

2.4

Smoking & Mental Health

Does Smoking Cessation Affect Mental Health?

Background

In Section 2.3 evidence was discussed suggest that smoking can have very transient, positive effects on mental health (such as improved mood). However, numerous studies were also presented that suggest longer-term adverse effects of smoking, particularly in form of depression and anxiety.

Given this evidence, one may reasonably predict that stopping smoking would follow a similar pattern. That is, it may be expected that smoking cessation is followed by an acute increase in psychiatric symptoms, but then followed by a longer-term improvement in mental well-being.

The Effect on Depression

Low mood is a commonly cited symptom of nicotine withdrawal. However, the data is unclear as to whether smoking cessation can lead to a relapse in depression among those who have been diagnosed with depressive mental health problems. In one study, Tsoh et al. (2000) compared participants in a smoking cessation programme with and without a history of mental health problems (in this case, major depression). While those with a history of depression did experience a higher rate of depressive episodes during the study period, this was independent of whether or not they actually stopped smoking.

Overall, studies in this area suggest that smokers with a past history of major depressive disorder are more likely to have a post-cessation relapse of depression (Hughes et al. 2007). However, these studies are methodologically flawed and many questions remain unanswered, such as whether smoking abstinence is actually responsible for increasing the incidence of the depressive relapses, or whether people with a history of depression are simply more likely to experience a depressive episode in any given time period.

In the longer term, and consistent with the evidence presented in Section 2.3, it may be that depression is improved by smoking cessation. For example, data from the from the National Household Survey on Drug Abuse in the USA indicated that, among ex-smokers, the risk of depression decreased as more time elapsed since stopping smoking (Martini et al. 2002).

The Effect on Anxiety

In relation to anxiety, again it is likely that increases will be observed immediately following smoking cessation. Anxiety is listed by Hughes (2007) as one of the 'normal' symptoms of withdrawal, along with restlessness and tension. However, some studies do contradict this assumption. West & Hajek (1997), for example, studied a sub-group of 70 smokers who successfully quit over a period of six weeks (two weeks before cessation and 4 weeks after). There was no evidence of an increase in anxiety following smoking cessation, but there was a significant decrease in anxiety from the first week of abstinence. While this study didn't include individuals with an anxiety related disorder, it is notable that it did confine its analysis to nicotine dependent smokers, who may be assumed to be the most vulnerable to withdrawal effects. The study also excluded from the analysis anyone who lapsed back

into smoking, ensuring that the effects observed could be attributed to actual smoking cessation rather than simply smoking cessation treatment.

In the longer term, and as with the case of depression, research findings indicate that smoking cessation has a positive effect on the risk of anxiety related problems. For example, Breslau et al (2004), in their study of 4414 adults, found that the likelihood of panic disorder and agoraphobia was significantly reduced as time since quitting increased. They authors even suggest that these conditions might to some degree be preventable by smoking cessation programmes.

The Effect on Psychotic Symptoms

In their recent review, Campion et al (2008) conclude that there is little evidence to suggest an adverse effect of smoking cessation on psychotic symptoms. For example, Baker et al. (2006) reported on a randomized controlled trial of a cessation intervention with community resident patients with a psychotic condition. The active treatment consisted of nicotine replacement therapy, motivational interviewing, and cognitive behavior therapy. There was no indication of an adverse effect of either cessation or the treatment on symptoms. Another study, however, does indicate that akathisia (restlessness and the inability to remain motionless, often as a side effect of anti-psychotics) can occur after smoking cessation (Barnes et al, 2006).

Related to the effects of smoking on psychotic symptoms is the potential for smoking cessation to alter the effects of anti-psychotic (as well as other) medications. This issue is discussed more fully in Section 4.2. In summary, however, smoking affects the metabolism of some forms of psychotropic medications (most notably, clozapine) and consequently smokers often require higher doses. If a service user stops smoking then this can lead to an increase in serum levels of the medication if the same dosage is maintained. These metabolic changes really shouldn't be a problem if appropriate liaison is taking place between a patient's smoking cessation advisor and the clinician prescribing their medication. Indeed, the effect of lowering the required dose of a particular medication may be seen in a positive light as many drugs used in mental health settings, such as clozapine, can significantly raise the risk of physical morbidity.

Smoking Cessation or Stop Smoking Support?

One can argue that examining the effects of smoking cessation on mental health in the context of stop smoking interventions will miss important effects. Specifically, it may be that the support offered during such interventions may 'mask' the presentation of adverse symptoms. It could also be argued that such studies utilise biased samples with those most vulnerable to a negative impact of smoking cessation refusing to participate.

However, in their reviews of smoking bans in mental health settings, which often involve minimal or even no withdrawal support, both Lawn & Pols, (2005) and Haustein et al, (2002) conclude that these bans do not tend to result in negative effects on mental illness. What is more, the majority of the evidence relating to the positive, long-term effects of smoking cessation (eg – on the risk of depression or anxiety) were conducted within general populations and not confined to those seeking stop smoking treatment.

Implications for Clinical Practice

There is evidence that the long-term effects of smoking cessation on mental health are, far from being negative, actually beneficial in relation to mental health. Specifically, research indicates that stopping smoking decreases the likelihood of both depressive and anxiety related problems, and that the risk continues to decrease as time goes on.

In the shorter term, there may be potential for increased risk of a relapse in depression after quitting among those who have a history of depressive illness. However, the evidence in this area is far from clear. In relation to anxiety and psychotic symptoms there is even less evidence of an adverse effect of cessation, with most studies suggesting no effect or even an improvement in mental health immediately following stopping smoking. Possibly the most consistently observed effects related to mental health after quitting are not a result of smoking cessation per se, but of smoking cessation reversing the adverse effects of tobacco use on medication metabolism.

Despite the uncertainty, however, it would seem prudent in clinical practice to consider mental health service users as potentially more vulnerable to the effects of nicotine withdrawal. Psychological support should form a key element of stop smoking support programmes in mental health settings, not simply to pre-empt any adverse psychological effects of cessation, but in order to enhance the likelihood that a quit attempt is a successful and positive experience for the service user. The success of stop smoking support in mental health settings is examined in the next section (section 2.5).

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