

2.3, 95% C.I. 1.0-5.3). HTLV-I seropositivity was also associated with frequency of needle sharing (Table 1).

Re-use of contaminated needles and other paraphernalia to prepare the dose were not associated with HTLV-I seropositivity. Anti-HTLV-I antibodies were detected more commonly among females (25%) than males (15%), but the difference was not significant (Odds Ratio=2.9, 95% C.I. 0.9-4.0). Having sex with more than 10 partners in one year was reported by 24% IDUs (42% seropositive and 19% seronegative IDUs), resulting associated with HTLV-I (OR=3.7, 95% C.I. 1.7-8.2). A large number of sexual partners was the only risk behaviour in 9 subjects who did not admit to needle sharing in the last 5 years. This pattern of sexual behaviour was not associated with needle sharing, acting as an independent risk factor.

The mode of transmission of HTLV-I infection among IDUs seems to be similar to that of HIV. HIV seropositive IDUs are more likely to have anti-HTLV-I antibodies than seronegative subjects.² Even if needle sharing seems to be the most important way of transmission of HTLV-I infection among IDUs, sexual behaviour might play a role in HTLV-I spread and account for some cases of transmission. However, in the cases presumably acquired through sexual intercourse, transmission via contaminated 'works' in the early 1980s could not be ruled out. In fact, HTLV-I antibodies have been detected in sera collected in IDUs in Rome at least since 1985.¹

Risk reduction measures such as use of sterile equipment and safe sex, recommended for hepatitis B virus and HIV infection, should reduce also the spread of HTLV-I infection.

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Effects of cigarette advertising: reply to Boddewyn

From Kenneth Warner (Institute of Gerontology, University of Michigan)

SIR—In his recent commentary on the effects of cigarette advertising J. J. Boddewyn¹, who describes himself as a "paid expert witness for the tobacco industry", makes a highly misleading and distorting assessment of the evidence.

His commentary, which criticizes an article by Chetwynd *et al.*² offers selective assertions many of which fail to approach the exacting standards of scientific rigor he criticizes Chetwynd for not attaining. For example, he claims that there is "strong international evidence that [cigarette advertising] bans are not effective in achieving their stated purpose, namely, to reduce smoking initiation and prevalence". As his source Boddewyn cites his own work³, a document paid for and produced by the International Advertising Association, an organization with an obvious interest in the outcome of the debate. As a scholar who has reviewed the evidence on this issue⁴ I find this booklet unconvincing and characterized by weak methodology.

Boddewyn concludes his commentary by suggesting that the Surgeon General of the United States agrees with his view that the attempt to link advertising to smoking is 'difficult' if not 'futile', as is "attempting to prove that bans are effective in reducing consumption". This assertion is supported by quoting one sentence, and a portion of a second, from the 1989 US Surgeon General's report⁵ completely out of context. The tobacco and advertising industries have misquoted these sentences on numerous occasions, creating an entirely false impression of what the Surgeon General actually said. The Surgeon General himself, Everett Koop, became so annoyed by this repeated distortion that

he published a rebuttal of it⁶. The effect of this distortion can be seen when the two sentences are presented in context in which they actually appear. The material omitted by Boddewyn is in italics.

"There is no scientifically rigorous study available to the public that provides a definitive answer to the basic question of whether advertising and promotion increase the level of tobacco consumption. *Given the complexity of the issue, none is likely to be forthcoming in the foreseeable future. The most comprehensive review of both the direct and indirect mechanisms concluded that the collective empirical, experiential, and logical evidence makes it more likely than not that advertising and promotional activities do stimulate cigarette consumption. However, that analysis also concluded that the extent of influence of advertising and promotion on the level of consumption is unknown and possibly unknowable* (pp. 516-517).

That Boddewyn should find the evidence relating cigarette advertising to consumption unconvincing is perhaps not surprising. The tobacco industry, for whom he is a consultant, remains unconvinced that smoking causes disease. Perhaps he should have read the Surgeon General's reports more thoroughly than he apparently did, containing as it does a thorough review of evidence on the ways advertising and promotion may increase both the prevalence of smoking, and the daily consumption of smokers.

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