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# Analysis of The Impact of Image Messages on Cigarette Packs on Interest to Stop Smoking in Medan City Community

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#### ABSTRACT

The regulation on graphic warnings on cigarette packs is governed by Minister of Health Regulation No. 28 of 2013 about the Inclusion of Warnings and Health Information on Tobacco Product Packaging. Smokers should also be urged to quit smoking by seeing frightening image messages on their cigarette packets. The goal of this study was to determine the effect of graphic messaging on cigarette packs on the interest of Medan residents in quitting smoking. This study used a quantitative Likert scale and 100 respondents to collect primary data. In this study, data were gathered through the use of a questionnaire and an online Google form. In this study, the data are analyzed using univariate analysis along with descriptive statistics. The results indicated that 64% of respondents smoked daily, 36% smoked occasionally, and 58% started smoking between the ages of 16 and 23. Cigarette picture message number 4 received the highest response value, namely 7-8. While the majority of respondents chose picture number 1 with a score of 5-6 as the image message that increases their intention to quit smoking, To discourage smoking behavior in the society, the government must increase the image message on cigarette packets. To enhance people's intentions to quit smoking, socializing about smoking image messaging should be provided.

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### 1. INTRODUCTION

Smoking behavior continues to be a concern in many countries of the world, most notably Indonesia. Tobacco consumption accounts for up to 57% of the population in Asia and Australia, 14% of the population in Eastern Europe and the Soviet Union, 12% of the population in America, 9% of the population in Western Europe, and 8% of the population in the Middle East and Africa. ASEAN is a region that accounts for 10% of global smokers and 20% of global tobacco-related deaths (WHO, 2015). According to Riskesdas (2018) data, the prevalence of smoking among teenagers aged 10-18 years has climbed from 7.20 percent in 2013 to 18.0% in 2018. (9.10 percent). This result is still significantly below than the RPJMN's 2019 aim of 5.4 percent. Meanwhile, male smokers aged > 15 years continued to be prevalent in 2018. (62,9 percent). According to the 2018 Basic Health Research Data, persons in Indonesia claim to smoke every day at a rate of up to 24.3 percent and occasionally at a rate of up to 4.6 percent. According to the 2018 Basic Health Research data, 52.1 percent of teenagers aged 15-19 years reported smoking for the first time, while 14.8 percent of adolescents aged 20-24 years reported smoking for the first time (Kementerian Kesehatan RI, 2018).

In a number of countries, including Thailand, Malaysia, Uruguay, Mauritius, Mexico, Australia, and Canada, health warnings are an effective intervention for increasing knowledge about the specific harms of tobacco use and for increasing smokers' thoughts and motivations to quit (Elton-Marshall, 2015). Health warnings also have the potential to deter non-smokers, including youth, from starting to smoke. Tobacco users regard the health warnings on cigarette packages as a prominent and credible source of information about the risks associated with tobacco use(Yang, 2015). Additional research has established that pictorial health warnings outperform text-only health warnings(Wu, 2015).

To determine whether the HWL on each cigarette pack complies with country requirements, we created a codebook for each country based on its requirements for cigarette HWLs. A country-specific HWL compliance codebook has been published(Smith, 2015; Joanna, 2016). As a result, the compliance rates presented here are for a diverse sample of unique packs and do not necessarily reflect compliance for the most frequently purchased or consumed brands in a country. Additionally, the packs were purchased in three of each country's most populous cities; HWL compliance in other cities or rural areas may vary(Kroart, 2015; Ross, 2015).

The policy on graphic warnings on cigarette packs is governed by Minister of Health Regulation No. 28 of 2013 on the Inclusion of Warnings and Health Information on Tobacco Product Packaging. On cigarette cartons, visual messages account for 40% of the surface area (KemenkesRI, 2013). On cigarette packets, graphic warnings refer to the health risks associated with smoking. The government-created health warning pictures on cigarette packets are a kind of nonverbal communication aimed at reducing active smokers in Indonesia (Nella, 2019). Exposure to knowledge has the potential to alter an individual's opinions and behavior (Sinaga, 2019).

In the field of advertising, it refers to a variety of displays in the form of text, graphics, or photographs featured in advertisements that combine to create a sign with meaning and message. The 'picture warning' image on cigarette packaging conveys both meaning and a message to the consumer community. By examining the phenomenon described above, it is clear that the advertising media used has the ability to increase public awareness. However, consumers are frequently unaware that they have acquired and adopted the advertisement's image and lifestyle. Even though cigarette packaging has visuals and photographs, as well as frightening or frightening text or writing, and contains warnings about the consequences of smoking, people continue to purchase cigarettes (Makmun, 2017).

On the basis of the foregoing, the researcher is interested in conducting research on the effect of image messages on cigarette packs on the desire to quit smoking among Medan residents. The goal of this study is to determine the effect of image messages on cigarette packs on the desire of residents of Medan to quit smoking..

# 2. METHOD

This study employs a quantitative approach based on the Likert scale. This study makes use of primary sources of data. This study took place in the city of Medan. This research will take place between January and August 2021. The population studied in this study is comprised of all smokers in Medan City. This study used a random sample of 100 people. The data collection technique used in this study was the Self-Administered Questionnaire technique, which involved distributing a questionnaire to respondents via an online google form. This is a data collection approach that covers a specific area, allowing researchers to collect all essential data in a relatively short period of time. The descriptive univariate analysis is used to analyze the data in this study..

### 3. RESULT

Characteristics of Respondents	n	%
Gender		
Man	98	98
Woman	2	2
Age (Years Old)		
18-25	59	66
26-33	26	22
34-41	6	3.5
42-49	7	4.5
50-57	2	3.0
Education		
Elementary School	1	1
Junior High School	6	6
Senior High School	56	56
Diploma	2	2
Barchelor or master	35	35

Table 1. Frequency Distribution of the Impact of Picture Messages on Cigarette Par	cks on
Interest in Quitting Smoking in Medan City Community	

Work	n	%
Student	55	55
Employee	8	8
Entrepreneur	21	21
Servants Goverments	4	4
Laborer	12	12
Income (IDR)		
<1,000,000	41	41
1,000,000-2,000,000	36	36
>3,000,000	20	20
5,000,000-7,000,000	2	2
>7,000,000	1	1
Smoking Behavior		
Yes, Everyday	64	64
Yes Sometimes	36	36
Early Age Started Smoking (Years Old)		
8-15	39	39
16-23	58	58
24-31	3	3
Number of cigarettes smoked/day		
1-10 Rods	61	61
16-23 <b>R</b> od	27	27
24-30 Stems	7	7
E-cigarette users	5	5
Types of Cigarettes Consumed		
Kreteks	50	50
Filter	45	45
vape	5	5

Based on table 1. The results show that the majority of respondents are male as many as 98 (98%), the majority of respondents are 18-25 years old (66%), the majority of respondents at high school education level are 56 people (56%), the majority of respondents with the employment status of students as many as 55 (55%), the majority of respondents with income <1,000,000 as many as 41 people (41%), the majority of respondents having smoking behavior every day as many as 64 people (64%), the majority of respondents with an early age starting to smoke 16 -23 years 58 people (58%), the majority of respondents with the number of cigarettes smoked 1-10 cigarettes per day were 61 people (61%), the majority of

respondents chose the type of cigarettes consumed were kretek as many as 50 (50%) and the majority respondents who choose smoking law are makruh as many as 61 (61%).

Picture Me Cigarette	essages On e Packs	Afr	raid	Disg	ısting	Wo	rried	Exce	ssive	Desire smo	to stop king
Sco	ore	N	%	N	%	Ν	%	N	%	Ν	%
Picture	1-2	8	8	12	12	13	13	9	9	8	8
Message 1	3-4	11	11	11	11	14	14	10	10	9	9
-	5-6	34	34	36	36	39	39	30	30	42	42
	7-8	22	22	26	26	22	22	33	33	23	23
	9-10	25	25	15	15	12	12	18	18	18	18
Picture	1-2	29	29	21	21	15	15	22	22	31	31
Message 2	3-4	11	11	15	15	16	16	17	17	14	14
1/	5-6	28	28	27	27	27	27	39	39	13	13
	7-8	18	18	25	25	24	24	11	11	19	19
	9-10	14	14	12	12	18	18	11	11	23	23
Picture	1-2	13	13	21	21	4	4	11	11	12	12
Message 3	3-4	12	12	11	11	5	5	11	11	10	10
Carlos Carlos	5-6	33	33	33	33	21	21	28	28	24	24
THE REAL PROPERTY IN	7-8	11	11	13	13	39	39	24	24	32	32
	9-10	31	31	22	22	31	31	26	26	22	22
Picture	1-2	18	18	5	5	6	6	15	15	6	6
Message 4	3-4	5	5	7	7	4	4	9	9	6	6
	5-6	23	23	19	19	23	23	30	30	25	25
	7-8	29	29	40	40	42	42	31	31	33	33
	9-10	25	25	29	29	25	25	15	15	30	30
Picture	1-2	7	7	5	5	6	6	9	9	5	5
Message 5	3-4	9	9	9	9	13	13	18	18	10	10
	5-6	36	36	31	31	33	33	44	44	36	36
	7-8	28	28	34	34	27	27	15	15	26	26
	9-10	20	20	21	21	21	21	14	14	23	23

 Table 2. Respondents' Responses Regarding 5 Cigarette Picture Messages

Based on table 2. The results show in Figure 1 the majority of respondents feel afraid as much as 34 (34%), feel disgusted as much as 36 (36%), worry as much as 39 (39%) and excessively as many as 30 (30%), with the desire to stop smoking as many as 42 (42%) with a score of 5-6. In Figure 2 the majority of respondents with a score of 1-2 feel afraid as much as 29 (29%), and with a score of 5-6 feel disgusted as much as 27 (27%), worried as much as 27 (27%) and excessively as much as 39 (39% ) with the desire to quit smoking as many as 31 (31%). In Figure 3 with a value of 5-6 the majority of respondents are afraid of smoking messages as much as 33 (33%), feeling disgusted as much as 33 (33%), worried as much as 39 (39%) in the range of values 7-8, excessive 28 (28%) ) with a value of 5-6, with a desire to stop smoking as much as 32 (32%) in the range of values 7-8. In figure 4 with a value of 7-8 the majority of respondents are afraid of cigarette messages as much as 40 (40%), worry as much as 42 (42%), excessively 31 (31%), with a desire to stop smoking as many as 33 (33%). In Figure 5 with a value of 5-6 the majority of respondents are afraid of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in figure 5 with a value of 5-6 the majority of respondents are afraid of cigarette messages as much as 34 (34%) in figure 5 with a value of 5-6 the majority of respondents are afraid of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in figure 5 with a value of 5-6 the majority of respondents are afraid of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the range of cigarette messages as much as 34 (34%) in the

the range of values 7-8, worrying as much as 33 (33%), excessive 44 (44%) ), with the desire to quit smoking as many as 36 (36%) in the range of values 5-6.

### 4. DISCUS

Advertising media is a method of communication that is applied and changed into signs such as text, graphics, and photographs that hold the meaning and message intended for the advertisement. Makmun (2017) asserts that a single commercial can contain text, image, and photo elements, notably cigarette advertisements. The cigarette commercial in question is the most recent packed cigarette advertisement, which features textual text and visuals that are then attached to packs of all brands of cigarettes (Nasution, 2020).

The results showed that the majority of respondents had smoking behavior every day as many as 64 people (64%) of the 100 respondents who were the research sample. the majority of respondents were male as many as 98 (98%), aged 18-25 years (66%), at the high school education level as many as 56 people (56%), The majority of respondents with student employment status were 55 (55%), the majority respondents with income <1,000,000 as many as 41 people (41%), the majority of respondents have a smoking behavior every day as many as 64 people (64%), the majority of respondents with an early age of starting smoking 16-23 years as many as 58 people (58%), the majority 61 respondents (61%), and the majority of respondents chose the type of cigarettes consumed were kretek as many as 50 (50%).

Every day, 55.2 percent of residents in Medan City smoke, which is higher than the national average of 54 percent in 2016. This means that around 55 persons out of every 100 household heads smoke; more than half of household heads are smokers. Male smokers are more likely to smoke daily than female smokers; the average smoker is between the ages of 20 and 35 and has a relatively low level of education. The epidemic of cigarette use in Indonesia is quite concerning, as the number of smokers in the country continues to grow from year to year (Keloko, 2019). Numerous factors influence young people's smoking behavior, one of which is low socioeconomic position (Tristanti, 2016).

Cigarette packaging includes verbal and non-verbal symbolism. The following are verbal symbols: (1) Smoking causes mouth cancer, (2) Smoking kills, (3) Smoking causes throat cancer, (4) Smoking around children is bad, and (5) Smoking causes lung cancer and chronic bronchitis. Meanwhile, non-verbal symbols include the following: (1) images of mouth cancer, (2) images of smokers with smoke forming a skull, (3) images of throat cancer, (4) images of smokers with children around, and (5) images of blackened lungs caused by cancer (Makmun, 2017; Nasution, 2019).

Counseling is one method of providing this information. The method is determined by conducting a situation analysis to ensure that the information provided is well received by the community group in order to increase knowledge and attitudes about health (Meutia, 2020;Hanum, 2020). Concerned with Regulations requiring pictorial health warnings on cigarette packs are expected to induce smokers to quit, and regulations in effect since 2014 should have been evaluated to determine whether pictorial health warnings on cigarette packs have the potential to alter the behaviour of smokers or prospective smokers in adolescents (Nasution, 2019).

While numerous studies demonstrate that the presence of PWMs has a beneficial effect on smoking-related attitudes and behaviors. Several studies have been unable to establish a significant relationship between labels and desired outcomes(Brewer, 2016). Nonetheless, the substantial body of research utilizing both experimental and longitudinal designs demonstrates a high degree of confidence in the significance of PWMs (Sutton, 2019; Romer, 2018). Noticing a warning is a critical initial step in encoding health warning messages, comprehending them, and ultimately changing behavior (Klein, 2017).

The results show the majority of respondents feel afraid as much as 34 (34%), feel disgusted as much as 36 (36%), worry as much as 39 (39%) and excessively as much as 30 (30%), with the desire to stop smoking as much as 42 (42%) with a score of 5-6. In Figure 2 the majority of respondents with a score of 1-2 feel afraid as much as 29 (29%), and with a score of 5-6 feel disgusted as much as 27 (27%), worried as much as 27 (27%) and excessively as much as 39 (39%) with the desire to quit smoking as many as 31 (31%). In Figure 3 with a value of 5-6 the majority of respondents are afraid of smoking messages as much as 33 (33%), feeling disgusted as much as 33 (33%), worried as much as 39 (39%) in the range of values 7-8, excessive 28 (28%) ) with a value of 5-6, with a desire to stop smoking as much as 32 (32%) in the range of values 7-8. In figure 4 with a value of 7-8 the majority of respondents are afraid of cigarette messages as much as 29 (29%), feel disgusted as much as 40 (40%), worry as much as 42 (42%), excessively 31 (31%), with a desire to stop smoking as many as 33 (33%). In Figure 5 with a value of 5-6 the majority of respondents are afraid of cigarette messages as much as 36 (36%), feeling disgusted as much as 34 (34%) in the range of values 7-8, worrying as much as 33 (33%), excessive 44 (44%) ), with the desire to quit smoking as many as 36 (36%) in the range of values 5-6. In line with the 2020 study Nasution, there is a significant relationship between the impact of picture messages on cigarette packs and adolescent smoking behavior.

This study corroborates Adiayatama et al., (2016), who found that written warnings and images warning of the dangers of smoking on cigarette packs have a 25% influence on changing smokers' behavior. Due to the tiny effect of warning picture messages on the dangers of smoking on cigarette packs, their contribution to changing smokers' behavior is negligible. This respondent's impression is undoubtedly influenced by the psychological variables unique to each respondent's response to the illustrations that elicit the most dread, based on the respondents' own experiences with the impact of smoking on its users. Ana R et al., (2018) asserts that health warning labels on cigarette packaging are critical for conveying and educating users about the health dangers associated with smoking. By reading and viewing images of health warnings.

The current study Sutton (2019) show identifies a number of characteristics that may enhance PWMs' effectiveness in reducing smoking prevalence. According to the findings of this study, not only do graphic representations of diseases and testimonials increase the overall emotionality of PWMs, but also their perceived effectiveness(Gibson, 2015; Cameron, 2015a). The pattern of results across measures of perceived effectiveness, negative emotional engagement, avoidance behaviors, and foregoing within a large set of labels sheds light on the design and implementation of effective PWMs (Purmehdi, 2017; Cameron, 2015). The objective characteristics of labels that can be manipulated by label designers, the findings provide generalizable guidelines for how certain label characteristics may affect the effectiveness of messages and, ultimately, smoking-related attitude and behavior change(Siregar, 2021).

The present study is the first to assess the efficacy of religious teachings on graphic HWLs. The nonreligious HWLs outperformed the religious HWLs on the SHS and suicide themes, while the religious HWL outperformed the nonreligious HWL on the gangrene theme. Religious and nonreligious SHS HWLs had a higher level of credibility than suicide and gangrene HWLs. Religious gangrene and suicide HWLs were equally effective at capturing attention, making people more concerned about smoking, encouraging people to stay smoke-free, making people consider quitting, and driving people to quit

smoking as nonreligious HWLs. Given the similar rating scores of religious and nonreligious HWLs, religious and nonreligious HWLs were functionally equivalent in terms of efficacy. With adequate consideration of potential unintended consequences, religious HWLs could be considered for a fraction of HWLs in nations where religion has a significant impact on social life (Kaplan, 2019).

Additionally, the use of digitally altered photographs increased avoidance intentions, implying that depictions of situations not encountered in the real world may result in more engaging PWMs(Sutton, 2019). Similarly, the increased perceived effectiveness associated with multiple image compositions demonstrates how the use of multiple images may result in increased engagement as individuals attempt to comprehend multiple components of the image as a whole. Study of Siregar (2020) show that the more fearful someone is when they see the picture message on a pack of cigarettes, the more likely they are to want to quit smoking. The government hopes to expand the picture message on cigarette packs in order to increase smokers' desire to quit and thus reduce the number of smokers in Indonesia.

### 5. CONCLUSION

The bulk of responses are between the ages of 16 and 23. The majority of respondents reported smoking between one and ten cigarettes each day. The cigarette image message number four received the greatest reaction value, namely 7-8. While the majority of respondents chose picture number one with a rating of 5-6 as the image message that increases their intention to quit smoking.

The government must increase the size of the picture message on cigarette packets in order to curb smoking behavior in the community, particularly in Medan. To enhance people's intention to quit smoking, socialization about smoking image messaging should be provided.

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