

Preferences among five nicotine treatments based on information versus sampling

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Smokers' minimal exposure to nicotine replacement treatments (NRTs) may account for poor compliance and outcome with these treatments. This study tested effects of information versus sampling of NRTs on smokers' preferences and expectations. The study was a crossover comparing information-only (INF) with sampling (SMP) methods for five NRTs: gum (2 and 4 mg), lozenges (2 and 4 mg), and inhalers. Subjects were given computer-based presentations on NRTs (INF) and rated and ranked use variables (e.g., ease, sensory/ritual, perceived relief, embarrassment) and overall choice for "use to quit." After INF testing, subjects sampled each NRT (SMP) and again rated and ranked drugs. SMP was brief (4 min) to mimic potential use in practice. Results showed changes in perceptions and preferences post-SMP. NRT preferences shifted for overall "use to quit" (59%) and most use variables (43%–63%) post-SMP. Inhalers (generally top choice) showed a 20% drop in choice to quit ($p < .04$) and a 24% drop in anticipated "relief of withdrawal" ($p < .04$) post-SMP; 4-mg lozenge ratings increased for "relief of withdrawal" ($p < .02$). Ratings improved post-SMP for three of the five NRTs ("ease of use," $p < .05$) but were reduced overall for liking "sensory action" ($p < .003$) and reduced for all but 2-mg gum for "use to quit" ($p < .03$). Positive changes were seen in improved ratings of NRTs chosen post-SMP. Given that reactions to NRTs change with experience, sampling should allow for a more realistic choice of NRT (self-tailoring) and better compliance versus current trial-and-error methods.

Introduction

In the United States, the faster-acting, or acute, nicotine replacement treatments (NRTs) are accessible to smokers over the counter (gums, lozenges) or by prescription (inhalers, nasal spray). Despite the widespread availability of these treatments, most smokers do not know how acute NRTs work, and

their effectiveness is undermined by misuse or underuse of the preparations (Bansal, Cummings, Hyland, & Giovino, 2004; Cummings & Hyland, 2005). In addition, the high frequency of daily use required and strong dislikes associated with a route of administration (Schneider et al., 2006; Schneider et al., 2004; Schneider et al., 2005) may undermine compliance and, ultimately, outcome.

The acute NRTs have long been shown to be effective in clinical trials (Henningfield, Fant, Buchhalter, & Stitzer, 2005; Silagy, Lancaster, Stead, Mant, & Fowler, 2004) and have a number of advantages. Acute NRTs can be used safely for long periods and can be combined with patches, other NRTs, or non-nicotine agents (Schneider et al., 2006; Steinberg, Foulds, Richardson, Burke, & Shah, 2006; Sweeney, Fant, Fagerström, McGovern, & Henningfield, 2001). A key advantage of acute NRTs is their ad lib use for immediate responses to crisis episodes and smoking cues (vs. patches, pills). Shiffman, Ferguson, Gwaltney, Balabanis, and

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