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Is health education hooked on addiction?

The belief that alcohol, tobacco, and other drugs are 'addictive' has had a widespread effect on attitudes to drug use and abuse. In particular, the fear that experimenting with tobacco will lead to addiction pervades health education strategies.

It seems to me that in recent times 'addiction' has become a catch-all label for any behaviour in which people indulge and which they have difficulty changing: this may include non-addictive pathological states like obsessions, but also habits, mannerisms, other people's hobbies (if not one's own) and perhaps any or all behaviours which are rewarding or which are a central part of a person's self-image. If the newspapers are to be believed we can become addicted to gambling, politics, exercise, telephone chat-lines and even sex.

Importance

What is the importance of addiction? I should like to discuss this issue with respect to smoking, prompted by a remark in *Curriculum Guidance 5* (Health Education), published by the National Curriculum Council, which outlines the points to be covered during work on psychological aspects of smoking:

Tobacco use causes addiction

There are many authoritative statements to support this belief.

- *Children can get themselves hooked on nicotine after smoking just three cigarettes — it's more addictive than heroin.* (1)
- *Cigarette smoking is probably the most addictive... self-administered gratification known to man.* (2)

The last sentence has been widely used in health education materials (for example the *Smoking and Me* pack and the Schools Council/HEC materials *SHEP 13–18*.)

Now, health educators have been very active in trying to communicate to the public in general, and young people in particular, an awareness of the health risks of smoking — to the extent that most adults and young people believe that smoking is dangerous to health.

Irrational smokers

Why on earth, then, do people smoke? It seems an irrational, even an insane thing to do.

If someone drank water which he knew to be infected with typhoid, not because he would otherwise die of thirst, but from choice because he liked the taste, we would consider him insane. How many of us drink alcohol or inhale tobacco smoke and still manage to be accepted as sane members of society? (3)

Addiction may be the way to resolve this paradox. Since counselling clinics have been notoriously unsuccessful, and personality differences between smokers and non-smokers have been found to be small, the 'dependence' theory of smoking is attractive.

Withdrawal syndrome

There is a lot of evidence about whether nicotine can produce a 'withdrawal syndrome', which is a necessary condition of physiological addiction(4). However, what is not clear, as Jarvik & Hatsukami state (5), is whether all smokers actually suffer a withdrawal syndrome when they try to stop, and if so whether this is the reason for them failing to stop.

This is even more doubtful for schoolchildren: I suggest that the great majority of young smokers are *not* physiologically addicted. Rather, the difficulties they encounter when trying to give up smoking include:

- *Their own belief that they are addicted*
- *The belief of teachers and counsellors that they are addicted*
- *The emphasis placed on 'addiction' in educative and counselling material*

Where do these beliefs come from and are they justified?

Is giving up so hard?

Some research evidence from studies of adult smokers may be briefly mentioned. In two parallel studies which attempted to survey exhaustively the whole of a university psychology department and a small mid-Western USA town, Sidney Schachter found that most people give up smoking (and other) habits with no more than moderate difficulty.

This study has been replicated in detail, and the general observation that actually *most* smokers stop smoking without undue effort has also been made by Richard Carmody. Carmody's data also contradicts the view that most people take up the habit again: at a 5-year follow-up over 90% remained non-smokers. This is evidence of the most powerful sort against giving primacy to addiction as a factor in maintaining cigarette smoking.

So, although smoking may be 'addictive' to some extent, the dependence produced may not be the life-destroying shackle that has been suggested, and cessation may even be a relatively straightforward procedure. Lee Robins found that only a small minority of American GIs who used narcotics while they were in SE Asia continued to use the drugs when they returned to the USA, despite the possibility and indeed in some cases actuality of them obtaining opiate drugs in their home localities.

Is abstaining common?

It is known that heavy smokers can abstain for short periods without great difficulty when circumstances demand — miners at the coal face and religious observers on certain days, for example. (Reports of difficulty need not be attributed to addiction — nail-biting and gambling can be extremely refractory to attempts to change, as well as attempts to cure oneself of other irritating minor mannerisms including figures of speech.)

That this can happen suggests that it is *circumstance* and not *chemistry* which makes stopping difficult.

Smoking levels

Once the emphasis on physiology is questioned, other difficulties become apparent. We still have no real account from an 'addiction' point of view of smoking initiation or of relapse following successful cessation. It is estimated that about 20 cigarettes are required to be consumed each day in order to create an addiction, and it is known that a slim majority of adult smokers in the UK do not smoke quite as much as this and in most cases smoke less than half as much.

Further, nicotine injections carried out in laboratory experiments do not reduce smoking as much as would be expected if smoking is driven by a smoker's pharmacology.

Based on current evidence, the conclusion that addiction is a relatively unimportant factor in maintaining adult smoking seems the most reasonable one to draw.

Young people don't smoke anything like as much as adults: 15-year old smoking boys, who are the heaviest users, average fewer than five a week. Young people do successfully give up smoking in large numbers (6), so unless young people are very much more susceptible to addiction than adults, the weight of negative evidence above must tell against addiction explanations of adolescent smoking as well.

Future issues

We are collecting material for the following topics. If you would like to make a personal contribution, or can point us to useful sources of information, please let us know. The topics are:

Working children
Death and bereavement
HE in the National Curriculum
Theatre and drama in HE
Peer pressure
HE and environmental issues
HE and primary/secondary school links

We are also pleased to receive articles, letters, and documents relating to all aspects of health education in primary and secondary schools, as well as in FE.

A comprehensive review by Kosterlitz and Hughes (7) concluded that metabolic changes appear to play only a minor role (if any) in addiction: they suggest that the addiction theory has been a 'failure', even when applied to drugs like opiates thought powerfully addictive in adults and young people.

Learning addiction

I would argue that addiction is to be regarded as of little importance in maintaining behaviours, not just for smoking but also for drinking, since alcohol is not believed to be anything like as addictive as tobacco.

However, the *idea* of addiction remains of great importance, for a reason pointed out by Dick Eiser of Exeter University.

Eiser (8) suggests that addiction does not just suddenly appear in adulthood, but depends to some extent on the individual learning about the nature of addiction in adolescence. After such learning, the person's belief that they must in fact be addicted will discourage them from trying to stop. If young people expect to become addicted, and label themselves as 'addicts', then this self attribution may be as powerful a link in the chain as nicotine itself. This is an interesting idea, though little evidence is yet available for its assessment.

Whether most or even some adolescent smokers regard themselves as addicted is, as far as I can tell, not known. Young smokers in the Avon prevalence study (9) report 'craving', but no attempt to demonstrate the presence of a withdrawal syndrome according to contemporary criteria was made.

There is some evidence that addiction is not a salient issue for young people (10), which would suggest that it is not of great importance in the maintenance of smoking in adolescence.

Sociologists have actually long been familiar with the idea that pharmacological effects of all drugs are at least in part mediated by the expectations held by persons and the social significance of the drug.

Teaching addiction

If self-attribution is a key question in addiction, a number of educational and other issues become apparent. If substance dependence and habits become entrenched primarily because of the user's beliefs and attributions, then the *last* thing health educators should be doing is promulgating myths about the difficulty of abstention and the cruel binds of addiction, which can only dissuade current users from attempting to change their practices.

The insistence on addiction also provides substance users with a 'vocabulary of motive' which absolves them of responsibility for their actions. Moreover, if the relative ease with which smokers do give up is (or became) widely known, what price the credibility of health educators?

The paradox of smokers smoking despite knowledge of dangers, to which I drew attention in my introduction, apparently cannot be resolved outside psychology, since physical/addiction explanations seem unable to explain why the majority of smokers, (young or adult), smoke at all.

Rational smoking

Rather than get too heavily into the psychological approaches, I suggest we must not dismiss young people and others who smoke as irrational because they smoke while believing that smoking is unhealthy; but neither must we dismiss them as helpless addicts. Instead, I suggest that we must look at what *else* they believe. What positive use does smoking have in their lives? What are the health risks of smoking compared with benefits that smoking might bring for them?

The question asked in the recent HEA campaign *Smoking — who needs it?* is, I am afraid, not rhetorical. Young people systematically deprived of status in the school system need sources of status outside it. Young women who are under pressure to lose weight need an appetite suppressant. Mothers caring for a young family under very limited and isolated circumstances need on-the-spot relief from stress.

Smoking, from a young person's point of view, may seem highly rational. It is our lack of sympathy which tempts us to cast smokers as addicts. But until we can look at smoking from the smoker's point of view we cannot educate effectively about it.

References

1. Dr Barry Lynch, *Radio Times*, 17-23 November, 1990.
2. Russell, M. A. H.,'Tobacco smoking and nicotine dependence' in Gibbins, R. J. *et al* (eds.), *Research advances in alcohol and drug problems* (Vol. 3). New York: Wiley, 1989.
3. Lea, M. V., *Health and social education*. Heinemann, 1975.
4. Ian Stolerman, *New Scientist*, pp 33-35, 3rd November 1990.
5. Jarvik, M. E. & Hatsukami, D. K., 'Tobacco dependence'. In Ney, T. & Gak, A. (eds.), *Smoking and human behaviour*. New York: Wiley,
6. Balding, J. W., *Young people in 1988*. Schools Health Education Unit, University of Exeter, 1989.
7. Kosterlitz, H. W. & Hughes, J., 'Biological significance of the endogenous opioid peptides and the opiate receptors'. In Israel, Y. *et al* (eds.), *Research advances in alcohol and drug problems* (Vol. 4). New York: Plenum, 1978.
8. Eiser, J. R., 'Smoking, the social learning of an addiction'. *Journal of social and clinical psychology*, 3, 4, 446–457, 1985.
9. Morgan, M. J. *et al*, 'Patterns of cigarette smoking among British schoolchildren: implications for educational intervention'. *Health education research*, **1**, 2, 95–100, 1986.
10. Eiser, J. R. *et al*, 'Adolescent arguments for and against smoking'. *Journal of the Institute of Health Education*, **21**, 3, 73–78, 1983.

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