Expert commentary to accompany: ASH Scotland case studies of stop-smoking support in mental healthcare settings

ASH Scotland is grateful to Dr. Lisa McNally, Smoke Free Minds, for providing expert commentary on the stop-smoking support in mental healthcare settings case studies.

Both of these documents may be used freely with suitable acknowledgement.

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Expert Commentary #1: Colin

Colin’s mental health condition, schizophrenia, is associated with very high smoking rates. Research suggests that around 88% of people living with schizophrenia smoke(1), with 68% classed as heavy smokers (25 or more cigarettes daily)(2).

It has been suggested that one reason for this high prevalence is that smoking can alleviate some of the symptoms of schizophrenia. While there is some evidence for this ‘Medication Hypothesis’, overall the research suggests that these alleviating effects occur in only a minority of individuals and are very short lived(3). Indeed, more robust evidence exists to suggest a damaging effect of smoking on mental health (see the case study of Sandy (#2) for more on this).

It is notable that Colin started smoking after being admitted to a psychiatric in-patient unit, a phenomenon which is fairly common. Colin’s own explanation of why this happened serves to highlight two other important theories (aside from the ‘medication hypothesis’) of why smoking rates in mental healthcare settings are so high. The first is the ‘Cultural Hypothesis’ and relates to how smoking is central to the culture of mental healthcare settings (see the case studies of Sandy (#2) and Julie (#6) for a more detailed discussion). The second is the ‘Void Hypothesis’, which is related to the view that mental health service users smoke out of boredom and because ‘they have nothing else’. Put simply, without smoking there would be a large ‘void’ in patients’ lives. While there may be some validity in this assumption, it is worth noting that this theory may exist to some extent as a ‘self-fulfilling prophecy’ generated by healthcare staff and even family or friends. The perception by others that a person with a mental health condition will have little else in life other than smoking may lead to the facilitation of smoking and the discouragement of quit attempts(4).

Ironically, despite the common belief that smoking fills a ‘void’ in people’s lives, Colin’s case actually illustrates how stopping smoking can enhance one’s life and lifestyle. Research shows that, by quitting, Colin dramatically reduced the risk of his heart problems worsening(4) and speeded up his recovery from surgery(5). Before long, this led to Colin taking up cycling, which aside from being a positive daily activity and a way to meet to new people, will continue to enhance both his physical and mental well-being(6).


DISCUSSION

How can we help people find alternative activities and coping strategies other than smoking? How may this aim be included within stop smoking treatment programmes?
Expert Commentary #2: Sandy

It's no surprise that some staff were less than positive about Sandy's attempt to quit. As a group, staff in mental healthcare have been found to be less positive about support smoking cessation than colleagues in other areas of healthcare\(^1\). This may stem in part from the place smoking occupies within the culture of mental healthcare – in which smoking can sometimes be used as a ‘clinical tool’ to appease or engage patients\(^2\). Brief intervention training across staff groups in mental healthcare settings has been advocated as a way to address these attitudes and practices\(^3\).

Another reason why staff may have been unsure about Sandy quitting smoking was their belief that smoking maintains mental health, and that quitting may have had detrimental effects. The often-assumed positive effects of smoking on mental health are not well supported by the evidence (see the case of Colin (#1) for more on this). However, there is actually a wealth of evidence to suggest smoking leads to the onset and worsening of mental health condition, particularly in relation to anxiety and depression, possibly through an effect on brain chemistry\(^{4,5}\). In addition, research suggests that successfully stopping smoking is associated with significant mental health gains, particularly in relation to symptoms of anxiety\(^6\) and depression\(^7\). This is apparent in the cases of Ian (#4) and Dee (#7).

Rather than discouraging quit attempts, a more positive approach would be to supplement quit support with brief techniques for maintaining psychological well-being. The importance of addressing psychological factors such as mood during stop smoking treatment is discussed within Norman’s (#3) case notes, as well as ways in which it can be done.

Sandy’s case also highlights the effects of quitting on medication metabolism. While a range of medications are affected (see the case notes on Norman (#3) for a list), the medication being used by Sandy, clozapine, is a particularly important medication to be aware of. Clozapine plasma concentrations can rise 1.5 times in the 2–4 weeks following smoking cessation and in some instances by 50–70% within 2–4 days\(^8\). As the metabolic effect of smoking on clozapine are not caused by nicotine, the common strategy of attempting to counteract the increase in plasma clozapine by using nicotine replacement products is unlikely to be effective. Rather, as Sandy’s case illustrates, the only valid course of action is an appropriate reduction in the prescribed dose of the medication.

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DISCUSSION

What place does smoking have in the ‘culture’ of your team or organisation? How does this manifest itself? How can we start to change the smoking ‘culture’?
Expert Commentary #3: Norman

Norman faced a number of barriers in his attempt to quit smoking. Aside from his mental health condition, these barriers included the heavy level his smoking had reached (40 per day) and his history of cannabis use (see case of Gabby (#5) for more on that issue). However, it is worth noting that Norman identified low mood as his main obstacle to quitting, which reminds us that quitting smoking is as much (if not more) a psychological battle as it is a fight against a pharmacological addiction.

In assessing his challenge, Norman was justified in identifying low mood as important. Research examining the quit attempts of people with mental health conditions clearly highlights that those experiencing a deterioration in depressive symptoms during the quit attempt are far more likely to return to smoking\(^1\). Simple techniques are available for enhancing mood management during stop smoking support\(^2\), including the use of diaries which were used to such good effect in Norman’s case.

Of course, we can’t ignore the pharmacological side of stop smoking support, and within mental health settings, this often goes beyond providing products to alleviate withdrawal. Both Norman and Jim were right to also consider what effect quitting may have on the metabolism of Norman’s usual medications. Smoking may affect the metabolism of various medications, including diazepam, haloperidol (partial), olanzapine (partial), clozapine, mirtazapine (partial), tricyclic antidepressants, barbiturates and benzodiazepines\(^3\). Clozapine is a particular drug to be careful with (see case notes on Sandy (#2) for more detail on clozapine). However, in all cases it is best that stop smoking practitioners alert the clinician prescribing a patient’s medication of the quit attempt. Furthermore, rather than giving specific advice on dose adjustments, stop smoking practitioners should refer prescribers to the local Pharmacy Department for more detailed guidance.

Norman’s case study also highlights how collaboration between Stop Smoking Services and Acute Psychiatric Services was a concern. This issue has previously been highlighted in research, as has the practitioner’s observation that this situation is not helped by the nature of health service targets in this area\(^4\). In particular, it may be that these targets, which often focus on the recording of high numbers of quitters regardless of who they are, serve to discourage the investment of resources in more ‘hard to reach’ groups.

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**DISCUSSION**

What strategies or techniques are there for helping people manage their mood? How could these be included into stop smoking treatment?
**Expert Commentary #4: Ian**

Ian’s epilepsy, and the effects quitting smoking may have on this condition, was highlighted as a concern. However, research evidence does not indicate that people with epilepsy should avoid stopping smoking. Indeed, recent research has even suggested that cigarette smoking may be associated with increased risk of seizure\(^1\). What is important to consider, however, are the possible effects of any medications used to aid the quit attempt (bupropion (Zyban) for example is not suitable for people with epilepsy). Therefore, while epilepsy should not stop anyone quitting smoking, a medical practitioner should always be consulted in advance of the quit attempt.

Medical advice was sought and Ian’s GP prescribed nicotine replacement therapy (NRT). What is of particular interest in this case was that ‘combination’ NRT was used, which generally involves pairing a nicotine patch with another ‘secondary’ nicotine product (in Ian’s case, the inhalator). There is indeed review-level evidence indicating that people who use NRT during a quit attempt are likely to further increase their chance of success by using a combination of the nicotine patch and a faster acting form such as an inhalator, gum or lozenges\(^2\).

As in other cases such as Norman’s (#3), Ian (and his wife) saw his psychological state during quitting smoking as an issue. Of particular concern in this case was anxiety, which may present as the major symptom of a condition (eg – Generalised Anxiety Disorder) as well as a secondary symptom of many other conditions (eg – Depression, Schizophrenia). Of course, one may intuitively think that smoking may alleviate anxiety because of the apparent ‘calming effect’ a cigarette can seem to have. However, this effect is simply the short-term result of temporarily alleviated withdrawal symptoms, and in fact, anxiety in the long term is worsened by regular smoking\(^3\).

The good news is that quitting smoking has been shown to be associated with a significant decrease in anxiety even within a few weeks of the last cigarette\(^4\). This is consistent with Ian’s report that his psychological state had improved following quitting smoking, and the similar experience reported by Dee’s (#7).

1. Dworetzky, B.a. et al., 2010. A prospective study of smoking, caffeine, and alcohol as risk factors for seizures or epilepsy in young adult women: data from the Nurses’ Health Study II. *Epilepsia*, 51(2), 198-205.

**DISCUSSION**

*Why does ‘combination’ NRT improve the chances of quitting successfully? Is it just about the higher level of nicotine? Is combination NRT available to the patients you work with?*
Expert Commentary #5: Gabby

Gabby’s case raises a common issue faced by stop smoking practitioners, that is, how to help someone quit smoking who also uses alcohol or illicit drugs.

The use of other substance hinders attempts to stop smoking for a number of reasons. First, if the use of two substances has been used together for a prolonged period of time (e.g., alcohol and cigarettes) then the use of one may consistently create a craving for the other. Second, the disinhibiting effects of other substances are likely to impact on the ability to resist smoking. Third, the use of some substances, such as marijuana, can involve the concurrent use of smoked tobacco.

In relation to stop smoking treatment, if the client is motivated to stop using other substances at the same time as quitting smoking, then the research suggests that this is achievable(1). However, if there is only motivation to quit tobacco but not other substances then it’s possible that the latter will maintain use of the former. This may be the case for Gabby in that her continued use of cannabis may be preventing her from stopping using tobacco completely.

Gabby’s case is not without success in that she reduced the number of cigarettes she smokes each day by half. This is significant in that it is clear evidence of her ability to exert at least some control over her smoking. Future cessation support should ask Gabby to focus on and fully acknowledge this control, as well as ask her to reflect how she achieved it. This in turn may enhance her level of self-efficacy (i.e., her belief in her ability to stop smoking) which research suggests is an important factor in determining success or failure in quit attempts(2) (see notes on Dee (#7) for more on self-efficacy).

It cannot be assumed, however, that Gabby’s reduction in the number of cigarettes she smokes will translate into a significant benefit on her health. Smokers who cut down tend to compensate (often unconsciously) by taking more and deeper puffs from each cigarette. This is a result of the natural tendency to seek medication against nicotine withdrawal, and in turn results in much less reduction in the intake of toxins than the ‘cut down’ number of daily cigarettes may imply. The concurrent use of nicotine replacement products, however, may allow smokers to cut down without this compensatory effect(3).

Gabby’s success went beyond her ability to control her smoking, and it is clear from the case notes that her treatment was a springboard to other improvements in her life not directly related to the effects of smoking. This is a common phenomenon and may be a result of the transferable nature of the skills and attributes commonly worked upon within stop smoking treatment (e.g., support seeking, self-control, mood management, confidence and self-efficacy).


**DISCUSSION**

What place does ‘cutting down’ have in stop smoking support? Is there a danger that supporting people to ‘cut down’ sends the message that it’s OK to smoke?
Expert Commentary #6: Julie

Within mental health settings, a large proportion of staff are smokers themselves and the place of smoking within the ‘culture’ of mental healthcare (see notes on Sandy (#2) has an influence on service providers as well as patients). Julie would therefore not have been alone as a smoker among her colleagues and, just like many patients who quit, missed the part smoking played in her interaction with others.

Julie had good reasons to quit, however, and those reasons illustrate clearly how the ‘traditional’ concerns (such as the fear serious illness) are not the only things that worry smokers. Like Julie, many people see the cosmetic, social and day-to-day fitness issues as being just as important. What is more, Julie’s case illustrates just how quickly quitting smoking can lead to improvements in those areas, as well as in psychological well-being (see case notes on Ian (#4) for another example of this latter effect).

Julie’s success in quitting smoking was aided by the use of varenicline (Champix). It is no surprise that the only mention of this product among the case studies was in relation to a staff member, as controversy has emerged about the use of varenicline with mental health service users. However, while more research evidence is required on the safety and efficacy of varenicline for people with mental health conditions, systematic research data does exist to suggest that it is a valid and safe treatment option in this population given appropriate post-quit support.

The notes on Julie’s case make reference to how her successful quit has left her empowered to support others in stopping smoking, and more generally, to advocate for the provision of a smoke-free environment. Given the central role of smoking in the culture of mental healthcare mentioned earlier, individuals such as Julie have a crucial role to play. However, the difference she and others can make will rely to large degree upon the extent to which her employers support her in that role. Issues such as adequate resources, protected time and further training need to be on the agenda.


DISCUSSION

What support does your organisation offer its staff in relation to quitting smoking?
Can a member of staff who still smokes take a role in helping patients to quit?
Expert Commentary #7: Dee

As in the case of Colin (#1) Dee’s health problem were a factor in motivating her to stop smoking. In addition to heart problems, Dee is also living with diabetes. Smoking is associated with an increased risk of a range of diabetes complications including kidney problems, retinopathy, neuropathy and cardiovascular disease. Stopping smoking is therefore crucial for anyone living with diabetes, although in doing so, attention to body weight through healthy eating and exercise may be particularly important.

Dee was a very heavy smoker and, as a consequence, probably quite nicotine dependent. Therefore, the provision of NRT formed an important part of her treatment. As mentioned in the case of Ian (#4) nicotine withdrawal can be more effectively addressed through the use of ‘combination’ NRT. Dee’s case also illustrates how the ‘hand to mouth’ action of the inhalator can be as important as the actual nicotine content in helping them cope without smoking.

One concern about Dee’s use of NRT may have been that she used it for much longer than the usual time-course. However, studies actually suggest that long-term NRT use does not lead to an increase in cardiovascular or other health problems. Therefore, it may well be that allowing the use of NRT over a long period is indeed a valid strategy if the person quitting feels that this will reduce the risk of a relapse back to smoking.

In the context of long-term NRT use, however, It is important for those supporting the quit attempt to ask the client to acknowledge their own role in maintaining abstinence and not attribute success solely to the nicotine product. Aside from being a more realistic view of the situation, this will aid the development of self-efficacy (ie – the belief in one’s ability to succeed in the face of a challenge – such as stopping smoking. As mentioned in the case of Gabby (#5) research suggests self-efficacy is an important factor in determining the success or failure in quit attempts.

As in the case of Ian (#4), Dee’s noticed an improvement in psychological well-being (specifically her anxiety) after stopping smoking. This effect has also been observed in research and serves to highlight how, while it may be tempting to see smoking as a tool for maintaining mental health, that quitting is actually the best way to promote real and sustainable improvements.


DISCUSSION

How long should a programme of stop smoking support treatment least? At what point do we ask a smoker who keeps relapsing to leave or take a break from the programme?