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PRESENTING A STRONG AND UNITED FRONT TO TOBACCO INDUSTRY INTERFERENCE: A CONTENT ANALYSIS OF AUSTRALIAN NEWSPAPER COVERAGE OF TOBACCO PLAIN PACKAGING 2008-2014

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Keywords:	tobacco, plain packaging, content analysis, print media

SCHOLARONE™
Manuscripts

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3 ***PRESENTING A STRONG AND UNITED FRONT TO TOBACCO INDUSTRY***
4 ***INTERFERENCE: A CONTENT ANALYSIS OF AUSTRALIAN***
5 ***NEWSPAPER COVERAGE OF TOBACCO PLAIN PACKAGING 2008-2014***
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46 **Running title:** Australian print media coverage of plain packaging

47 **Keywords:** Plain packaging, print media, content analysis

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ABSTRACT

Objectives: In 2012 Australia was the first country in the world to introduce plain or standardised tobacco packaging, coupled with larger graphic health warnings. This policy was fiercely opposed by industry. Media coverage can be an influential contributor to public debate, and both public health advocates and industry sought media coverage for their positions. The aim of this study was to measure the print media coverage of Australian's plain packaging laws, from inception through roll-out, in major Australian newspapers.

Methods: This study monitored mainstream Australian print media (17 newspapers) coverage of the plain packaging policy debate and implementation, over a 7-year period from January 2008 to December 2014. Articles (n=701) were coded for article type, opinion slant and topic(s).

Design: Content analysis

Results: Coverage of plain packaging was low during pre-implementation phase (2008-2009), increasing sharply in the lead into legislative processes, and diminished substantially after implementation. Articles covered policy rationale, policy progress and industry arguments. Of the news articles 96% were neutrally framed. Of the editorials, 55% were supportive, 28% were opposing, 12% were neutral and 5% were mixed.

Conclusions: Protracted political debate, reflected in the media, led to an implementation delay of plain packaging. While Australian media provided comprehensive coverage of industry arguments, coverage was largely neutral or supportive of the policy. Countries seeking to implement plain packaging of tobacco should not be deterred by the volume of news coverage, but should actively promote

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2
3 the evidence for plain packaging in the media to counteract the arguments of the
4
5 tobacco industry.
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7 **Strengths and limitations of this study**

- 9 • This content analysis provides detailed and comprehensive coverage of
10 newspaper articles published pre- and post-implementation of the world-first
11 tobacco plain packaging initiative in Australia.
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- 14 • The observational design allowed us to monitor the contribution of industry
15 arguments, which continue to be recycled around the globe, to the fierce and
16 protracted policy debate played out in Australia's print media.
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- 19 • Study results are limited to newspaper articles and therefore do not capture
20 other sources of media influence (e.g. advertising).
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INTRODUCTION

Australia has led the world in introducing plain or standardised packaging of all tobacco products. Plain packaging came into effect on 1 December 2012.^{1,2} The implementation was preceded by years of policy preparation, and intense lobbying by public health advocates and by industry against the globally unprecedented reforms. Several countries have since followed suit and are now in the process of debating, legislating and implementing plain tobacco packaging.^{3,4} These jurisdictions routinely face industry opposition similar to that which occurred in Australia.⁵

Media play an important role in public policy debate.^{6,7} Both industry and health advocates seek media coverage on matters of public health policy, understanding its role in influencing and reflecting public opinion and political decision makers. Newspaper, television and radio were central in Australian debate of plain packaging, as they were for previous policy reforms.⁸ In addition to unpaid PR efforts, industry took out multiple full-page advertisements in Australia's major newspapers, as did Australian health agencies, although in far lesser volume.⁹

This report presents a study of the print media coverage in major Australian newspapers of Australia's plain packaging laws; from inception through roll-out. The observations start in January 2008, the year in which the Australian Government established the National Preventive Health Taskforce, whose draft (October 2008) and final reports (September 2009) recommended plain packaging.¹⁰ On 29 April 2010, the Prime Minister announced that Australia would adopt plain packaging.¹¹ A general election was held in August 2010. After draft regulations were released in April 2011, protracted parliamentary debate occurred which led to an announcement

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3 (2 November 2011) by the Minister for Health that implementation would be delayed.
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5 The legislation passed on 1 December 2011; coming into effect 1 December 2012.¹²
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7 The observations in this study conclude 2 years post-implementation in December
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9 2014.
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11 12 13 **METHODS**

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15 Newspaper articles published between 1 January 2008 and 1 December 2014 were
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17 sourced from all major Australian daily and weekend print newspapers through the
18
19 Australian/New Zealand Reference Centre and Factiva online database. Newspapers
20
21 were selected based on readership,¹³ and included 2 national newspapers, and 10 daily
22
23 and 5 weekend state newspapers. Search terms were: plain, pack*, tobacco, cigarette
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25 and smok* and a 'print media only' filter was applied. The search produced 2147
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27 articles, which were screened for duplicates (n=482, articles duplicated in newspapers
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29 across multiple editions), and against exclusion criteria (n=964) of: less than 5 lines
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31 long (n=74); not relevant to plain packaging (n=778); and inappropriate article type
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33 (n=112; e.g. cartoon), yielding 701 separate articles for analysis. Coding was based on
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35 previous studies^{6, 14} with minor amendments. Prominence was coded as *very high*:
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37 page 1, *high*: pages 2-5, or *low*: page 6 onwards. Articles were coded by Type: *news*
38
39 (factual account of issues or events); *editorial* (opinion of newspaper or columnist);
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41 *letters/comments* (letters to the editor and readers' comments sections), and for
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43 Opinion Slant which focused on dominant view which was expressed by the author
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45 and was coded as either *supporting*, *opposing*, *neutral* or *mixed* towards plain
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47 packaging. One author coded all articles. A second researcher re-coded a randomly
48
49 selected 10% of articles. The Kappa score was 0.94.
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54 **Patient and public involvement**

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3 Neither patients nor the public were involved in this study.
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6 7 **RESULTS**

8 9 **Volume and type of articles**

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11 During the observation period, plain packaging was mentioned in 701 articles (558
12 news articles (79.6%), 11 editorials (14.3%), and 43 letters/comments (6.1% (39
13 letters and 4 groups of comments)). The majority of articles were low prominence
14 (70.0%), with 25.7% high prominence and 4.3% very high prominence. As depicted
15 in Figure 1, print media coverage was prevalent at the times of: the announcement of
16 intention to adopt plain packaging; the Australian general election which coincided
17 with paid advertising by industry and health groups;⁹ and release of the draft Bill for
18 consultation through to the eventual passage of legislation. Coverage spiked again
19 during the legal challenge in Australia's High Court (April 2012), and upon
20 announcement that the industry's legal case had failed (August 2012). Smaller peaks
21 were observed around actual implementation and in June 2013, in response to
22 Britain's discontinuation of plain packaging laws and the release of some Australian
23 data on impact. In June 2014, industry reported an increase in sales volumes (data not
24 made publicly available), the Australian government released data showing a drop in
25 sales, and there was a Media Watch critique.¹⁵
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46 -----Insert Figure 1 about here-----
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50 51 **Opinion slant**

52 News articles were overwhelmingly neutral (96.1%). Of the editorials, 55.0% were
53 supporting, 28.0% were opposing, 12.0% were neutral and 5.0% were mixed. Among
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3 letters/comments, 37.2% were supporting, 16.3% were opposing, 44.2% were mixed
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5 and 2.3% were neutral.
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8 9 **Content of articles**

10 Article content routinely covered multiple elements of plain packaging. Articles
11
12 featured updates on progress of the policy (policy announcements, consultations,
13
14 legislative process, implementation, legal challenges and their outcomes). The
15
16 rationale for plain packaging as a tobacco control initiative and the harms of smoking
17
18 to health were also routinely covered.
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24 Tobacco industry's objections and arguments were covered, including: 'nanny state'
25
26 objections; predictions that the policy 'wouldn't work'; predictions of unintended
27
28 consequences including smuggling and illicit trade, youth smoking, harm to small
29
30 business; as well as legal arguments about acquisition of intellectual property.
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35 While industry arguments received widespread coverage, there was also coverage of
36
37 critique of industry data and arguments (see examples below).
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42 *The tobacco industry warned yesterday plain packaging could see the price*
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44 *of cigarettes halve over time, because generic packets would only benefit*
45
46 *counterfeiters and smugglers. "When all cigarette packs look the same and*
47
48 *lose their trademarks and distinguishing features, counterfeiters will have a*
49
50 *field day mass producing packets to smuggle into Australia," said David*
51
52 *Crow, chief executive of British American Tobacco.*
53

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55 *The Age, 18/05/2011, pg6; News*
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5 *Imperial says anecdotal evidence shows illicit trade has increased since*
6 *plain packaging. But Australian Customs and Border Protection says*
7 *tobacco seizure data since the new laws were introduced "does not support*
8 *tobacco industry claims that plain packaging would result in a big spike in*
9 *illegal tobacco imports". The Age, 10/10/2013, p22; News*
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18 Industry calls for delays for implementation were covered in the media. For example,
19 industry argued there would be supply issues as the proposed implementation timeline
20 was too tight. The July 2012 deadline was subsequently extended to December 2012.
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26 *SMOKERS face the prospect of being unable to purchase their preferred*
27 *brand of cigarettes when plain packaging is introduced, with the tobacco*
28 *industry warning it will not be able to supply the olive-green packs by next*
29 *year's July 1 deadline. The Australian, 5/08/2011, pg6; News*
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37 Industry tactics featured in a wave of stories, following a TV investigative journalism
38 piece about industry funding of a "front-organisation".
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44 *Senator Siewert recalled that the international tobacco companies spent*
45 *\$5million during the election campaign "using a front organisation the Alliance*
46 *of Australian Retailers in an attempt to prevent the introduction of plain*
47 *packaging laws". The Canberra Times, 20/11/2010, pg15, News*
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54 The likely effectiveness of plain packaging was a major source of debate, as was the
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3 need to stand up to industry to pursue tobacco control policy for health.
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7 *"Let there be no mistake, big tobacco is fighting the government for one very*
8 *simple reason — because it knows, as we do, that plain packaging will work," Ms*
9 *Roxon [then Australian Attorney General] said The Age, 22/12/2011, pg1; News*
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15 *Globally, we need to present a strong and united front to tobacco industry*
16 *interference so we can finally end the pain, illness, suffering and costs caused by*
17 *tobacco. Herald Sun, 28/05/2012, pg23; Editorial.*
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24 **DISCUSSION**

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26 Media coverage of Australia's plain packaging was extensive and reflected the
27 protracted political debate and delays in implementing plain packaging. Plain
28 packaging saw the tobacco industry step into the media in a way that had not been
29 seen in Australia for many years. Media coverage provided comprehensive coverage
30 of industry arguments, but it also covered critiques of industry's data, industry's
31 arguments and practices. Despite the apparent volume, much of the coverage was of
32 low prominence, neutral and/or supportive in framing, and interest largely dissipated
33 upon implementation.
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46 Recent research on industry responses to plain packaging proposals in other
47 jurisdictions have demonstrated that claims used in Australia, such as increased illicit
48 trade and negative economic consequences, are being recycled despite evidence
49 clearly demonstrating the falsehood of such claims.^{5, 16-18} One study identified 173
50 arguments against plain packaging in tobacco industry documents submitted during a
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3 plain packaging consultation process in the United Kingdom.¹⁸ These tactics serve to
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5 overwhelm and to delay policy adoption and implementation, but do not hold up to
6
7 scrutiny when challenged⁴. Consequently, plain packaging laws have since passed in
8
9 the UK, Ireland, NZ and France, with more likely to follow.
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13 This study focused on newspaper articles and did not include other sources of media
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15 influence (e.g. advertising). It may have missed articles not contained within the
16
17 database. Nevertheless, this study demonstrates how large volumes of industry
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19 misinformation can be challenged and thwarted using evidence-based public health
20
21 advocacy. Countries seeking to implement plain packaging of tobacco should not be
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23 deterred by the volume of news coverage of plain packaging debates or coverage of
24
25 industry counter-arguments, but should be actively promoting the policy rationale and
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27 evidence for plain packaging in the media to counteract the response of the tobacco
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29 industry.
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36
37 None.

38 **COMPETING INTERESTS**

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41 None.

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43
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46
47 commercial or not-for-profit sectors.
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50 **DATA SHARING STATEMENT**

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52 The dataset analysed during the current study is available from the corresponding
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54 author on reasonable request.
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AUTHOR'S CONTRIBUTIONS

CM and KE conceptualised the study. KE and AB designed the study with input from CM and JD. AB collected and analysed the data and all authors contributed to interpretation of the results. CM drafted the manuscript, which was critically reviewed by all authors. The final version was approved by all authors.

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32 argumentation in the 2012 UK standardised packaging consultation. Tob Control.
33 2017:tobaccocontrol-2017.

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3 **FIGURE 1. Volume of print media articles on plain packaging, Jan 2008 - Nov**
4 **2014**
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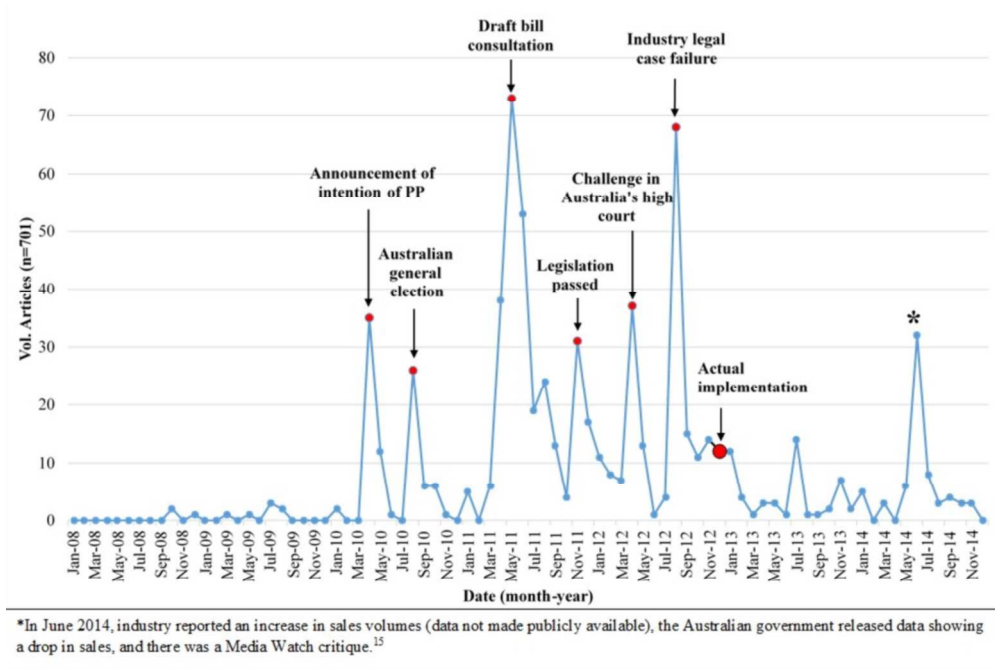


Figure 1. Volume of print media articles on plain packaging, Jan 2008 - Nov 2014

342x228mm (300 x 300 DPI)

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	P1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	P3
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	P4
Objectives	3	State specific objectives, including any prespecified hypotheses	P4
Methods			
Study design	4	Present key elements of study design early in the paper	P5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	P5
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	na
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	P5
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	P5
Bias	9	Describe any efforts to address potential sources of bias	na
Study size	10	Explain how the study size was arrived at	na
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	na
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	na
		(b) Describe any methods used to examine subgroups and interactions	na
		(c) Explain how missing data were addressed	na
		(d) If applicable, describe analytical methods taking account of sampling strategy	na
		(e) Describe any sensitivity analyses	na
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	na
		(b) Give reasons for non-participation at each stage	na
		(c) Consider use of a flow diagram	na
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	na
		(b) Indicate number of participants with missing data for each variable of interest	na
Outcome data	15*	Report numbers of outcome events or summary measures	P6
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	na
		(b) Report category boundaries when continuous variables were categorized	na
		(c) If relevant, consider translating estimates of relative risk into absolute risk for	na

		a meaningful time period	
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	na
Discussion			
Key results	18	Summarise key results with reference to study objectives	P9
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	P10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	P10
Generalisability	21	Discuss the generalisability (external validity) of the study results	P9-10
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	na

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.

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Manuscripts

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3 ***PRESENTING A STRONG AND UNITED FRONT TO TOBACCO INDUSTRY***
4 ***INTERFERENCE: A CONTENT ANALYSIS OF AUSTRALIAN***
5 ***NEWSPAPER COVERAGE OF TOBACCO PLAIN PACKAGING 2008-2014***
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46 **Running title:** Australian print media coverage of plain packaging
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48 **Keywords:** Plain packaging, print media, content analysis
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ABSTRACT

Objectives: In 2012 Australia was the first country in the world to introduce plain or standardised tobacco packaging, coupled with larger graphic health warnings. This policy was fiercely opposed by industry. Media coverage can be an influential contributor to public debate, and both public health advocates and industry sought media coverage for their positions. The aim of this study was to measure the print media coverage of Australian's plain packaging laws, from inception through roll-out, in major Australian newspapers.

Methods: This study monitored mainstream Australian print media (17 newspapers) coverage of the plain packaging policy debate and implementation, over a 7-year period from January 2008 to December 2014. Articles (n=701) were coded for article type, opinion slant and topic(s).

Design: Content analysis

Results: Coverage of plain packaging was low during pre-implementation phase (2008-2009), increasing sharply in the lead into legislative processes, and diminished substantially after implementation. Articles covered policy rationale, policy progress and industry arguments. Of the news articles 96% were neutrally framed. Of the editorials, 55% were supportive, 28% were opposing, 12% were neutral and 5% were mixed.

Conclusions: Protracted political debate, reflected in the media, led to an implementation delay of plain packaging. While Australian media provided comprehensive coverage of industry arguments, news coverage was largely neutral, whereas editorials were mostly supportive or neutral of the policy. Countries seeking to implement plain packaging of tobacco should not be deterred by the volume of

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3 news coverage, but should actively promote the evidence for plain packaging in the
4
5 media to counteract the arguments of the tobacco industry.
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7 **Strengths and limitations of this study**

- 9 • This content analysis provides detailed and comprehensive coverage of
10 newspaper articles published pre- and post-implementation of the world-first
11 tobacco plain packaging initiative in Australia.
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- 14 • The observational design allowed us to monitor the contribution of industry
15 arguments, which continue to be recycled around the globe, to the fierce and
16 protracted policy debate played out in Australia's print media.
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- 19 • Study results are limited to newspaper articles and therefore do not capture
20 other sources of media influence (e.g. advertising).
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INTRODUCTION

Australia has led the world in introducing plain or standardised packaging of all tobacco products. Plain packaging came into effect on 1 December 2012.^{1,2} The implementation was preceded by years of policy preparation, and intense lobbying by public health advocates and by industry against the globally unprecedented reforms. The passing of legislation was followed by multiple, unsuccessful legal challenges by industry. Several countries have since followed suit and are now in the process of debating, legislating and implementing plain tobacco packaging.^{3,4} These jurisdictions routinely face industry opposition similar to that which occurred in Australia.⁵

Media play an important role in public policy debate.^{6,7} Both industry and health advocates seek media coverage on matters of public health policy, understanding its role in influencing and reflecting public opinion and political decision makers. The agenda setting function of the media is well established.⁸ The amount of media coverage can signal the importance of an issue and contribute to guiding the public's response.^{9,10} Furthermore, media content can shape public discourse by how the issue is framed, that is, how the issue is presented to give salience to one aspect over others in order to give meaning to the audience.¹¹ Studies across multiple jurisdictions have shown that tobacco policy frequently features in news coverage^{6,12-14} and that such coverage can influence public perceptions^{15,16} as well as policy and behaviour change.^{12,17,18} Tobacco control coverage is often cast favourably.^{6,12-14,19-21} Yet, the tobacco industry has used the media to thwart policy progression by reframing the health issue as an economic, commercial or political issue.^{22,23} The media utilises controversy to sell newspapers and so coverage can take on the voice of the dominant

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2 stakeholder rather than the scientific evidence.^{24, 25} Furthermore, the ideological and
3 financial positioning of a newspaper can influence editorial decisions on what to
4 publish.²⁶
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11 Newspaper, television and radio were central in Australian debate of plain packaging,
12 as they were for previous policy reforms such as smoke-free policies,^{24, 27-31} tax
13 initiatives,^{32, 33} point-of-sale reforms,³⁴ and graphic health warnings.³⁵ The media also
14 has a role in how current tobacco control issues are portrayed, such as those relating
15 to illicit trade^{15, 36} and electronic cigarettes.³⁷ With regard to plain packaging, one
16 New Zealand study³⁸ explored the rhetoric used by the Tobacco Industry in a mass
17 media advertising campaign designed to sway public opinion against the adoption of
18 plain packaging. They found that common tactics included logical fallacies and
19 unsound arguments. In an examination of online comments posted in response to
20 news articles reporting on the announcement of the plain packaging initiative in 2010,
21 Freeman²³ found that the prevailing argument opposing the initiative was the same as
22 that used in a mass media campaign funded by the tobacco industry. These analyses
23 of tobacco control related news articles demonstrate the importance of public health
24 advocacy in counteracting the arguments put forward by the tobacco industry.
25
26 Furthermore, Australian tobacco control advocacy groups have a history of
27 contributing to the news discourse and shaping policy development.^{22, 25, 39}
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29 Nevertheless, the campaign against plain packaging was prolonged and intense. In
30 addition to unpaid PR efforts, industry took out multiple full-page advertisements in
31 Australia's major newspapers, as did Australian health agencies, although in far less
32 volume.⁴⁰
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3 This study aimed to document the volume and content of the print media coverage in
4 major Australian newspapers of Australian's plain packaging laws; from inception
5 through roll-out. The observations start in January 2008, the year in which the
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7 Australian Government established the National Preventive Health Taskforce, whose
8
9 draft (October 2008) and final reports (September 2009) recommended plain
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11 packaging.⁴¹ On 29 April 2010, the Prime Minister announced that Australia would
12
13 adopt plain packaging.⁴² A general election was held in August 2010. After draft
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15 regulations were released in April 2011, protracted parliamentary debate occurred
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17 which led to an announcement (2 November 2011) by the Minister for Health that
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19 implementation would be delayed. The legislation passed on 1 December 2011;
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21 coming into effect 1 December 2012.⁴³ The observations in this study conclude 2
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23 years post-implementation in December 2014.
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31 **METHODS**

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33 Newspaper articles published between 1 January 2008 and 1 December 2014 were
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35 sourced from all major Australian daily and weekend print newspapers through the
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37 Australian/New Zealand Reference Centre and Factiva online database, both of which
38
39 contain full-text articles. The major (i.e. most read) newspapers of each state/territory
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41 were selected, and a minimum of 100,000 readership was required in those states
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43 having multiple major newspapers.⁴⁴ This included 2 national newspapers, 10 daily
44
45 and 5 weekend state newspapers. Articles were searched using the following terms:
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47 plain, pack*, tobacco, cigarette and smok*; the default search settings for both
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49 databases were used (i.e. Australian/New Zealand Reference Centre: title, keywords,
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51 description; Factiva: full-text) and a 'print media only' filter was applied. The search
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53 produced 2147 articles, which were screened for duplicates (n=482, articles
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3 duplicated in newspapers across multiple editions), and against exclusion criteria
4 (n=964) of: less than 5 lines long (n=74); not relevant to plain packaging (n=778); and
5 inappropriate article type (n=112; e.g. cartoon), yielding 701 separate articles for
6 analysis. Coding was based on previous studies^{6, 45} with minor amendments to
7 account for the use of online databases rather than hardcopy newspaper clippings. The
8 coding of prominence was also modified because imagery accompanying an article
9 was used to define prominence in previous studies whereas imagery was not available
10 from the online databases used in this study. Prominence was coded as *very high*:
11 page 1, *high*: pages 2-5, or *low*: page 6 onwards. Articles were coded by Type: *news*
12 (factual account of issues or events); *editorial* (opinion of newspaper or columnist);
13 *letters/comments* (letters to the editor and readers' comments sections; included for
14 comprehensiveness of coverage but excluded from analysis as they did not contain
15 sufficient detail), and for Opinion Slant which focused on the dominant view which
16 was expressed by the author and was coded as either *supporting*, *opposing*, *neutral*
17 (i.e. author expressed no opinion) or *mixed* (i.e. author expressed both supporting and
18 opposing opinions) towards plain packaging. One author coded all articles. A second
19 researcher re-coded a randomly selected 10% of articles. The Kappa score was 0.94.

20 **Patient and public involvement**

21 Neither patients nor the public were involved in this study.

22 **RESULTS**

23 **Volume and type of articles**

24 During the observation period, plain packaging was mentioned in 701 articles (558
25 news articles (79.6%), 100 editorials (14.3%), and 43 letters/comments (6.1% (39
26 letters and 4 groups of comments)). The majority of articles were low prominence
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3 (70.0%), with 25.7% high prominence and 4.3% very high prominence. As depicted
4 in Figure 1, print media coverage was prevalent at the times of: the announcement of
5 intention to adopt plain packaging; the Australian general election which coincided
6 with paid advertising by industry and health groups;⁴⁰ and release of the draft Bill for
7 consultation through to the eventual passage of legislation. Coverage spiked again
8 during the legal challenge in Australia's High Court (April 2012), and upon
9 announcement that the industry's legal case had failed (August 2012). Smaller peaks
10 were observed around actual implementation and in June 2013, in response to
11 Britain's discontinuation of plain packaging laws and the release of some Australian
12 data on impact. In June 2014, industry reported an increase in sales volumes (data not
13 made publicly available), the Australian government released data showing a drop in
14 sales, and there was a Media Watch critique.⁴⁶

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35 **Opinion slant**

36 News articles were overwhelmingly neutral (96.1%). Of the editorials, 55.0% were
37 supporting, 28.0% were opposing, 12.0% were neutral and 5.0% were mixed. Among
38 letters/comments, 37.2% were supporting, 16.3% were opposing, 44.2% were mixed
39 and 2.3% were neutral.
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48 **Relationship between article type, prominence and opinion slant**

49 Of the 30 (4.3%) articles achieving very high prominence, two were supporting plain
50 packaging (one news article, one editorial) and the remainder were neutral news
51 articles. The two supporting articles achieving front page coverage were both
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3 published in 2012, the first article (editorial) in January following the passing of plain
4 packaging legislation and the second article (news) in August following the industry
5 legal case failure. The majority of high prominence articles were also neutral (169 out
6 of 180), however, there were nine articles supporting plain packaging (4 editorials, 3
7 news articles, and 2 letters) and two editorials opposing plain packaging. Both
8 opposing editorials were published on 18 June 2014 in *The Australian* (national daily
9 newspaper), in response to the critique of the industry released report on cigarette
10 sales volume since plain packaging. A supporting editorial was also published during
11 this period (24 June 2014; *The Canberra Times*). All of the remaining high
12 prominence articles were published prior to implementation. Two articles (one news,
13 one editorial), published in September 2010, were critiques of the ‘It won’t work’⁴⁰
14 mass media and public relations campaign funded by the tobacco industry. An
15 editorial was published in May 2011, coinciding with the prolific reporting of the
16 draft bill consultation. Two articles (one news, one editorial), published in April 2012,
17 were reporting on the tobacco industry’s High Court challenge, and a news article
18 published in August 2012, reported on the failure of this challenge.
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40 **Content of articles**

41 Article content routinely covered multiple elements of plain packaging. Articles
42 featured updates on progress of the policy (policy announcements, consultations,
43 legislative process, implementation, legal challenges and their outcomes). The
44 rationale for plain packaging as a tobacco control initiative and the harms of smoking
45 to health were also routinely covered.
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54 Tobacco industry’s objections and arguments were covered, including: ‘nanny state’
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3 objections; predictions that the policy ‘wouldn’t work’; predictions of unintended
4 consequences including smuggling and illicit trade, youth smoking, harm to small
5 business; as well as legal arguments about acquisition of intellectual property.
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11 While industry arguments received widespread coverage, there was also coverage of
12 critique of industry data and arguments, even from newspapers that are traditionally
13 anti-regulation (see examples below).
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20 *The tobacco industry warned yesterday plain packaging could see the price*
21 *of cigarettes halve over time, because generic packets would only benefit*
22 *counterfeiters and smugglers. "When all cigarette packs look the same and*
23 *lose their trademarks and distinguishing features, counterfeiters will have a*
24 *field day mass producing packets to smuggle into Australia," said David*
25 *Crow, chief executive of British American Tobacco.*
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33 *The Age, 18/05/2011, pg6; News*
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37 *Imperial says anecdotal evidence shows illicit trade has increased since*
38 *plain packaging. But Australian Customs and Border Protection says*
39 *tobacco seizure data since the new laws were introduced "does not support*
40 *tobacco industry claims that plain packaging would result in a big spike in*
41 *illegal tobacco imports". The Age, 10/10/2013, p22; News*
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50 *This newspaper favours the use of market mechanisms to achieve policy*
51 *outcomes rather than the imposition of regulations that restrict the use of*
52 *private property. While the government does have a legitimate interest in*
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3 *public health, individuals also have a right to decide their tobacco use...*
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5 *However, Australia has had some big wins in improving public health*
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7 *through regulation... Given that there is no safe way to consume tobacco*
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9 *products, and that smoking-related expenses are at least \$12 billion a year,*
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11 *taxes would have to double to cover the cost of health problems tobacco*
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13 *creates. In that situation, the plain-packaging laws may be a necessary evil.*
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15 *The Australian Financial Review, 17/08/2012, pg42; Editorial*
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20 Industry calls for delays for implementation were covered in the media. For example,
21 industry argued there would be supply issues as the proposed implementation timeline
22 was too tight. The July 2012 deadline was subsequently extended to December 2012.
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29 *SMOKERS face the prospect of being unable to purchase their preferred*
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31 *brand of cigarettes when plain packaging is introduced, with the tobacco*
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33 *industry warning it will not be able to supply the olive-green packs by next*
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35 *year's July 1 deadline. The Australian, 5/08/2011, pg6; News*
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39 Industry tactics featured in a wave of stories, following a TV investigative journalism
40 piece about industry funding of a “front-organisation”.
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46 *Senator Siewert recalled that the international tobacco companies spent*
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48 *\$5million during the election campaign "using a front organisation the Alliance*
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50 *of Australian Retailers in an attempt to prevent the introduction of plain*
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52 *packaging laws". The Canberra Times, 20/11/2010, pg15, News*
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3 The likely effectiveness of plain packaging was a major source of debate, as was the
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5 need to stand up to industry to pursue tobacco control policy for health.
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9 *"Let there be no mistake, big tobacco is fighting the government for one very*
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11 *simple reason — because it knows, as we do, that plain packaging will work," Ms*
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13 *Roxon [then Australian Attorney General] said. The Age,22/12/2011,pg1;News*
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17 *Globally, we need to present a strong and united front to tobacco industry*
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19 *interference so we can finally end the pain, illness, suffering and costs caused by*
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21 *tobacco. Herald Sun,28/05/2012,pg23;Editorial.*
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26 **DISCUSSION**

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28 Media coverage of Australia's plain packaging was extensive and reflected the
29
30 protracted political debate, delays in implementation and legal challenges. Plain
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32 packaging saw the tobacco industry step into the media in a way that had not been
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34 seen in Australia for many years. Media coverage provided comprehensive coverage
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36 of industry arguments, but it also covered critiques of industry's data, industry's
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38 arguments and practices. Prior to the passing of the plain packaging bill the media
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40 were covering a public health policy debate. Post legislation the media were covering
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42 the litigation as it unfolded, and the uncertainty of outcome that involved. Despite the
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44 apparent volume, much of the coverage was of low prominence, neutral and interest
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46 largely dissipated upon implementation. When an opinion was present, there were
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48 more articles that were supportive than opposing plain packaging.
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3 The volume of articles peaked following the release of the draft Tobacco Plain
4 Packaging Bill 2011 and consultation paper for public comment (7 April 2011). By
5 the closing date (6 June 2011), the government had received 265 submissions, of
6 which 99 supported the bill and 158 were opposed.⁴⁷ The arguments raised in the
7 public consultation reflected those reported in the media; pro-policy arguments
8 centred on health and social benefits, backed up by scientific evidence, whereas anti-
9 policy arguments were more varied and included the ‘it won’t work’ rhetoric,
10 economic impact on businesses, increase in illicit trade and infringements on
11 consumer rights. Both sides of the argument were often discussed within the same
12 article.
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26 Recent research on industry responses to plain packaging proposals in other
27 jurisdictions have demonstrated that claims used in Australia, such as increased illicit
28 trade and negative economic consequences, are being recycled despite evidence
29 clearly demonstrating the falsehood of such claims.^{5, 38, 48, 49} One study identified 173
30 arguments against plain packaging in tobacco industry documents submitted during a
31 plain packaging consultation process in the United Kingdom.⁴⁹ These tactics serve to
32 overwhelm and to delay policy adoption and implementation, but do not hold up to
33 scrutiny when challenged.⁴ Lessons learned from Australia allowed the Canadian
34 Government to combat this strategy during the consultation process by requiring that
35 all submissions declare potential conflicts of interest and substantiate arguments with
36 peer-reviewed evidence.⁵⁰ While these arguments continue to be perpetuated through
37 the media, plain packaging laws have since passed in the UK, Ireland, NZ, Canada
38 and France, with more likely to follow.
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3 The second largest peak in articles corresponded with the High Court of Australia's
4 rejection of the constitutional challenge to plain packaging legislation made by four
5 tobacco companies (15 August 2012). This gave the green light for plain packaging to
6 be implemented as planned. Relatively few articles were published once plain
7 packaging was implemented. However, coverage of plain packaging increased again
8 in June 2014, which corresponded with industry research claiming that plain
9 packaging had failed. This news was reported in overseas newspapers but was quickly
10 discredited in Australia with the use of a growing body of evidence demonstrating
11 that plain packaging was effective.⁵¹
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24 Nevertheless, the tobacco industry's use of misleading and unsubstantiated reports to
25 generate negative media interest needs to be addressed. Recent research on the media
26 reporting on illicit tobacco trade in the UK¹⁵ and Canada³⁶ showed that industry
27 continues to actively undermine public policy. They conclude that journalists need to
28 scrutinise data sources more critically and hold tobacco industry reports to account by
29 subjecting their data to independent peer review. However, the tobacco industry is
30 aware of the high level of public distrust it attracts, and solicits other third-party
31 organisations to disseminate its arguments,⁵² and these organisations are not always
32 forthcoming in declaring financial relationships with the tobacco industry.⁵³ In
33 Australia, advocacy is core business for non-government public health bodies, with
34 resources dedicated to maintaining contact with policy makers, critically reviewing
35 published documents, producing evidence-based reports, issuing press releases and
36 holding press conferences, and employing dedicated media and public relations staff
37 to proactively (generate newsworthy story) and reactively (respond to journalists'
38 request for comment on a story) give voice to tobacco control issues.²⁵ Advocacy has
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3 been critical in shaping tobacco control news coverage for many years and this
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5 experience is likely to have been essential in producing the timely and newsworthy
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7 pro-plain packaging press releases that were reported in the media.²⁵ This was
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9 facilitated by having evidence of bi-partisan and community support for the policy.⁴⁰
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13 It is important to note that policy implementation was delayed, and industry tactics
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15 did receive a high volume of coverage, albeit mostly neutral in tone. The power
16
17 structure of the media may contribute to the stance that is taken on whether the
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19 dominant viewpoint aligns with industry or public health,²⁶ but such analysis was
20
21 beyond the scope of this study. By reporting tobacco industry tactics and mis-
22
23 information, the media is complicit in biasing the narrative around policy initiatives,
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25 even if they also report alternative perspectives put forward by health advocates.
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27 However, reports on tobacco industry tactics, such as policy setbacks, may help
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29 consolidate the negative view of the industry by sophisticated audiences who already
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31 view such tactics as unethical.¹⁹ Thus ongoing advocacy efforts to keep tobacco issues
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33 in the news beyond topical policy debates is essential for maintaining an educated and
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35 pro-tobacco control audience ready for when industry strikes again.^{19, 25, 39}
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42 This study focused on newspaper articles and did not include other sources of media
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44 influence (e.g. advertising). It may have missed articles not contained within the
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46 database. The findings are specific to plain packaging and may not generalise to
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48 media coverage of public health policy debates outside of tobacco control.
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51 Nevertheless, this study demonstrates how large volumes of industry misinformation
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53 can be challenged and thwarted using evidence-based public health advocacy.

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55 Countries seeking to implement plain packaging of tobacco should not be deterred by
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3 the volume of news coverage of plain packaging debates or coverage of industry
4 counter-arguments, but should be actively promoting the policy rationale and
5 evidence for plain packaging in the media to counteract the response of the tobacco
6 industry.
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13 **ACKNOWLEDGEMENTS**

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15 None.
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17 **COMPETING INTERESTS**

18
19 None.
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21

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23
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25 commercial or not-for-profit sectors.
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27

28 **DATA SHARING STATEMENT**

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30 The dataset analysed during the current study is available from the corresponding
31 author on reasonable request.
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35 **AUTHOR'S CONTRIBUTIONS**

36
37 CM and KE conceptualised the study. KE and AB designed the study with input from
38 CM and JD. AB collected and analysed the data and all authors contributed to
39 interpretation of the results. CM drafted the manuscript, which was critically reviewed
40 by all authors. The final version was approved by all authors.
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FIGURE 1. Volume of print media articles on plain packaging, Jan 2008 - Nov 2014

For peer review only

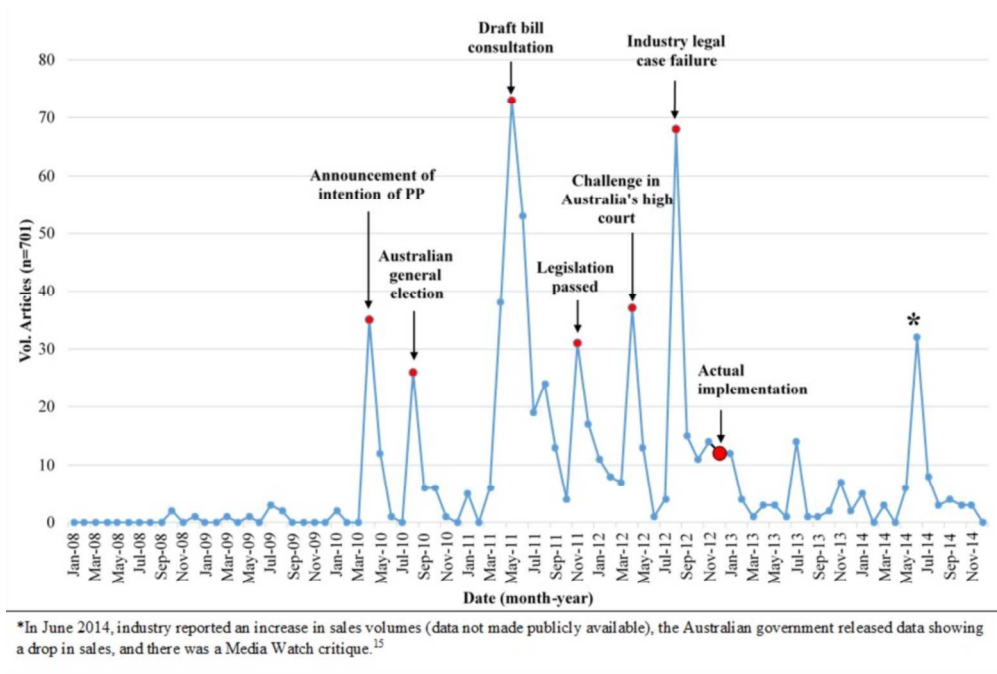


Figure 1. Volume of print media articles on plain packaging, Jan 2008 - Nov 2014

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STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	P1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	P3
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	P4
Objectives	3	State specific objectives, including any prespecified hypotheses	P4
Methods			
Study design	4	Present key elements of study design early in the paper	P5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	P5
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	na
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	P5
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	P5
Bias	9	Describe any efforts to address potential sources of bias	na
Study size	10	Explain how the study size was arrived at	na
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	na
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	na
		(b) Describe any methods used to examine subgroups and interactions	na
		(c) Explain how missing data were addressed	na
		(d) If applicable, describe analytical methods taking account of sampling strategy	na
		(e) Describe any sensitivity analyses	na
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	na
		(b) Give reasons for non-participation at each stage	na
		(c) Consider use of a flow diagram	na
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	na
		(b) Indicate number of participants with missing data for each variable of interest	na
Outcome data	15*	Report numbers of outcome events or summary measures	P6
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	na
		(b) Report category boundaries when continuous variables were categorized	na
		(c) If relevant, consider translating estimates of relative risk into absolute risk for	na

		a meaningful time period	
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	na
Discussion			
Key results	18	Summarise key results with reference to study objectives	P9
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	P10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	P10
Generalisability	21	Discuss the generalisability (external validity) of the study results	P9-10
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	na

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.