Behavioural and Cognitive Psychotherapy, 2007, 35, 117–120
Printed in the United Kingdom doi:10.1017/S135246580600316X

Cognitive Reframing of Positive Beliefs about Smoking: A Pilot Study

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Abstract. Beliefs in the benefits of smoking are reported by most smokers. Such beliefs have been shown to be modifiable, and belief modification has been shown to predict smoking cessation (Petersen, Kinderman and Maguire, 1998). This study evaluates a treatment group conducted in an NHS Specialist Smoking Cessation Service which explicitly challenged beliefs about the benefits and pleasures of smoking. There were 152 participants. At 4 weeks post quit date, 110 participants had stopped smoking, (72.4%), 26 were still smoking, (17.1%) and 16 were lost to follow-up (10.5%). At the 52 week follow-up, 45 were still not smoking (29.6%), 54 were smoking (35.2%) and 53 were lost (34.9%). This compares favourably with other published data on smoking outcomes, which report quit rates ranging from 17–19% (NICE, 2002; Ferguson, Bauld, Chesterman and Judge, 2005.) Treatment was perceived positively by participants, most of whom who felt it had changed their attitudes to smoking, enhanced their motivation to quit, and increased their confidence in their ability to quit.

Keywords: Smoking cessation, belief modification.

Introduction

Most models of smoking assume the existence of benefits of smoking and the fact of these benefits is often stated, without qualification, as self evidently true. For example Russell, (1990) states that "besides being pleasurable, smoking helps many people to cope better with the stresses of their lives". However, West (1993) cautions that this "tacit assumption" of the benefits of smoking may be unsupported by the literature and comments that this has significant treatment implications.

The hypothesis that positive beliefs about smoking may be distorted and therefore modifiable was tested in a study for a Doctoral Thesis (Petersen et al., 1998) in which smokers were offered treatment aimed at challenging perceived benefits and pleasures of smoking. Results showed a significant reduction in beliefs in positive effects of smoking ($p < .001$) in the treatment groups. This attitude shift was found to significantly predict cessation.

The present study evaluates a pilot treatment group aimed at modifying positive beliefs about smoking. This approach represents a significant departure from traditional methods. Instead of accepting a statement like "smoking relaxes me" at face value and either reflecting it back (motivational interviewing), seeking an alternative method of relaxing (behaviour

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therapy), or outweighing the benefit by pointing out harm (health education), this approach involves eliciting, exploring and, if appropriate, directly challenging such positive beliefs about smoking.

Method

Participants were recruited via referrals from GPs or practice nurses. An average of 12 participants attended each group (range 8–17). Each group comprised two treatment sessions, each of 2 hours duration. Cessation rates were determined by self-report at 4 weeks and 52 weeks post quit date in accordance with DOH guidelines.

Participants were given an anonymous feedback form at the end of the second session, which they filled in before leaving, containing statements such as: "the group helped me change my attitude to smoking"; "the material was presented poorly"; and "I am more motivated to quit than I was before the group". Participants were requested to rate each statement on a 6 point Likert scale ranging from totally agree to totally disagree.

In session 1, participants' reasons for smoking, and the perceived benefits of smoking, were elicited. Such reasons were then explored and challenged using cognitive therapy. One of the key cognitions identified was the misattribution of relief of withdrawal as stress relief, relaxation or pleasure. Psycho-education regarding this process was aided by the use of an externalizing approach. The craving to smoke was conceptualized as "Nitch", short for Nicotine Itch, where ITCH stands for Irritating, Time Consuming, Controlling and Horrible . Nitch is seen as having two weapons: stress arising from the physical craving for nicotine, and propaganda, which are the attitudes and beliefs like "I need a cigarette to cope", or "smoking is my only pleasure in life". Such beliefs are viewed as distorted, and reframing them was a central feature of the approach. In addition, smokers were encouraged to identify and reframe thinking errors such as minimization or denial ("who wants to live forever anyway" or "what do doctors know?"; selective attention such as noticing healthy happy looking smokers and not noticing miserable ill looking smokers, and arbitrary inference – "he's happy because he is smoking". Nicotine Replacement Therapy (NRT) and Bupropion, were discussed and advice on their use given. The decision of whether or not to prescribe rested with the GP, who also issued the prescriptions.

Session 2 focused on relapse prevention, the aim being to arm people against beliefs such as "just one won't hurt". The aim of the second session was to help the smoker feel liberated from the constant need to smoke rather than deprived of the "pleasure" of smoking.

Results

The study took place in an NHS Smoking Cessation Specialist Service. Data were collected and analysed in accordance with the Department Of Health Guidelines for specialist smoking cessation services, thus allowing cautious comparison of outcomes across such services. Mean amount smoked daily was 20–29 cigarettes for both genders. Mean number of years smoked was 20–29 years for both genders. One hundred and twenty-eight had made previous quit attempts (84%).

Cessation data

One hundred and fifty-two participants set a quit date. At 4 week follow-up, 110 participants (72.4%) had stopped smoking, 26 (17.1%) were still smoking, and 16 (10.5%) were lost to follow-up. At 52 week follow-up, 45 (29.6%) were still not smoking, 54 (35.2%) were smoking and 53 (34.9%) were lost to follow-up. Of the 53 lost to follow-up at 52 weeks, 28 had been non smokers at 4 weeks post quit date, 17 had been smokers and 8 had been also been lost at 4 weeks.

Qualitative data

Anonymous feed-back questionnaires were completed at the end of the second session. There was a high response rate with 137 participants (90%) completing the questionnaires. Participants were asked to rate items such as "The group helped me change my attitude to smoking", "The material was presented poorly" and "I am more motivated to quit than I was before the group" on a Likert scale. The groups were perceived positively with most participants reporting that they felt more confident and motivated to quit, and had changed their attitude to smoking.

Discussion

It was hypothesized that beliefs about benefits of smoking create a barrier to quitting as the smoker fears the loss of these pleasures and benefits. Reducing the degree to which people believe in the benefits of smoking was therefore hypothesized to offer a useful avenue for helping people to stop smoking. The present study evaluated a treatment intervention aimed explicitly at helping smokers modify any tendency to minimize costs of smoking while elevating benefits. Central to this approach was eliciting and challenging positive perceptions of smoking.

While there was no control group, there is a wealth of outcome research regarding smoking cessation that has been summarized by NICE in their 2002 Guidance (NICE, 2002). A meta-analysis of almost 100 RCTs evaluating the effectiveness of Nicotine Replacement Therapy (NRT), which is usually offered in conjunction with motivational support, counselling and advice, found 10% success rate in the placebo groups and 17% in the treatment groups. For Bupropion plus motivational advice, counselling and support, success rates were 9% in the placebo groups and 19% in the treatment groups. NICE states that the current evidence does not allow judgements on the relative importance of the pharmacological products and the additional support.

These clinical trial findings have been replicated in smoking cessation services across England. Ferguson et al. (2005) evaluated two contrasting areas of England (Nottingham and North Cumbria), consisting of 9 PCT localities. Two thousand and sixty-nine participants set a quit date, and of these 17.7% were not smoking at 52 week, based on self-report.

The current study collected and analysed data in accordance with the Department Of Health Guidelines for specialist smoking cessation services, thus enabling outcomes across different services to be cautiously compared. NICE makes no comment on CBT for smoking, as this avenue has not as yet received much research attention. However, NICE (2002) recognizes

the high failure rate in all types of treatment for smoking and writes "innovative strategies to encourage quitting should be investigated".

The present study offers such an innovative approach and the outcomes reported here of 29.6% not smoking at 52 week follow-up are promising when compared with other published data. I therefore feel that this approach is worthy of further investigation, particularly given the cost-effective nature of a 2-session group protocol. A randomized controlled trial comparing standard specialist service care (NRT/Bupropion plus motivational support) and enhanced care including the belief modification component is now needed.

References

Ferguson, J., Bauld, L., Chesterman, J. and Judge, K. (2005). The English Smoking Treatment Services: one year outcomes. *Addiction*, *100* (S2), 59–69.

NICE (2002). *Guidance on the Use of Nicotine Replacement Therapy (NRT) and Bupropion for Smoking Cessation*. London: National Institute for Clinical Excellence, Technology Appraisal Guidance, No. 38, March.

Petersen, K., Kinderman, P. and McGuire, N. (1998). *The Role of Positive Beliefs about Smoking in Maintenance of Smoking Behaviour and Relapse after Cessation*. Thesis submitted to the University of Manchester for the degree of Doctor of Clinical Psychology, Faculty of Medicine, Department of Psychiatry.

Russell, M. A. H. (1990). The nicotine addiction trap: a 40 year sentence for four cigarettes. *British Journal of Addiction*, *85*, 293–300.

West, R. (1993). Beneficial effects of nicotine: fact or fiction? *Addiction*, *88*, 589–590.