CONTENT ANALYSIS OF CIGARETTE PACKS IN INDONESIA:
REGULATORY NON-COMPLIANCE AND PRODUCT PROMOTION
ADVANTAGE

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ABSTRACT
Background: A cigarette pack is the most intimate property and frequently seen by smokers every time they want to start smoking. It gives tobacco industry the opportunity to scrutinize every single space including the inside part of the pack to promote tobacco product and it is often called a mini billboard.

Objective: To analyze possible violations if any against the existing regulations on packaging and labelling and to uncover packaging design and types of promotional elements on cigarette packs.

Methods: A purposive sample based on the assessment and discussion with the representatives of National Agency of Drug and Food Control that generated a total of 42 cigarette packs representing 18 sample from Jakarta, 5 most popular brands, 18 special edition packs, and 1 illegal cigarettes. The observation units, variables and observable signs that covered the materials, size, content of the entire pack including the cigarettes stick were set by Southeast Asia Tobacco Control Alliance and analyzed against the existing regulation.

Results: There were two brands produced in 2019 that did not comply with the latest sets of Pictorial Health Warning. About 40.5% of sample (n=17) did not include information on production dates on the pack as mandated by Government Regulation Number 109/2012. The back panels of the top of pictorial health warning in all machine-made cigarettes were partially bunged up by excuse tax stamps with exception of hand-rolled clove cigarettes. The tobacco industry took the advantage of the cigarette packs' violations for product promotion, among others providing information on filter technology, promoting the upcoming tobacco-sponsored events, relating the product with imported goods by mentioning the country of brand origin, and using the flip lid of the pack to promote the brand name reputation. A total of 83.3% (n=35) samples gives additional products description such as bold, mild, lights, super, and special.

Conclusion: The tobacco industry uses the ample spaces on both outer and inner panels of cigarette packs to promote their products, no single corners are left empty. The study confirmed violations of the regulation for product promotion.

Keywords: cigarettes pack, promotion, tobacco control regulation, Indonesia

BACKGROUND

Indonesia, a non-party country to the Framework Convention on Tobacco Control still have issue with tobacco use where the smoking prevalence among youth age 10-18 rose from 7.2% in 2013 (Ministry of Health, 2013) to 9.1% in 2018 (Ministry of Health, 2018), far from the government's target to reduce the prevalence of youth age 10-18 by 5.4% in 2019. The country has only partial TAPS ban in its Government Regulation Number 109/2012 (Astuti & Freeman, 2017). Some few local governments have begun to include banning outdoor advertisement and
cigarette display at POS in their Smoke Free Ordinances such as Jakarta and Bogor city. In such a free TAPS environment, tobacco industry would not let to miss any opportunity to maximize promoting their products.

A cigarette pack is a mini billboard, the most intimate property and frequently seen by smokers every time a smoker wants to light a cigarette, it gives tobacco industry the opportunity to scrutinize every available space including the inside part of the pack to promote tobacco product to smokers and non-smokers (Slade, 1997).

Beginning January 2018, Indonesia has been issued Ministry of Health Regulation Number 56 Year 2017 and implemented the second round of Pictorial Health Warnings (PHW) implementation with 12 months grace period compared to 18 months in the first round, and this second round was fully effective on 11 January 2019.

Passing the provision of 24 months for rotation period, after 54 months when PHW was adopted, the first rotation still uses the current warning size 40% with the change of 3 out of the 5 pictures and retained 2 of the 5 old ones. The same size of PHW with the two old selected pictures that have kept appearing for more than 2 years might not effective, particularly youth to prevent from smoking. Like most other health communications, pictorial health warnings must be updated or revised to maintain their effectiveness over time (Hammond & Reid, 2012).

The content analysis of cigarette packs aims to assess the compliance of cigarette packaging and labelling with the existing regulation and the weaknesses of the provisions that became loopholes for the tobacco industry to use for promotions and provide feedback for policy’s corrective actions.

**METHODS**

**Study Design and Settings**
The qualitative study focuses on content analysis in the cigarette packs was conducted from April 1 to August 31, 2019. Cigarette packs sample were collected from retail store from January 12-March 31, 2019 with the assumption the second round of PHW has been effectively implemented in the market, except for special edition packs \((n=18)\) that collected in 2018. The observation units, variables and observable signs followed the standards from Southeast Asia Tobacco Control Alliance (SEATCA).

**Sample Size Determination and Sampling Procedure**
To draw samples of the packs for analysis, a minimum basic knowledge about cigarette pack population in Indonesia is needed to guide for a closely reliable pack selection method for observation. A face-to-face interview was conducted with key officials from the National Agency of Drug and Food Control (NADFC) as a preliminary assessment to understand the extensive of cigarette brand and variants sold in Indonesia. A guided interview with the Head and staff of the Sub Directorate of Control of Tobacco Products came out with the following results that served the basis for the data collecting (Table 1).

| No | Questions                                                                 | Answers                                                                                                                                 |
|----|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 1  | How much the total number of cigarette brands and variants in each brand available in 34 provinces in Indonesia? | In 2017, there were 3,563 cigarette brands identified by the Directorate of Excise Tax Ministry of Finance. Each brand has 1-8 variants including number of sticks per pack. |
| 2  | What is the source of lists of cigarette brands and variants for inspection at NADFC? | The source of list provided by the Directorate of Excise Tax, Ministry of Finance on yearly basis. The latest data was 2017 for 2018 labelling inspection by 34 provincial NADFC. |
| 3  | How much the total number of sampled brands and items that has been observed by 34 provincial NADFC? when? And what is the procedure of the observation process? | In 2018, there were 966 cigarette brands, 4 variants for each brand. All samples sent to Central NADFC office for verification. The same variants counted as 1 item. Each province will send the results and sampled packs monthly to the central NADFC office for verification before day-10 of the following month. |
4. How much is the average number of local products on the market? Only 10% are locally produced.

5. Is there any seasonal variety? Yes, usually special edition cigarette packs for promoting big events or anniversary of the brands

6. Is there any special survey conducted by NADFC? (e.g.: to identify the most preference brands) Yes, NADFC did a survey in 5 cities: Jakarta, Bogor, Depok, Tangerang, Bekasi in Feb 2019 and identified 5 most preference brands:
   1. A Mild 16 sticks (Sampoerna)
   2. GG Surya 12 sticks (Gudang Garam)
   3. LA Lights 16 sticks (Djarum)
   4. Dji Sam Soe 16 sticks (Sampoerna)
   5. GG Surya Pro Mild 16 sticks – (Gudang Garam)

Lastly, a purposive sampling based on the previous assessment and discussion with the NADFC officials determined the following sample distribution: 1) The January 2019 sampled packs from Jakarta Capital City received by NADFC in February 2019 (18 packs); 2) The recent NADFC survey on preference brands in 5 cities surrounds Jakarta (5 packs); 3) Example of packs of 2018 special edition (18 packs); 4) Special case of illegal cigarette collected in March 2019 (1 pack).

**Data Collection and Analysis**

The observation unit, variable and observable signs was adopted from the standard set by Southeast Asia Tobacco Control Alliance including packs material, size, front and back panels, side 1 and 2 panels, tax stamp position, bottom panel, top panel, tear tape, pack inside and cigarette stick (Table 2). All collected data from the observation form were examined and analyzed with the packaging and labelling provisions of tobacco products in the Government Regulation Number 109/2012 and the Health Minister Regulation Number 40/2013 and Number 56/2017 as the Technical Guidelines.

| Observation Unit          | Variable and Observable Signs                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------|
| General                   | 1. Material: Hard/ Soft/ Hard Bevelled                                                         |
|                           | 2. Size: Normal/ Oversized/ Smaller than Normal Size                                            |
| Front and Back Panels     | 3. Conformation with the existing regulation.                                                   |
|                           |   • Position of label top to bottom (Yes/No)                                                   |
|                           |   • Text and Pictures, Text only                                                               |
|                           |   • Size %                                                                                        |
|                           |   • Language                                                                                   |
|                           | 4. Identical pics front/back (Yes/No)                                                          |
|                           | 5. What occupies the remaining space?                                                           |
|                           | 6. Color of Background (Single/ Multi/ Metallic)                                                |
|                           | 7. Any design on background? (Yes/No) - if Yes, explain                                        |
|                           | 8. Descriptors? (Yes/No) – If Yes ➔ Mention it                                                 |
|                           | 9. Any logo? (Yes/No) - If Yes ➔ Mention it                                                    |
|                           | 10. Any trademark? (Yes/No) - if Yes ➔ Mention it                                               |
|                           | 11. Any picture? (Yes/No) – if Yes ➔ Describe                                                  |
|                           | 12. Any text? (Yes/No) – if Yes ➔ Describe                                                     |
| Side 1 Panel              | 13. What is printed there? – Describe                                                          |
|                           | 14. Background color                                                                            |
|                           | 15. Info on manufacturer (Yes/No)                                                               |
|                           | 16. Info on Production (Yes/No)                                                                |
|                           | 17. Info on Distributor (Yes/No)                                                               |
| Side 2 Panel              | 18. What is printed there? – Describe                                                          |
|                           | 19. Background color                                                                            |
|                           | 20. Info on manufacturer (Yes/No)                                                               |
|                           | 21. Info on Production (Yes/No)                                                                |
|                           | 22. Info on Distributor (Yes/No)                                                               |
| Tax Stamp Position        | 23. From Side-1 to the Back (hard pack). From on top-front to back (soft pack)                 |
| Bottom Panel              | 24. What is printed on bottom panel?                                                            |

**Table 2 Observation Unit, Variables and Observable Signs**

25. Any security ink?
26. Production code?
27. Anything else observed?

Top Panel
28. What is printed on top panel?

Tear Tape
29. Transparent? (Yes/No)
30. Printed? (Yes/No) → If Yes, Describe.

Inside of the pack
31. Any Design /Color on the inside of flip lid (Yes/No) – if Yes, Mention it
32. Color of the collar
33. Any design on the COLLAR (Yes/No) → If Yes, Describe
34. MATERIAL used for the REAR and Front blanks?
35. TEXTURED or Smooth Aluminium Foil?
36. Color of Aluminium Foil (Original/Color)
37. Any Text embossed on the blanks (Yes/No)
38. Aluminium foil laminated (Yes/No) If Yes, with Plastic or small re-sealable flap?

Cigarette
39. The length of cigarette
40. The diameter of cigarette
41. The length of filter
42. The color of the filter
43. Any printing on the filter? (Yes/No) - if Yes, describe
44. The color of cigarette?
45. Any printing on the cigarette? (Yes/No) – if Yes, describe

Ethical Consideration
This research does not involve humans or other living creatures as samples, no formal ethical scrutiny was required or undertaken.

RESULTS

General Features
A total of 42 brands of cigarettes were sampled consisting of 5 brands in the category of Hand-rolled clove Cigarettes (SKT), 7 brands of White Cigarettes (SPM), 1 brand of Cigars (CRT), 1 brand did not have tax stamp that was considered Illegal Cigarette, and the remaining 28 brands were Machine-made Clove Cigarettes (SKM).

The number of cigarette sticks in each pack ranges from 6 to 20 sticks, 1 brand of 6 sticks, 10 brands of 12 sticks, 15 brands of 16 sticks and 16 brands of 20 sticks.

Most of the brands (n=39) used paper board for the pack (hard paper), two brands use soft paper for the pack and only one brand use hard bevelled (iron material) and it was their 60th anniversary special edition. There was one brand that used double or twin pack designs composing of inside and outside covers; while the outer cover printed with PHW, the inside had different, more colorful and very attractive design with no PHW (Graphic 1).

Graphic 1 Example of Double Pack Design

The side panel (push to open the inside pack) | Front panel (outer pack design) | Front and back panel of inside pack design
The majority of the sampled packs are in normal size (length=5.0-6.1 cm, width=1.2-2.3 cm, height=7.8-10.2 cm), only 12 packs are small size (length=4.4-5.5 cm, width=1.0-2.2 cm, height=7.3-9.6 cm) and remaining 5 packs are big size (length=5.3-6.7 cm, width=1.6-2.2 cm, height=9.5-10 cm). Most of the products (37 out of 42 brands) use blank / non-printed transparent plastic tape. The remaining 5 packs come out without transparent plastic tape.

Pictorial Health Warnings (PHW)
There are 2 cigarette brands produced in 2019 that did not comply with the latest sets of pictures under the amended Minister of Health Regulation No. 56/2017. All the cigarette packs carry 40% size of pictorial and textual warnings, placed at the top front and back panels of the cigarette packs including the health messages printed in Bahasa Indonesia as mandated by the ministry of health regulation. The front and back panels of the PHW are identical. The back panels of the top of the pack were covered by excise tax stamp. There are three brands (Forte Menthol, Forte Original and Forte Slim) that do not include the address of the manufacturers, and only mention “Indonesia”. 17 out of 42 sampled cigarette brands that do not include information on production dates on the pack were ESSE, Gudang Garam, Dunhill, Lucky Strike, Menara and the one illegal cigarette brand. All of them have production codes that might reflect the information of production dates of the packs.

Pack Design, Violations and Space Utilization for Product Promotion

Front and Back Panels
All cigarette pack designs found from the top to the bottom of the pack. Aside from the 40% space allocation for PHW on the principle front and back areas, the remaining 60% of the pack was printed with a wide range of graphic designs and attractive colors combined with glossy papers to enhance the brand recognition and make them more appealing to different target groups. The remaining 60% of packs also been used to promote the upcoming tobacco-sponsored events; imaging the products with imported goods by printing the city or country of origin of the brand; describe the quality of the tobacco leaf, ingredients and all advantages of the product. Products such as LA Lights provide information on the new technology they used to produce the products such as trile blended technology. Most of the packs (35 out of 42 sampled brands) give additional description of the products such as bold, mild, lights, super, special, etc. Furthermore, the industry also uses brand segmentation strategy with targeting specific gender for their products. For example, Slims Brand that entirely uses pink color and brand name that can appeal to female group.
Promotion of new feature (capsule) taste in the cigarette filter and upcoming event

Celebrate the achievement of the industry and promote quality of the tobacco leaf and ingredient of the product

**Tax Stamp Position**

The position of the excise tax stamps mostly covered the back panel of the pictorial health warning, except for hand-rolled clove cigarettes (SKT) where the stamp position from the side panel to the top. Specific case for small size cigarette pack (20 stick cigarettes), the pictorial health warning is almost 100% covered by the excise tax stamp (Graphic 5 ref. SPM).

**Inside the Pack**

Products of ESSE uses the flip lid to promote the brand name reputation (“World’s No 1 Super slim Band”, “Sweet Surprise! It’s Honey!”), while some other brands such as Dunhill, Magnum and Philip Morris printed their email address to allow consumers to write in besides its function as information center. Collar design of the cigarette packs has been made very attractive, a combination of materials and colors. Some brands use collar space to put brand logos or symbols that relate to the product features and written messages about the products and brands that would appeal to the customers. Most of cigarette packs (36 out of 42 brands) use aluminium foil to wrap the cigarette sticks, some of them are embossed and textured aluminium foil. All sampled Dunhill brands and Marlboro Black Filters come with reseal-able flaps. It uses aluminium foil that are coated with a layer of plastic with a small opening lid cover that helps to maintain the “freshness” and “taste” of the cigarette.
**The Cigarette Sticks**

The smallest cigarette stick is Forte’s cigarette (L= 70mm, D= 5mm) and the longest is ESSE Change Juicy and ESSE Change Grape (L= 100mm, D= 5mm) while the widest is Dji Sam Soe -234 (L= 80mm, D= 9mm). All the sampled cigarettes sticks are printed either with brand names or logos. There are 7 cigarette brands promote flavor capsule innovation in filter to enhance the flavor sensation by crushing the capsule. Different flavor capsules (including mint, menthol, berry, honey) embedded in the filter. There is an instruction for the capsule type at the back panel to click (meaning to bite) the filter during smoking to get the flavor out.

**DISCUSSION**

**Compliance with the Pictorial Health Warnings Regulation**

Two sampled cigarette brands (Forte Original Charcoal Filter and Bro Mild Super) produced in 2019 did not comply with the new pictures obligated in the amended Minister of Health Regulation No. 56/2017 after it began into effect. This situation is not the first time has happened, the tobacco industry has a well-established history of using delay tactic in implementing tobacco control regulation, including Pictorial Health Warning regulation in Indonesia in 2014 (SEATCA, 2014). The same tactics also been identified in other countries, especially in the low-middle income countries were the enforcement policy is weak (Doku, 2010). The strategy often called 3D (Denial, Deceit and Delay) and been summarized by Judge Kessler in the 2006 in the US District court for the District of Columbia (Kessler, 2008).

Almost all machine-made cigarette packs have pictorial health warnings bunged up by excise tax stamps at the back panel; exception was found in the sampled hand-rolled clove cigarette (SKT) where the stamp position covers from the side panel to the top. The government regulation Number 109/2012 states the Health Warning of the Tobacco Products should not covered by anything except by transparent plastic material that is still easily readable; if otherwise covered by non-transparent materials, the health warning should be printed on the side cover. In this case, the design of excise stamp must comply with the government regulation by designing the tapes that do not obstruct health warning pictures.

Another finding from this study is the promotion of double pack design. This is another tactic used to conceal the pictorial health warning and any other tobacco control measured on cigarette pack. This finding contributes the reason why standard design of cigarette pack is very important to prevent the industry from using cigarette packs as a means of product promotion (World Health Organization, 2016). In terms of tobacco manufacturing information that are required to be printed at the bottom of the pack, the study found that most of the packs did not include production date which actually violated the current health warning regulation. Since the product itself is harmful, from consumer point of view any warning on expired date is not relevant. But from regulators point of view, it is important because it can measure the compliance of the product to recent regulation and also to track the product for tax tariff.

**Regulatory Loopholes**

The industries have been successfully taken the advantages from the loopholes of the regulation where 12 out of 42 brands designed in small size packs, even more the pictorial health warning on two of which were almost 100% sealed by excise tax stamps because the size of the cigarette pack is too small. This has resulted in diluting the effect of pictorial health warning. The situation is happened because tax sealed designed for machine-made cigarette are larger than the other cigarette types, and the regulation limited only the number of sticks for white cigarettes with no standard for the cigarette packs size that can be sold in the market.

The non-compulsory provision of Article 11 of the Health Minister Regulations No 28/2013 and No 56/2017 derived from Article 22 of the Government Regulation No 109/2012 that states the side panel of the tobacco product packaging MAY include statements of “No safe level”; and “Contains more than 4000 harmful chemical substances and over 43 cancer causing agents” are not complied, except for ESSE Barry Pop...
The cigarette industry has been reported from decades of using ‘light’ or ‘mild’ product as their marketing strategy to make its product feel safer and attract the consumers (Hirschhorn & Initiative, 2005). The packs analysis found that 35 out of the 42 sampled packs have “light” “mild” “super”, “special” descriptors printed on the packs. This is because the provision of misleading descriptors such as “light” and “mild” is not clear in the Government Regulation 109/2012, and was not further elaborated in the Ministers’ technical guidelines on the distinction between the so called allowable “light” “mild” descriptors for registered cigarettes that had become brand names as stated in Article 24(3) of the Government Regulation, and the prohibited “light” “mild” descriptors considered as misleading and promotional messages in Article 24 (1) and 24(2) of the Government Regulation.

Article 24 of the Government Regulation No 109/2012 on prohibition of misleading descriptors contains of 4 clauses that split the term misleading descriptors. Clause 1 mentioned the prohibition of including any information or signs that are misleading or words that are promotive and clause 2 explained the additional prohibition of the terms “light”, “ultra-light,” “mild”, “extra mild”, “low tar”, “slim”, “special”, “full flavor”, “premium” or other terms indicating quality, superiority, safety, image, or terms of similar meaning. The provision as referred to clause 2 (prohibition of “light” “mild” etc.) does not apply to tobacco products that had the descriptors certificate and become certified brand (clause 3). Any manufacturers that produce misleading descriptors as referred to clause 1 are sanctioned in accordance with prevailing laws and regulations.

The last, the amended Health Minister Regulation No. 56/2017 requires additional information on cessation’s hotline number to be included on the pack. But strange as it may seem, the location of the cessation’s hotline number to be incorporated with the health message of the respective picture and within the 40% PHW boundary, instead of placing it on the side panel. This new provision has further reduced the current pictorial warning size and that would benefit the industry.

The Use of Cigarette Packaging for Product Promotion
Given the 40% size of PHW, the tobacco industry has made maximum use of the remaining 60% of the pack on both front and back panels including the inside panel for marketing purposes. Most of the cigarette packaging made of quality materials, hard covers that are glossy and give shiny effect of the packs. Most of the cigarette packs are designed with colorful and attractive graphics or patterns as a form of advertisement and promotion, capitalizing the 60% spaces on cigarette packaging that is not required for health warning. This finding in line with the evidence from tobacco industry documents that the company undoubtedly used cigarette packaging as an integral component of marketing strategy to create brand image (Wakefield, Morley, Horan, & Cummings, 2002).

The use of cigarette packaging for brand image is not only from the outside appearance, inside panel such as the collar, flip-lid and the cigarette sticks also contain promotional messages including email address for consumers to communicate and contact number. Some of the cigarette brands use collar space to put brand logos or symbols that are related to the product features and written messages about the products and brands that would appeal to the customers. The industry tries to communicate their brand quality and how they engage with the customer to understand their expectation as a marketing strategy (Andrews & Shimp, 2017). Although most of the cigarette packs use aluminium foil to wrap the cigarette sticks, due to advance printing technology, some used embossed and textured aluminium foil such as brand logo or name, trademark, product and brand description, website address, processing product technology. Various promotional messages are used such as information that describes the world-class product, product quality and the production and filter technology.

New Features and Technology
Aside from making cigarette packs look attractive with well thought design, color, logos, messages,
The use of impressive terms and high-quality papers and materials, the tobacco industry keeps up with new innovations to enhance the functions of cigarette packs and flavors in filter such as the use of resealable flap in the inner panel. An aluminium foil that are coated with a layer of plastic with a small opening lid cover that helps to maintain the “freshness” and “taste” of the cigarette without tearing the aluminium foil. Flavor capsule is embedded in the filter to enhance the flavor sensation by crushing the capsule. Promotion of different flavor capsules including mint, menthol, berry, honey. The use of flavoring capsule in cigarettes increase attractiveness to smoking. The flavor has been known for decades as part of tobacco industry strategy to ensure they have a product for every segment of consumers, especially among youth (Manning, Kelly, & Comello, 2009).

Limitation of the Study
The number of cigarette pack samples cannot represent the population of cigarette packs on the market.

CONCLUSIONS

The pack analysis has provided feedback and good lessons for policy makers on the unsuspected evidence of remarkable use of ample spaces on both outer and inner panels of cigarette packs by the industry to promote their products, no tiny corners are left empty. It became evident that cigarette pack played important role in product promotion that reaches the consumers up to the remote areas. It is often called a mini billboard that gives the impressions of glamor, cool or masculine to the users. The size of cigarette packs that not regulated become a loophole that enables the excise tax stamp to cover the whole back side of pictorial health warning. The confusing provision on splitting the term of misleading descriptors and “light” “mild” group remained uncorrected.

The small size of the pictorial warnings that has been reduced by the relatively sizable lining that contains the word “warning” and health message is now further burdened by inserting hotline number for cessation in between the health message that draws-in the bottom line towards the picture. The larger pictorial warning size will restrict the spaces for product promotion.

The findings of the pack analysis could help committed health regulators to work better in the amendment of Government Regulation No 109/2012 to avoid tobacco industry from taking advantage of the regulatory loopholes, including to standardized cigarette packaging size, ban any misleading descriptors, redesigned the tax stamp size or position, standardized the length and diameter of cigarette stick and number of cigarette stick, standardized filter color and prohibit any brand name on it and prohibition of emissions yield statements of tar and nicotine level on the pack.

Declaration of Conflict of Interest
The authors declared no conflict of interest in this study that would obstruct the result and conclusion of the research.

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