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Title: Increased support for standardised packaging in the United Kingdom: A longitudinal online survey

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INTRODUCTION

While standardised (or plain) packaging is required in at least 14 countries, the only evidence on post-implementation support comes from Australia. Public support is important for public health policy as it can be instrumental in whether governments introduce measures, and can help justify the decision to have done so.^{1,2} In Australia, support for plain packaging during the transition period was higher among smokers using plain packs than smokers using fully-branded packs.² A longitudinal survey found that support among smokers increased from 28% pre-plain packaging to 49% six months post-plain packaging.³ Cross-sectional surveys found that while approval among smokers and ex-smokers was unchanged from prior to the policy being implemented to twelve months post-plain packaging, there was a significant decrease in disapproval (from 36.4% pre-implementation to 28.2% for smokers, and from 17.2% pre-implementation to 13.9% for ex-smokers).⁴

Since May 20th 2017, cigarettes and rolling tobacco in the United Kingdom must be sold in standardised packs. We explored whether support for standardised packaging changed following the introduction of this policy.

METHODS

A longitudinal online survey (the ‘Adult Tobacco Policy Survey’) with a cohort of smokers, recruited pre-standardised packaging (April-May 2016) and followed up 4-6 months post-standardised packaging (September-November 2017) and 24-26 months post-standardised

packaging (May-July 2019). To be eligible for inclusion at Wave (W) 1 participants had to be current cigarette smokers. Of the 6233 cigarette smokers at W1, 4293 responded at W2 (3629 cigarette smokers, 607 ex-smokers, 36 who only used other forms of tobacco, 7 who reported being a smoker but had not smoked in the past three months, and 14 who responded ‘Don’t know’ for smoking status) and 3175 at W3 (2412 cigarette smokers, 700 ex-smokers, 44 who only used other forms of tobacco, 6 who reported being a smoker but had not smoked in the past three months, and 13 who responded ‘Don’t know’ for smoking status). The sample at W1 was weighted by age, gender, government office region, and tobacco consumption to represent the national profile of smokers aged 16 and over in the UK and in subsequent waves weights were adjusted for sample attrition, see technical report (Supplementary file).

Participants were shown an image of standardised packs and asked *‘To what extent, if at all, do you agree or disagree that tobacco companies should be/continue to be required to continue to sell cigarettes and rolling tobacco in standardised packs – that is, in packs which all look the same except for the brand and variant name?’* with options ‘Strongly agree’, ‘Agree’, ‘Neither agree nor disagree’, ‘Disagree’, ‘Strongly disagree’, and ‘Don’t know’ collapsed into approval (Strongly agree/Agree), neutral (Neither agree nor disagree/Don’t know) and disapproval (Strongly disagree/Disagree). Ethical approval was granted by the University of Stirling, with the first two waves approved by the Faculty of Health Sciences and Sport Ethics Committee and the third wave by the General University Ethical Panel.

RESULTS

Approval for standardised packaging increased at each wave for cigarette smokers and ex-smokers, from 25.4% at W1 to 35.7% at W2 and 39.3% at W3, and for cigarette smokers, from 25.4% at W1 to 34.0% at W2 and 35.4% (see Table 1). Among ex-smokers, approval was 44.8% at W2 and 52.0% at W3. Generalised estimating equations, adjusted for smoking

status, show a statistically significant increase in the proportion of participants approving of standardised packaging across waves (W1 vs W2 OR=1.50, 95% CI 1.23-1.82; W1 vs W3 OR=1.71, 95% CI 1.57-1.86).

Table 1: Support for standardised packaging among cigarette smokers and ex-smokers across three waves

		Wave 1	Wave 2	Wave 3
Cigarette smokers and ex-smokers	<i>Approval</i>			
	n	1,489	1,417	1,127
	weighted %	25.4%	35.7%	39.3%
	95% CI	(24.2-26.6%)	(34.0-37.4%)	(37.2-41.5%)
	<i>Neutral</i>			
	n	2,592	1,472	1,134
	weighted %	40.0%	33.1%	33.2%
	95% CI	(38.7-41.3%)	(31.5-34.7%)	(31.3-35.1%)
	<i>Disapproval</i>			
n	2,152	1,347	851	
weighted %	34.6%	31.2%	27.5%	
95% CI	(33.4-35.9%)	(29.6-32.9%)	(25.6-29.5%)	
Cigarette smokers	<i>Approval</i>			
	n	1,489	1,140	787
	weighted %	25.4%	34.0%	35.4%
	95% CI	(24.2-26.6%)	(32.2-35.9%)	(33.1-37.9%)
	<i>Neutral</i>			
	n	2,592	1,267	896
	weighted %	40.0%	33.3%	34.2%
	95% CI	(38.7-41.3%)	(31.5-35.0%)	(32.0-36.4%)
	<i>Disapproval</i>			
n	2,152	1,222	729	
weighted %	34.6%	32.8%	30.3%	
95% CI	(33.4-35.9%)	(31.0-34.6%)	(28.2-32.7%)	
Ex-smokers	<i>Approval</i>			
	n	0	277	340
	weighted %		44.8%	52.0%
	95% CI		(40.1-49.6%)	(47.6-56.5%)
	<i>Neutral</i>			
	n	0	205	238

	weighted %	32.2%	29.9%
	95% CI	(27.9-36.8%)	(26.2-33.9%)
	<i>Disapproval</i>		
	n	125	122
	weighted %	23.0%	18.1%
	95% CI	(18.8-27.8%)	(14.8-21.9%)

DISCUSSION

Approval for standardised packaging in the UK increased, and disapproval decreased, post-implementation, consistent with findings from Australia²⁻⁴ and other tobacco control policies such as pictorial warnings, a retail display ban, and smoke-free public places.³ The higher support found following the introduction of tobacco control policies, which may be due to increased acceptability, decreased concerns about the impacts, adaptation, realisation that it may aid cessation, or other factors,^{1,3} helps governments defend the decision to have implemented these policies,¹ may be a springboard to further policies, and could encourage other governments to follow suit.

What this paper adds

- While a growing number of countries have fully implemented standardised packaging, the only evidence on public support comes from Australia.
- Three waves of a longitudinal online survey in the UK, conducted pre-standardised packaging, 5-6 months post-standardised packaging, and 24-25 months post-standardised packaging, explored support for this policy among smokers and ex-smokers.
- Approval of standardised packaging increased, and disapproval decreased, across the three waves.

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REFERENCES

1. Sohlberg T. In favour of tobacco control? Former smokers' support for tobacco policies. *Nordic Studies Alc Drugs* 2019;36:496–510.
2. Wakefield MA, Hayes L, Durkin S, et al. Introduction effects of the Australian plain packaging policy on adult smokers: a cross-sectional study. *BMJ Open* 2013;3:e003175.
3. Swift E, Borland R, Cummings KM, et al. Australian smokers' support for plain or standardised packs before and after implementation: findings from the ITC Four Country Survey. *Tob Control* 2015;24:616–21.
4. Hayes L, Wakefield MA, Bain E. Change in public support for the introduction of plain packaging and new, enlarged graphic health warnings in the Australian state of Victoria, 2011–2013. *Tob Control* 2017;26:627-8.