

play an important role as a smoking cessation strategy.

### C. Jairaj Kumar

Visiting Fellow

Jawaharlal Nehru Centre for Advanced

Scientific Research  
Jakkur, Bangalore, India

### Arunachalam Kumar

Vice-Dean

K.S. Hegde Medical Academy

Deralakatte, Karnataka, India

#### REFERENCES

1. Gervais A, O'Loughlin J, Meshefedjian G, et al. Milestones in the natural course of onset of cigarette use among adolescents. *CMAJ* 2006;175(3):255-61.
2. Wittmann M, Dinich J, Merrow M, et al. Social jetlag: misalignment of biological and social time. *Chronobiol Int* 2006;23(1-2):497-509.
3. Roenneberg T, Kuehne T, Pramstaller PP, et al. A marker for the end of adolescence. *Curr Biol* 2004;14(24):R1038-9.

DOI:10.1503/cmaj.1060179

#### [Two of the authors respond:]

Nicotine addiction in children and adolescents is not the old mantra; it is a new mantra that has emerged over the last 5 years with accumulating evidence that novice smokers can experience symptoms of nicotine dependence early in the smoking onset process. Indeed, until recently, it was generally believed that young people could experiment with cigarettes without experiencing cravings or withdrawal symptoms. Our analysis documents that classic symptoms of dependence, such as cravings and symptoms of withdrawal, occur rapidly after the first puff, before the development of tolerance (i.e., the disappearance of the initial adverse effects, such as nausea and dizziness) and well before regular weekly or daily cigarette use.<sup>1</sup>

We agree with Preston that our paper did not incorporate perceived social benefits of smoking into the description of the natural course of smoking onset. However, current conceptualizations of dependence do take into account the fact that young people weigh the benefits of smoking early in the preparation and experimentation phases of smoking. Future studies on the natural course of onset should perhaps incorporate the evolution of per-

ceived benefits in relation to the appearance of symptoms of dependence and intention to quit.

We agree that our finding that mental addiction can occur even before the first puff may reflect the fact that some people are more susceptible or attracted to smoking because of perceived benefits. However, the onset of mental addiction was closely aligned in many of our subjects with the onset of physical addiction; in reality, it may be impossible to distinguish mental addiction from physical addiction.

For every smoker who quits without experiencing withdrawal symptoms, there are many more who relapse. Randomized controlled trials demonstrate that relief of withdrawal symptoms through nicotine replacement therapy doubles quit rates, providing empirical evidence for the role of nicotine in dependence.<sup>2,3</sup> One could argue that underestimating the biological underpinnings of dependence, and instead relying solely on the notion that dependence is psychological, may underlie the failure of many quit attempts. Smokers who fail in their attempt to quit smoking may become even more disempowered when they are blamed for not having enough willpower to quit.

### Jennifer O'Loughlin

Department of Social and Preventive  
Medicine

Centre de recherche du Centre

hospitalier de l'Université de

Montréal

Université de Montréal

Montréal, Que.

### André Gervais

Agence de santé et des services  
sociaux

Direction de santé publique

Montréal, Que.

#### REFERENCES

1. Gervais A, O'Loughlin J, Meshefedjian G, et al. Milestones in the natural course of onset of cigarette use among adolescents. *CMAJ* 2006;175(3):255-61.
2. Fiore MC, Bailey WC, Cohen SJ, et al. Recommendations regarding specific pharmacotherapies: first-line medications. In: *Treating tobacco use and dependence*. Rockville (MD): US Department of Health and Human Services; 2000. p. 72-90. Available: [www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.section.7838](http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.section.7838) (accessed 2007 Jan 22).
3. Silagy C, Lancaster T, Stead L, et al. Nicotine re-

placement therapy for smoking cessation. *Cochrane Database Syst Rev* 2004;(3):CD000146.pub2.

DOI:10.1503/cmaj.1060240

## Controlling cervical cancer

There has been striking progress in research into cervical cancer prevention. According to a CMAJ news article by Alicia Priest, a vaccine against human papillomavirus types 6 and 18 is about to be introduced in Canada.<sup>1</sup> As Priest notes in the article, fears have been expressed that administration of the vaccine to young girls might increase sexual promiscuity.<sup>2</sup> Moreover, there are concerns about how comfortable young women, parents and health care providers will be about discussing the vaccine.<sup>3</sup>

Despite the availability of the vaccine, policy-makers should not abandon more cost-effective methods of controlling the burden of cervical cancer,<sup>4</sup> such as regular Papanicolaou screening and health education regarding the risk factors for human papillomavirus infection and the clinical problems and long-term complications associated with the infection. These methods have yet to be effectively implemented in some countries.<sup>5</sup>

After the vaccine is introduced, it will be a few years before a reduction in cervical cancer incidence is detectable. In the meantime, it is important to maintain the existing screening programs and to study the acceptability of the vaccine and the feasibility of the programs to administer it.

### Jeevan P. Marasinghe

Registrar in Obstetrics and  
Gynecology

Teaching Hospital

Peradeniya, Sri Lanka

### A.A.W. Amarasinghe

Psychiatrist

McDonough, Ga.

#### REFERENCES

1. Priest A. Cervical cancer vaccine may come soon to Canada. *CMAJ* 2006;175(3):235.
2. Monk BJ, Wiley DJ. Will widespread human papillomavirus prophylactic vaccination change sexual practices of adolescent and young adult women in America? *Obstet Gynecol* 2006;108(2):420-4.
3. Zimet GD. Understanding and overcoming barriers to human papillomavirus vaccine acceptance. *Curr*