Smoker (Mis)Perceptions Associated with Pack Colouring: National Survey Data

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Background

There is evidence that “light” and “mild” descriptors on cigarette packs are associated with smoker misperceptions around cigarettes from these packs posing a lower health risk than full flavour cigarettes.11 In response to bans on such descriptors in various countries (including New Zealand [NZ]), the tobacco industry moved to “colour codes” packs so as to associate pack colour with different brand variants.5,6 As a result, there is evidence that smokers now interpret lighter colours (e.g., white, silver or blue) on packs to signify “lighter” cigarettes.5 This remains problematic from a health perspective given that smokers misperceive cigarettes from lightly coloured packs as less harmful and easier to quit smoking.7,6 We therefore aimed to determine how NZ smokers interpret cigarette pack colouring at a time when “light” and “mild” descriptors had disappeared from packs.

Methods

The NZ arm of the International Tobacco Control Policy Evaluation Survey (ITC Project) derives its sample from the NZ Health Survey (a representative national sample with boosted sampling of Maori, Pacific and Asian NZers). In wave two (n=923) we asked about perceptions of tobacco packaging. Further details of the methods are available in online reports.9

Results

Around a third of smokers said that they obtained at least some “useful information on how cigarettes taste” from the pack colour (35.3%, 95% CI = 30.9 – 39.7). This was less than the equivalent ratings for tar and nicotine levels of the brand (43.5%); brand descriptor words such as “smooth” and “ultra” (50.4%), and “light” and “mild” (65.1%).

Obtaining information about taste from pack colour was reported more frequently in younger age groups (p-value for trend: p=0.00001) (Figure 1). It didn’t vary significantly by ethnicity (Figure 2) but it did increase with higher individual deprivation scores (p-value for trend: p=0.0002) (Figure 3).

In two multivariate models, younger smokers were significantly more likely to report that the pack colour provided useful information on taste, but in the fully-adjusted “Model 3” this was only statistically significant for the comparison between the 35-49 age group and the 50+ age group; i.e., adjusted OR = 1.88; 95% CI = 1.07 – 3.30. This model adjusted for a range of variables relating to demographics, socioeconomic position, mental health, and smoking-related beliefs/behaviours.

Discussion

NZ smokers (and especially younger smokers) commonly say that pack colour gives them useful information about cigarette taste. Given the evidence for smoker misperceptions concerning “light” cigarettes and because of evidence that some smokers interpret cigarettes that taste “less strong” as being better for health,2 the use of differential pack colouring by tobacco manufacturers is problematic from a public health perspective. Such findings add weight to the adoption of precautionary policy responses such as regulations for plain packaging for tobacco products (as planned by Australia5,6) or to displace coloured surfaces of packs with larger pictorial health warnings.

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References