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Industry manipulation of pictorial health warning labels in Pakistan

Elizabeth Crespi , Michael Iacobelli, Kevin Welding , Sejal Saraf, Katherine Clegg Smith, Joanna E Cohen

Department of Health, Behavior & Society, Institute for Global Tobacco Control, Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA

Correspondence to

Ms Elizabeth Crespi, Department of Health, Behavior & Society; Institute for Global Tobacco Control, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD 21205, USA; ecrespi2@jhu.edu

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Approximately 10.5% of adults in Pakistan (about 13 million) smoke cigarettes,¹ causing 134 000 deaths annually.² To reduce the burden of disease, the Pakistan government implemented a requirement in 2010 for 40% pictorial health warning labels (HWLs) that depicted mouth cancer. A 2017 ruling to increase HWL size was implemented in August 2018 (50% throat cancer image) and August 2019 (60% gangrenous foot image).^{3 4} Pictorial HWLs increase smokers' quit attempts, deter initiation of use among non-smokers, and prevent relapse in former smokers.⁵

In 2013, only 58% of unique packs with the current, in-rotation HWL were compliant with size, location, text contrast and text size requirements in Pakistan.⁶ In 2019, compliance with size, location and text language requirements was 82% (largely due to size compliance improvements) for unique packs displaying the most recent gangrenous foot HWL⁷; however,

poor HWL quality was observed. Here, we examine Pakistani HWLs on packs collected from retailers to identify differences from the government mandated HWL image. Thirty-four packs (47%) displayed the current gangrenous foot HWL, 18 (25%) displayed the former 50% throat cancer HWL and 20 (28%) displayed the former 40% mouth cancer HWL. Over half of the packs were manufactured by transnational companies (eg, Philip Morris International); the rest were from domestic manufacturers.

The Tobacco Pack Surveillance System (TPackSS) monitors HWL compliance in low-income and middle-income countries. Between December 2019 and January 2020, the TPackSS protocol was employed in Pakistan; 72 unique cigarette packs with Pakistani HWLs were collected from four major cities (Islamabad, Karachi, Lahore, Quetta). Although the law clearly states that the HWL be 'printed in the exact color, intensity and clarity' as the HWL



Figure 1 Pakistan health warning labels. (A) Current government-mandated gangrenous foot health warning label (HWL); (B) former government-mandated throat cancer HWL; (C) former government-mandated mouth cancer HWL; (D) HWL that has been tinted to the color of the pack (blue); (E) HWL where the throat cancer has been completely removed; (F) HWL that has been darkened and cropped.

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provided by the government,⁴ 85% (n=61) of the 72 unique sample packs differed from the official images (figure 1A–C). Manipulations were observed in HWLs of all types and by both international and domestic manufacturers.

HWL manipulations observed included tinting, darkening, fading, changing the background colour from blue to grey, cropping the HWL, blurring, brightening and increasing the colour saturation or reducing the size of the throat cancer. Of these, tinting (n=49, 68%), darkening (n=32, 44%) and fading (n=28, 39%) were the most common manipulations. Packs were also observed with multiple types of manipulations (eg, red tint and a grey background). Of note, HWLs tinted to the colour of the pack (figure 1D) and HWLs with no apparent cancer (figure 1E) appeared in our sample, indicating intentional manipulation of the HWL by the tobacco industry.

Despite efforts in Pakistan to address high smoking rates through implementation of pictorial HWLs, it is clear that the tobacco industry is manipulating HWLs. This cannot be considered a printing issue as other elements of the packs (eg, logos, backgrounds) did not display the same quality issues. HWL manipulation was previously documented for smokeless tobacco products in India.⁸

Packs were collected only from cities; further research could explore if these manipulations are also present in other areas of Pakistan. Improved monitoring, enforcement and alignment with FCTC penalty provisions are needed to maintain the integrity of mandated HWLs and ensure former HWLs are removed from shelves to deter youth initiation, increase quit intentions and prevent relapse in former smokers.⁵

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ORCID iDs

Elizabeth Crespi <http://orcid.org/0000-0002-5462-5976>

Kevin Welding <http://orcid.org/0000-0002-1833-6691>

Joanna E Cohen <http://orcid.org/0000-0002-3869-3637>

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