Health Warning Labels

Evidence on Pictorial Warnings

Pictorial health warning labels are an important opportunity to communicate the risks of tobacco use

The tobacco industry uses the tobacco package as a promotional opportunity. Public awareness is low about the true risks of tobacco use, even in countries with widespread anti-smoking campaigns.[1]

- Most smokers cannot recall the specific health effects associated with smoking.[2]
- Even smokers who understand the dangers of smoking underestimate the severity of its impact on health.[3]
- Most smokers perceive other smokers to be at greater risk from smoking than themselves.[4]
- Smokers tend to be even less aware of the risks of secondhand smoke to others.[5]
- An understanding of both the risks and severity of smoking are important factors in motivating smokers to quit.[2]

Public health proponents see the tobacco package as an educational opportunity. Pack-a-day smokers are exposed to images printed on packs at least 20 times a day (and 7,000 times a year), when they buy and use cigarettes. That's 20 opportunities a day to deliver anti-smoking messages at critical junctures: the point of purchase and the time of smoking.[6] The use of pictorial images enhances the impact of the public health message.

> " …if you smoke, a cigarette pack is one of the few things you use regularly that makes a statement about you. A cigarette pack is the only thing you take out of your pocket 20 times a day and lay out for everyone to see."[7]
>
> Marketing Backgrounder, Brown & Williamson (1985)

Pictorial health warning labels effectively increase knowledge about health harms from tobacco use

Smokers report that they receive more information about the risks of smoking from the tobacco product package than from any other source except television.[2] As more countries introduce stronger health warning labels (HWLs) and evaluate their effectiveness, growing evidence shows that pictorial HWLs have a greater impact than text-only HWLs on awareness of the risks of tobacco use.

- A 2011 review of health warning messages on tobacco products concluded that pictorial HWLs eliciting emotional reactions are significantly more effective than text-only warnings at increasing health knowledge and risk perception, promoting cessation, and preventing initiation of smoking.[8]
- A 2015 review of 37 experimental studies found that, compared to text-only warnings, pictorial HWLs:
  - Attracted and held attention better;
  - Evoked stronger cognitive and emotional reactions;
  - Resulted in more negative attitudes toward packs and smoking;
  - More effectively discouraged smoking initiation and increased intention to quit.[9]

¡PELIGRO!

El Ministerio de Salud y Deportes advierte que:
Fumar causa
CÁNCER DE BOCA
www.sns.gob.bo

(Bolivia, 2011)

- In assessing the impact of strengthening cigarette pack warnings, a 2016 review concluded that introducing stronger warnings—either changing from text-only to pictorial, and/or increasing size—led to increased knowledge and quitline calls, and reduced smoking prevalence.[9]

Single country studies report similar findings about the greater effectiveness of highly visible pictorial warning labels compared to text-only warning labels on cigarette packaging

Population-based studies showed that switching from text-only to pictorial significantly enhanced the effectiveness of the HWLs.

- After Canada introduced large pictorial HWLs in 2000, 91% of smokers surveyed said they had read the warnings and were able to demonstrate a strong knowledge of the subjects the warnings covered. Smokers who had read and discussed the warnings were more likely to have quit or made quit attempts at the 3-month follow-up.[6]

- Following the change from text-only to larger, pictorial HWLs in Thailand, smokers were nearly twice as likely to notice the warnings, read them closely, and think about smoking-related risks compared to before.[10]

- After implementation of pictorial HWLs in Mauritius in 2009, smokers had nearly four times greater odds of noticing the warnings, and almost three times greater odds of reading the warnings closely compared to the prior text-only warnings.[11]

Pictorial health warning labels influence initiation and motivate tobacco users to quit

- Studies show that intentions to quit smoking improve when a quitline number is provided with the pictorial label:
  - After Australia introduced pictorial HWLs with quitline information in 2006, the rate of quitline callers doubled from the previous two years.[12]
  - After New Zealand introduced pictorial HWLs with quitline information in 2008, the number of new quitline callers increased.[13]

- A study of adult smokers from Brazil, Uruguay and Mexico found that Brazilians were more likely than Uruguayans or Mexicans to be aware of and have used telephone-based cessation assistance. In Brazil, quitline information was publicized on health warning labels and in tobacco media campaigns, whereas in Mexico and Uruguay it was only publicized in media campaigns.[14]

- A study on U.S. and Canadian adult smokers found that more graphic representations of health consequences evoked more fear and resulted in stronger intentions to quit smoking.[15]

- After Brazil introduced new pictorial HWLs in 2002, 67% of smokers said the new warnings made them want to quit.[16]

(India, 2015)

(Brazil, 2009)

- ○ Brazil introduced a second round of labels in 2004. In a study evaluating both rounds, researchers found that the most threatening and fear-arousing images on warning labels increased intentions to avoid smoking.[17]

- After the introduction of pictorial HWLs on cigarettes in Taiwan in 2009, the prevalence of thinking about health hazards of smoking increased from 51% to 80% among smokers, and from 69% to 94% among nonsmokers. Additionally, the prevalence of smokers thinking of quitting rose from 30% to 52%.[18]

- A follow-up investigation of the four-country study revealed that larger, pictorial HWLs (as seen in Canada and Australia) were associated with increased quit attempts in comparison with text-only labels (as seen in the U.S.).[19]

- In a study comparing the impact of small, text-only warnings in Malaysia with large, pictorial warnings in Thailand, the Thai warnings were more likely to lead to quitting behaviors.[20]

  - ○ An additional study in Thailand before and after implementation of pictorial warnings found that smokers were significantly more likely to think about quitting in response to the larger, pictorial warnings compared to the previous text-only warnings.[10]

- After implementation of pictorial health warnings in Mauritius, smokers had over twice the odds of thinking about smoking-related health risks or thinking of quitting than before.[11]

(Mauritius, 2009)

Key Messages

- Pictorial counter tobacco industry advertising on tobacco products, increase knowledge about risks associated with tobacco use, reduce adolescents' intentions to smoke, and motivate smokers to quit.

- Pictorial health warning labels have a greater impact than text-only labels and can be recognized by low-literacy audiences and children—two vulnerable population groups.

- The WHO Framework Convention on Tobacco Control obligates Parties to implement large, clear, rotating pictorial health warning labels on all tobacco product packaging within three years of ratifying the treaty.

References

1. Ayanian JZ, Cleary PD. Perceived risks of heart disease and cancer among cigarette smokers. JAMA. 1999 Mar 17;281(11):1019-21.
2. Hammond D et al. Effectiveness of cigarette warning labels in informing smokers about the risks of smoking: Findings from the International Tobacco Control (ITC) Four Country Survey. Tobacco Control. 2006 Jun;15 Suppl 3:iii19-25.
3. Hammond D et al. Text and graphic warnings on cigarette packages: Findings from the international tobacco control four country study. American Journal of Preventive Medicine. 2007 Mar;32(3):202-9.
4. Hammond D. Tobacco labeling toolkit: Implementation. In: Hammond D, editor. Tobacco Labeling and Packaging Toolkit: a guide to FCTC article 11. Waterloo: University of Waterloo; 2008.
5. Environics Research Group. Assessment of perceived health risks due to smoking. Ottawa: Health Canada, Office of Tobacco Control; 1999.
6. Hammond D, Fong GT, McDonald PW, Cameron R, Brown KS. Impact of the graphic Canadian warning labels on adult smoking behaviour. Tob Control. 2003 Dec;12(4):391-5.
7. Sandefur T. Remarks of T.E. Sandefur Jr. Marketing backgrounder New York, 850723 (internal industry document.) Williamson B. 1985. Bates No. 532001934/1947 http://legacy.library.ucsf.edu/tid/poi24f00

8. Hammond D. Health warning messages on tobacco products: a review. Tobacco Control. 2011 Sep;20(5):327-37.
9. Noar SM et al. Pictorial cigarette pack warnings: a meta-analysis of experimental studies. Tob Control. 2016;25:341-354.
10. Yong H et al. Adult smokers' reactions to pictorial health warning labels on cigarette packs in Thailand and moderating effects of type of cigarette smoked: Findings from the International Tobacco Control Southeast Asia survey. Nicotine & Tobacco Research. 2013 Aug;15(8):1339-1347.
11. Green AC et al. Investigating the effectiveness of pictorial health warnings in Mauritius: Findings from the ITC Mauritius Survey. Nicotine & Tobacco Research. 2014 Sep;16(9): 1240-1247.
12. Miller CL et al. Impact on the Australian Quitline of new graphic cigarette pack warnings including the Quitline number. Tobacco Control. 2009 Feb 11.
13. Li J, Grigg M. New Zealand: new graphic warnings encourage registrations with the quitline. Tobacco Control. 2009 Feb;18(1):72.
14. Thrasher JF et al. Assessing the impact of cigarette package health warning labels: a cross-country comparison in Brazil, Uruguay, and Mexico. Salud Pública de México. 2010 June;52(2):S206-S15.

15. Kees J et al. Understanding How Graphic Pictorial Warnings Work on Cigarette Packaging. Journal of Public Policy & Marketing. 2010;29(2):265- 76.
16. Presentation to EU Commission on enforcement of health warnings in Brazil: (2002).
17. Nascimento BE et al. Avoidance of smoking: the impact of warning labels in Brazil. Tobacco Control. 2008 Dec;17(6):405-9.
18. Chang F et al. The impact of graphic cigarette warning labels and smoke-free law on health awareness and thoughts of quitting in Taiwan. Health Education Research. 2011;26(2):179-191.
19. Borland R et al. How reactions to cigarette packet health warnings influence quitting: findings from the ITC Four-Country survey. Addiction. 2009 Feb 10.
20. Fathelrahman AI et al. Stronger pack warnings predict quitting more than weaker ones: finding from the ITC Malaysia and Thailand surveys. Tobacco Induced Diseases. 2013;11(1):20-27.