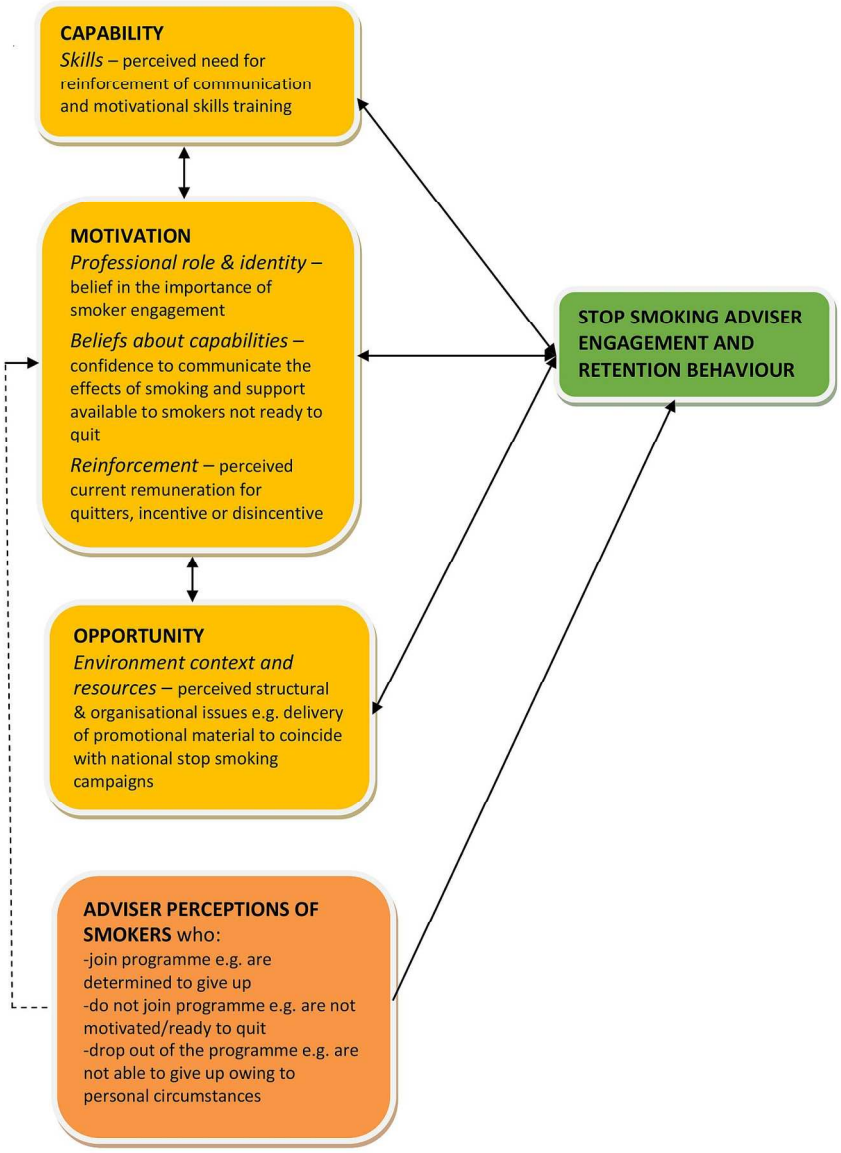

Figure 1. Illustration of behavioural factors affecting adviser engagement and retention behaviour (modified from the COM-B model)
144x196mm (300 x 300 DPI)

Supplementary file 1 Theoretical Domains Framework (TDF) - Domain definitions

TDF (definition)	Theoretical Constructs	Possible Example
Knowledge *An awareness of the existence of something*	Knowledge (including knowledge of condition /scientific rationale); procedural knowledge; knowledge of task environment	Knowledge of why important to ask people if smoke; knowledge of nicotine patches so can deliver service well
Skills *An ability or proficiency acquired through practice*	Skills; Skills development; competence; ability; interpersonal skills; practice; skill assessment	Communication skills
Memory, attention and decision processes *The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives*	Memory; attention; attention control; decision making; cognitive overload/tiredness	Remembering to deliver different parts of service
Behavioural regulation *Anything aimed at managing or changing objectively observed or measured actions*	Self-monitoring; breaking habit; action planning	Are there systems which help monitor whether something has been done or not
Environmental context and resources *Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behaviour*	Environmental stressors; resources/material resources; organisational culture/climate; salient events/critical incidents; person x environment interaction; barriers and facilitators	The lack of a consulting room impedes consultations
Social influences *Those interpersonal processes that can cause individuals to change their thoughts, feelings or behaviours*	Social pressure; social norms; group conformity; social comparisons; groups norms; social support; power; intergroup conflict; alienation; group identity; modelling	Senior pharmacist not prioritising smoking cessation
Professional/social role and identity *A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting*	Professional identity; professional role; social identity; identity; professional boundaries; professional boundaries; professional confidence; group identity; leadership; organisational commitment	Identification that behaviour change is within a pharmacists remit
Beliefs about capabilities *Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use*	Self-confidence; perceived competence, self-efficacy; perceived behavioural control; beliefs; self-esteem; empowerment; professional confidence	Confidence that can raise question of smoking in non-threatening manner
Optimism *The confidence that things*	Optimism, pessimism; unrealistic optimism; identity	Belief that with support most people can give up smoking

will happen for the best or that desired goals will be attained		
Beliefs about consequences *Acceptance of truth, reality, or validity about outcomes of a behaviour in a given situation*	Beliefs; outcome expectancies; characteristics of outcome expectancies; anticipated regret; consequents	If don't stop smoking will die from cancer
Intentions *A conscious decision to perform a behaviour or a resolve to act in a certain way*	Stability of intentions; stages of change model; transtheoretical model and stages of change	Intention to give up smoking
Goals *Mental representations of outcomes or end states that an individual wants to achieve*	Goals (distal/proximal); goal priority; goal/target setting; goals (autonomous/controlled) ; action planning; implementation intention	Wanting to achieve increased uptake by x amount
Reinforcement *Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus*	Rewards (proximal/distal, valued/not valued, probable/improbable); incentives; punishment; consequents; reinforcement; contingencies; sanctions	Financial reward
Emotion *A complex reaction pattern, involving experiential, behavioural and physiological elements by which the individual attempts to deal with a personally significant matter or event*	Fear, anxiety; affect; stress; depression ; positive/negative affect; burn-out	Discussing smoking raises distress due to family members recent smoking related death

Definitions of the COM-B model.

Capability

i) Physical Capability e.g. not having lost voice during smoking cessation consultation,

ii) Psychological Capability e.g. having knowledge of NRT products to talk about them

Opportunity

i) Physical Opportunity afforded by environment involving time, resources, locations, cues e.g. pharmacist having sufficient time to speak with clients

ii) Social Opportunity afforded by interpersonal influences, social cues, cultural norms influence way think about things e.g. pharmacist allows counter assistant time to become trained in stop smoking

Motivation

i) Reflective Motivation involving plans (intentions) and evaluations (beliefs about what is good and bad) e.g. intention to give up smoking because believe bad for health

ii) Automatic Motivation includes automatic processes which involve emotional reactions, desires (wants and needs), impulses, inhibitions, drive states and reflex responses.

Research Checklist: Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

No Item Guide questions/description

Domain 1: Research team and reflexivity

Personal Characteristics

1. Interviewer/facilitator - Which author/s conducted the interview or focus group?
Author RS and VM conducted the interviews. Page 7.
2. Credentials - What were the researcher's credentials? E.g. PhD, MD
Author RS and VM have a PhD. Not mentioned in manuscript.
3. Occupation - What was their occupation at the time of the study?
Author VM was one of the qualitative researchers who conducted 11 interviews and left during the course of the study. Author RS joined the study team as a qualitative researcher and conducted 14 interviews. Page 7 suggests 'qualitative researcher'.
4. Gender - Was the researcher male or female?
Both RS and VM are female. Page 7.
5. Experience and training - What experience or training did the researcher have?
Both RS and VM have expertise in qualitative research methods through education/training courses. Page 7 mentions the term 'experienced'

Relationship with participants

6. Relationship established - Was a relationship established prior to study commencement?
No. The interviewers were not known to the study participants prior to study commencement and they were not involved in participant recruitment. Page 7.
7. Participant knowledge of the interviewer - What did the participants know about the researcher? e.g. personal goals, reasons for doing the research
The participants were made aware by the study team that a researcher would contact them to arrange the interview. Prior to the start of the interview the purpose of the study and interview was explained to each participant. Page 7.
8. Interviewer characteristics - What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic
The participants only knew that the interviewers were study researchers. Page 7.

Domain 2: study design

Theoretical framework

9. Methodological orientation and Theory - What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis
We used thematic framework analysis applying the Theoretical Domains Framework (TDF) within the COM-B (Capability, Opportunity, Motivation-Behaviour) model of behaviour change. Page 5.

Participant selection

10. Sampling - How were participants selected? e.g. purposive, convenience, consecutive, snowball
Purposive sampling was used to obtain a diverse range of views. We selected stop smoking advisers who differed by gender and duration of being an adviser. Page 7.
11. Method of approach - How were participants approached? e.g. face-to-face, telephone, mail, email.
Pharmacies were sent a letter and information sheet and contacted by telephone to arrange a face-to-face meeting in the pharmacy. Page 7.
12. Sample size - How many participants were in the study?
Twenty-five participants were in the study. Page 9.
13. Non-participation - How many people refused to participate or dropped out? Reasons?
Nineteen advisers refused to participate. Reasons for non-participation were lack of interest (n=14) or unavailable/no answer (n=5). Page 9.

Setting

14. Setting of data collection - Where was the data collected? e.g. home, clinic, workplace
The setting was the consultation room of the community pharmacy. Page 7.
15. Presence of non-participants - Was anyone else present besides the participants and researchers?
No. Page 7.

16. Description of sample - What are the important characteristics of the sample? e.g. demographic data, date.
The following are characteristics of the study sample: whether interviewee/stop smoking adviser was a pharmacist or other pharmacy support staff, study ID, gender, duration of being a stop smoking adviser. Table 1 on Page 10. The proportion on ethnicity of advisers, proportion of multi-lingual service and training of advisers is on Page 9.

Data collection
17. Interview guide - Were questions, prompts, guides provided by the authors? Was it pilot tested?
A semi-structured interview guide was used to conduct the interviews. A question was added after conduct of a few interviews as an issue emerging from the data. Page 8.
18. Repeat interviews - Were repeat interviews carried out? If yes, how many?
No repeat interviews were carried out.
19. Audio/visual recording - Did the research use audio or visual recording to collect the data?
Digital audio-recording was used to collect the data. Page 7.
20. Field notes - Were field notes made during and/or after the interview or focus group?
No.
21. Duration - What was the duration of the interviews or focus group?
Duration of the interviews lasted 30-60 minutes. Page 7.
22. Data saturation - Was data saturation discussed?
Yes. The study stopped recruitment once no new knowledge was being obtained from the interviews. Page 7.
23. Transcripts returned - Were transcripts returned to participants for comment and/or correction?
The transcripts (typed per verbatim) were not returned to participants for comment and/or correction as not planned for study.

Domain 3: analysis and findings
Data analysis
24. Number of data coders - How many data coders coded the data?
There were two data coders. RS coded all the data collected and author CR coded 20% of the data which was assessed using kappa agreement. In addition, the emergent themes from the data collected was mapped onto the behavioural theory to generate analytical themes. The mapping the conducted by RS and was checked and discussed with author LS (health psychologist) to ensure the mapped thematic data fitted with the domain definition and its content. See supplementary file 1 for full definition of the COM-B and TDF constructs. Page 9.
25. Description of the coding tree - Did authors provide a description of the coding tree?
Yes, the description of the coding leading to the formation of categories and themes has been provided in the manuscript as per the thematic framework analysis. Page 9.
26. Derivation of themes - Were themes identified in advance or derived from the data?
As per the thematic framework analysis, this method starts deductively with a priori codes (not themes) from the study aims and objectives however, subsequent analysis is inductive and grounded in the accounts of the participants. So the themes were identified from the data and not identified in advance. Page 9.
27. Software - What software, if applicable, was used to manage the data?
Nvivo software was used to manage the data. Page 7.
28. Participant checking - Did participants provide feedback on the findings?
This was not planned in this study.

Reporting
29. Quotations presented - Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. participant number
Yes. Participant quotations have been presented to illustrate the themes. Yes each quotation can be identified by the study ID given in Table 1 of the manuscript. Page 9 and 10.
30. Data and findings consistent - Was there consistency between the data presented and the findings?
Yes. The data analysis that included mapping onto theory to generate analytical themes led to the study findings, exemplified by participant quotations. The study findings include themes/high level finding from the COM-B model and the subheadings represent relevant domains from the Theoretical Domains Framework. Page 9.
31. Clarity of major themes - Were major themes clearly presented in the findings?

Yes. The emergent themes mapped on to five of 14 TDF constructs have been clearly presented in the findings and has been illustrated in Figure 1 of the manuscript. Page 9.

32. Clarity of minor themes - Is there a description of diverse cases or discussion of minor themes?

Yes. An independent theme emerged following the analysis that was not mapped onto the TDF constructs and yet was an important finding and has been clearly presented and illustrated in Figure 1 of the manuscript. Page 9.