Nicotine : Addiction within your Children's Reach

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Recent evidence has shown that cigarette smoking and its major health problems are no longer confined to adults[1,2]. Although minors suffer primarily from passive smoking due to parental smoke, children of parents who smoke are also influenced to begin smoking early[3].

Apart from the role of parents, minors also smoke as a result of the lack of national strategies to prevent children from smoking. A paper in this issue of the Medical Journal of Malaysia has shown that our children can easily purchase cigarettes without being asked their age or for whom the cigarettes are for[4]. Yet another factor is the aggressive marketing strategies employed by cigarette companies. Dwindling sales in developed countries have resulted in these companies diverting their resources and attention to the developing countries. As these countries have populations with large numbers of children and adolescents, marketing strategies are deliberately targeted at the younger age groups. Cigarette advertisements in developing countries therefore use themes and role-models that would mainly appeal to adolescents and children. Cigarette companies also sponsor programmes that appeal to the younger age groups like sports, music, travel and other recreational activities. The psychological effect of this in children is the conditioning of their minds and the formation of an association between smoking and these "acceptable" activities. While this does not automatically make children take up the habit, it nevertheless creates some degree of permisiveness in their minds towards smoking[5].

Other factors also play a part in determining smoking behaviour in children. Recent studies have shown these factors to be cultural, peer pressure and psychobiological[6-8].

Nicotine unlike other addictive drugs is a non-intoxicant and thereby little affected by cultural sanctioning. Even religion, which plays an important role in society against drug addiction, has little prohibitions against smoking. This would explain why seemingly pious adults would smoke openly in front of their children or to ask their children to buy cigarettes on their behalf.

The lack of appreciation of the addictive strength of nicotine and the lack of cultural sanctions have undermined the efforts of the medical profession in the prevention of smoking. This could partly explain the stand of certain groups that smoking is a birthright or the willingness of shopkeepers to sell cigarettes to minors. Until and unless such preventive efforts take into account both scientific knowledge and the present societal perceptions, it would be difficult to achieve any degree of success in the near future. The medical profession must do its utmost to emphasise to society the similarity between nicotine and other addictive drugs. Whilst it may not be possible to enact a religious *fatwa* against nicotine, there should at least be a national policy to classify nicotine as a hard drug.

The risk of smoking on a regular basis in a child who has already smoked his first cigarette is many times higher than in a child who has never smoked before. This is because nicotine can induce a severe from of addiction syndrome. A study has noted that the strength of nicotine addiction is on par with that of heroin and coccaine[10]. This could explain why only small numbers of adolescents are able to stop smoking despite having acquired knowledge on the dangers of smoking. The majority of adolescent smokers are unable to give up smoking or relapse after trying. This is due to their strong dependence on nicotine and a study has shown that 40% of smokers in their late

adolescence demonstrated signs of nicotine dependence[11]. Withdrawal symptoms related to nicotine dependence can take various forms and can vary in severity depending on the duration of smoking and amount smoked[12]. Some of the common withdrawal symptoms include weight gain, inability to sleep, inability to concentrate and depression.[13] All these symptoms are usually accompanied by a strong craving for nicotine. This can create a very stressful situation for the adolescent trying to give up smoking and special attention should be given to the patient. Nicotine replacement therapy may be necessary to overcome the dependence to nicotine[14]. Replacement therapy together with simple counselling has been effective in helping up to 10% of smokers abstain from the habit permanently[15]. The nicotine dependence syndrome is associated with development of tolerance which results in the need to increase cigarette consumption. This in turn increases the risk to diseases related to smoking. Since there is a correlation between the severity of disease and duration of smoking, the young smoker is more likely to suffer from more severe smoking-related illnesses in later life.

Smoking causes numerous adverse health effects which are not only deadly but extracts a tremendous toll on societal resources as well as human suffering. These consequences are entirely preventable but preventive strategies have to be well-planned. Priority should be given to developing age-appropriate cessation material which should include information on the dangers of smoking and methods of quitting taking into account social, cultural and religious factors. Since cigarette smoking is a disorder arising from many causes, its prevention should be both multi-level and multidisciplinary. The doctor can play many roles in this, from convincing smokers to quit to helping them overcome their dependence. Doctors should also be actively involved in the prevention programmes especially those targeted at young smokers. Such activities can be undertaken at the clinic itself through pamphlets or short five-minute counselling sessions about the dangers of smoking. Such simple preventive measures have been shown to be effective[16]. Health education and treatment programmes should be made readily available to the community. One of the ways of achieving this is through the mobilisation and participation of the community itself. This could be done through networking with community leaders, NGOs and religious organisations and getting their support and commitment. Particular attention should be paid on prevention activities targeted at children. A negative image of smoking must continually be portrayed to children. Since peer pressure plays a major role in the formation of the smoking habit, it can similarly play an important role in smoking cessation programmes. Political will and support is also necessary. The government should enforce laws that prohibit sale of cigarettes to minors. Cigarette advertising should be more adequately controlled. Billboard advertising should be disallowed and any advertising limited to black and white text only. Cigarette company sponsorship of sporting and other entertainment events should be stopped entirely and any resulting loss of government revenue made up through increased taxation on tobacco. Cigarette companies should contribute a portion of their profits to support sporting and other activities without putting their brand names to these activities.

Over the last two decades, there has been much scientific evidence to show that nicotine is addictive and that cigarette smoking is harmful. However there is still a strong resistance in society at large to efforts designed for the prevention and cessation of smoking, even among minors. This is due in part to social, cultural and economic factors. Cigarette companies have been successful in attracting minors through advertising strategies that employ conditioning techniques. Nicotine addiction therefore occurs even in early adolescence. The policy on cigarette advertising should therefore be reviewed. Health-care workers should also direct more effort towards the prevention and treatment of smoking in the young.

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