

## PREVALENCE AND INFLUENCES ON SMOKING IN PEOPLE WITH LEARNING DISABILITIES

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### Introduction

Smoking is acknowledged as causing major health problems, having clearly been demonstrated to lead to a greater risk of two of the major causes of death, namely heart disease and cancer (for example Ho *et al.*, 2002 and Taylor *et al.*, 2002). So far there has been very little research on smoking in people with learning disabilities.

A few studies have looked at the prevalence of smoking amongst learning disabled clients and have produced a wide range of results. Tracy and Hosken (1997) reported a prevalence rate of 36% of a sample of people with learning disabilities living independently in Australia. Hymowitz *et al.* (1997) looked at the smoking habits of 136 adults who were consecutively seen at a developmental disabilities clinic and found that 18% smoked. Rimmer *et al.* (1995) found that less than 10% of a sample of 186 people

with mild to severe learning disabilities living in a range of settings in the U.S. smoked. Peine *et al.* (1998) report that only 4% of the adults in a 400 bed long-term residential institution smoked.

Hymowitz *et al.* (1997) suggest that it is likely that cigarette smoking enhances self-esteem, confidence and image, and serves as a symbol of maturity and competence, in people with learning disability. The implication of this is that the people with learning disability who smoke may be imitating what they see non-learning disabled adults do. If this is the case, then one would expect that there would be an increased rate of smoking amongst learning disabled clients who were exposed to other people who smoked. Other factors that may influence the smoking habits of people with learning disability are whether they are actively discouraged from smoking and the degree of knowledge they have about the health risks of smoking.

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The aims of this study were:

To find the prevalence of smoking in people with learning disabilities who attend the local Social Education Centres (SEC) and the local Technical College.

To ascertain if the smokers have less knowledge about the harmful effects of smoking than non-smokers do.

To ascertain if the carers of the people who smoke were also more likely to smoke and have a more permissive attitude to smoking than the carers of non-smokers.

## Method

The clients in the study were the people attending the three local SECs and those attending the "Into Independence" and "Community Access" courses at the local technical college. The SECs provide daytime activities and training for 347 adults with moderate to severe learning disabilities. The course at the technical college provides further education to 234 young people with mild to borderline learning disabilities. The staff at these facilities identified the clients that had been observed smoking in the last month (the smokers). Control clients were also identified matched on sex and approximate degree of learning disability (the non-smokers).

Each smoker and non-smoker was given a semi-structured questionnaire. The first part of the questionnaire was an extended version of the Lindsay *et al.* (1997) test on knowledge about smoking and its health risks, which had a maximum score of 27. The second part questioned them about their attitudes to

smoking, their desire to stop or start smoking, the social pressure they were under to stop, and whether they lived with other people who smoked. A researcher was present when the client filled in their questionnaire and assisted if necessary. A similar questionnaire designed for the carers of these clients, which also tested knowledge about smoking and attitude to smoking, was given to the main carer of each smoker and non smoker. It was felt that approaching clients and carers personally, so that the purpose of the research could be explained to them, would result in a better compliance rate. However, the staff at the technical college were reluctant to provide the addresses of their students, and so the questionnaire, together with an information sheet, the consent form and a stamped addressed envelope, was taken home by the students taking part in the study.

## Results

All the identified smokers and non-smokers agreed to complete the questionnaire, and questionnaires were also completed by main carers of the smokers and non-smokers at the SECs. Only two of the carers of the clients at the technical college (one a smoker and one a non-smoker) returned questionnaires.

### *Prevalence*

Out of the 347 clients who attended the SECs only four (1.15%) were identified as smokers and of the 234 students who attended the technical college only seven (2.99%) were identified as smoking.

Therefore, eleven smokers were identified out of a sample of 581, giving an overall prevalence rate of 1.89%.

### *Knowledge about smoking*

The average knowledge score for the smokers was 17.6 and for the non-smokers 18.0. There was therefore a very small and statistically insignificant difference between the degree of knowledge about smoking of the smokers and non-smokers. Both smokers and non-smokers seem to be well aware of the health risks of smoking, with 8 of the smokers answering "yes" to the question "can smoking kill you?" as compared to 10 of the non-smokers.

### *Influences from home*

As predicted, more smokers said they lived with someone who smoked than did the non-smokers: seven as compared with two, a statistically significant difference (Chi-square  $P = .04$ ). Although the carers of only five smokers and five non-smokers completed the carer's questionnaire, some useful information was still obtained from these data. None of the main carers of the non-smokers smoked, however, three of the five main carers of the smokers smoked, a difference that just fails to be statistically significant (Chi-square  $p = .085$ ).

Two smokers answered "yes" to the question "Do the people you live with mind if you smoke?" and two answered "yes" to the question "Do the people you live with ever try to stop you smoking?". No details were given as to how the people they lived with tried to stop them

smoking. However, of the eight non-smokers who responded to the question "Would the people you live with mind if you smoked?" all of them replied "yes".

The smokers in the study were exposed to more modelling of smoking and less to active discouragement of smoking at home than the non-smokers. However, as the number of people in the study was small it will need further work to demonstrate if there is a relationship between modelling of smoking, active discouragement, and smoking generally in people with learning disabilities and the nature of that relationship.

### *Reasons for smoking*

Of the eight smokers who expressed an opinion as to why they started to smoke, six pointed to the influence of family or friends, and one said that she started so that she would "look cool". However, when asked why they smoked now, only two of the nine who replied to this question pointed to the influence of family or friends. Of the others, two said it was a habit, one said that he could not give up, and four said that it either relieved stress or helped them to calm down.

### *Desire to stop smoking*

Eight of the 11 smokers said that they would like to stop smoking, mainly citing health reasons for this. None of the non-smokers said that they would like to start smoking, again mainly citing health reasons.

## Discussion and Implications

This study has a number of methodological shortcomings. There is the small sample of smokers that were only drawn from a limited number of settings, the technical college and the SECs, so it is clearly not representative of all people with learning disabilities. The data are based on verbal reports from people with learning disabilities and their carers and there has been no attempt to validate these, so it is not clear how accurate it is. The analysis of the data is correlational so cannot be taken to show that one variable had an effect on another. It is also not certain that all smokers were identified, as the study relied on the reports of staff on the units as to who smoked, and it is not known how accurate these reports were. Therefore any conclusions must be tentative. Nonetheless it is possible to generate some hypotheses as to why some people smoke and why most do not.

The proportion of clients attending the SECs and technical college identified by staff as smokers was just under 2%. This rate is smaller than rates reported by other studies of smoking prevalence in people with learning disabilities referred to above or for people of a similar age without learning disabilities (Schmid, 2001). It is not clear from this study why the rate was so low, and further detailed research will be needed to establish this.

Non-smokers cited the negative effect of smoking on health as the main reason for not smoking, a finding that has also been reported for people of a similar age without a learning disability (Schmid, 2001). This suggests that informing people with learning disabilities about the health risks of smoking is an important way of preventing smoking being taken up. Another factors that may influence people with learning disabilities not to smoke are

the attitudes of others, e.g., the non-smokers reporting that the people they live with would object if they smoked. This may be an important factor as, compared with other people, people with learning disabilities are often dependent on carers and so may be more likely to be influenced by them not to smoke. There may also be other factors, not directly dealt with in this study, which influence people with learning disabilities not to smoke. One example is the cost of cigarettes, which has been found in studies of smoking generally to be a major incentive to stop smoking (Foster and Jones, 2001).

Although this study provides evidence that the non-smokers do not smoke because of the health risks, there was no difference in the degree of knowledge about smoking between the smokers and non-smokers. This finding is repeated in studies of people without learning disabilities (Denscombe, 2001; Kanvil and Umeh, 2000; Zucker *et al.*, 2001), and suggests that a lack of knowledge was not the reason why smokers continue to smoke. However, it was also found that many of the smokers in this study wanted to stop for health reasons. Wanting to quit for health reasons has also been found in smokers without learning disabilities. For example West *et al.* (2001) found that many smokers wanted to quit due to health concerns. However, although a concern about health was associated with a desire to quit, it was not related to a successful attempt to quit, which seemed to be mainly influenced by the degree of dependence the smokers had on cigarettes. This suggests that knowledge about health risks may well encourage people not to start smoking but may not be so important in persuading people to stop smoking once they have started.

This study also suggests social influences to smoke from the people the smok-

ers live with are important. The smokers in this study were significantly more likely to live with people who smoke and be more likely to have a main carer who smokes. Also, when asked why they had started smoking in the first place, the majority of the smokers said that it was the influence of family and friends, a finding, which has also been reported for smokers without learning disabilities (Siddiqui *et al.*, 2000).

Other factors cited by smokers as to why they continue to smoke were stress reduction, also reported in studies of smokers without learning disabilities (Schmid, 2001), and smoking being a habit and being difficult to give up, again reported in studies of people without learning disabilities (West *et al.*, 2001). All of which suggests that smoking has an intrinsic reinforcing effect for many smokers.

There are therefore suggestions from this and other studies that one reason why people with learning disabilities start to smoke is that they are influenced to do so by other people. It is also suggested that once people have started smoking then they continue because of the physical effects of smoking, relaxation or reducing a craving. However, this is probably an over simplified analysis of smoking in people with learning disabilities, as there may well be many other factors affecting smoking in people with learning disabilities not considered in this study, but suggested in recent publications on smoking in the non-learning disabled population. For example Denscombe (2001) questioned adolescents as to why they and/or their peers smoked, and found that in addition to smoking making them look "grown up" or "cool", it helped young people develop an identity. Other reasons for smoking have been to control weight (Boles and Johnson, 2001; Perkins *et al.*,

2001; Zucher *et al.*, 2001), being influenced by tobacco advertising (Zucker *et al.*, 2001) and enjoyment of smoking (West *et al.*, 2001). Space does not permit a fuller discussion of the possible influence of these factors on people with learning disabilities. However, it would seem that further research in this area may well be helpful in understanding not only why people with learning disabilities smoke but also how their behaviour is influenced by today's modern complex society.

There would seem to be a number of implications from these findings for both the prevention and cessation of smoking in people with learning disabilities.

First, the study lends some support for the idea that making people with learning disabilities aware of the health risks of smoking can help to prevent them from starting to smoke. However, the study also suggests that knowing about health risks, once a person has started to smoke, may not be a sufficient motivator to get them to stop. It may therefore be important to educate people about the dangers of smoking before they start to smoke when they are children, so that knowledge about health risks is able to stop them starting to smoke.

Secondly, as other people's smoking seems to have an influence on whether people with learning disabilities start and continue to smoke, it may be helpful if staff were discouraged from smoking in the presence of clients.

Thirdly, as in this and other studies, coping with stress was cited by a number of smokers as a reason for continuing to smoke, teaching smokers alternative ways of coping with stress could be an important component of a smoking cessation programme. There are a number of studies where people with learning disabilities have been trained to cope with anxiety and stress (c.f. Lindsay *et al.*, 1997; Turk

and Francis, 1990) and these methods could be used to help people stop smoking.

Fourthly, as a number of smokers indicated that they smoked from habit or because they could not give up, probably indicating that they are having problems overcoming a physical addiction to nicotine, help may need to be provided to assist them overcome this addiction.

In addition, as the wider literature on learning disabilities suggests that people with learning disabilities often have poor self-regulation skills (c.f. Whitman, 1990) and can have difficulty in impulse control (Vollmer *et al.*, 1999), further training in self-regulation may also be necessary to help people stop smoking. Again, there are a number of methods that have been shown to be effective on challenging behaviour (see Whitaker, 2001 for a review of these methods), which could be used to help people with learning disabilities control their smoking.

The above suggestions are made on the basis of a very limited amount of evidence with regard to smoking in people with learning disabilities. There is clearly a need for further research on the determinants of smoking in people with learning disabilities, techniques to help them give up smoking and preventing them from starting in the first place.

## Summary

The people attending the three local social education centres (SECs) and those attending the "Into Independence" and "Community Access" courses at the local technical college who smoked were identified. A questionnaire on knowledge and attitude to smoking was then given to each smoker as well as to a group of

matched controls (matched on age sex and approximate degree of learning disability who attended the same facility). A similar questionnaire was also given to the carers of the smokers and the carers of the controls. It was found that the overall prevalence rate of smoking was only two percent, and that there was no significant difference in the knowledge about smoking between the smokers and controls; however, the smokers were significantly more likely to live with someone who smoked than the controls.

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