



Exposure to Public Service Advertisements #suaratanparokok: A Sociodemographic Analysis

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Abstract. The negative impact of cigarettes is on the health and socio-economic of individuals and the community. Cigarette advertising in mass media contributes to an increase in smoking behaviour. The high number of cigarette consumption in the community raises concerns about the low level of public awareness of the dangers of smoking. One approach to protect and increase public awareness about smoking is to communicate the harms of tobacco through Public Service Advertisements (PSAs), like #suaratanparokok on YouTube. There is still a lack of studies that explore the effectiveness of PSAs, including looking at the exposure to anti-smoking PSA from different indicators. This study aims to analyze the exposure of #suaratanparokok PSA based on people's socio-demographic backgrounds. The characteristics assessed include gender, age, education, occupation, income, origins, smoking status, and social media preferences to view the PSAs. Three hundred and ninety-eight respondents participated in an online survey distributed via Short-Message-Sending (SMS) and social media platforms. This study shows that only smoking status ($p\text{-value} = 0.001$) and place of origin of the respondents ($p\text{-value} = 0.049$) correlate with the exposure to #suaratanparokok PSA. Most people who access the PSA are 17–25 years old and are university students. Passive smokers viewed more the ad than smokers, and Instagram was the social media platform where most people view the #suaratanparokok PSA. The study suggests that besides a total ban on cigarette advertising, there is a need to develop PSAs targeting certain age groups, particularly youth and young adults, and smokers through prominent social media, such as Instagram.

Keywords: Effectiveness · Anti-smoking · Public Service Announcement · Socio-demographic

1 Introduction

The high number of cigarette consumption causes adverse impacts and losses for the individual and community's health, social, and economics. Tobacco products contain addictive substances and other materials that are harmful to health. The risk of smoking causes people to experience various health problems. The rise in numbers of smokers is

accompanied by an increase in diseases caused by smoking, such as stroke, hypertension, heart disease, diabetes, and cancer [1]. About 10% of the total population in the world and 20% of global deaths due to tobacco are in the ASEAN region [2]. Every year there are 225,700 deaths in Indonesia caused by smoking or other diseases caused by tobacco [3].

Based on data from WHO, Indonesia is the third-largest country after India and China in cigarette consumption. The prevalence of smoking in Indonesia is very high, especially in men; 67% of smokers are men aged over 15 years. The high prevalence of smoking in Indonesia is the highest in ASEAN. Moreover, there is a tendency for the number of female smokers to increase every year. Although the number of female smokers is still small, there was an increase from 2.6% in 2016 to 4.8% in 2018 [4]. Furthermore, based on the Global Youth Tobacco Survey (GYTS) in 2019, as many as 40.6% of Indonesian students have consumed and used tobacco and (3 out of 5 students) aged 13–15 years have been exposed to cigarette advertisements on TV, sales, and outdoor media; and (1 out of 3 students) are exposed to cigarette advertisements from the internet. These data indicate that the prevalence of smoking among young adults and adolescents is still relatively high.

The high number of active smokers among adolescents is related to the tobacco industry's target market. Around 90% of tobacco companies target adolescents because they are vulnerable, more effective than those who have never or not smoked [5]. Cigarette advertisements are targeting adolescents. Advertising aims to create stereotyped values, which are the key to changing people's thoughts and behaviour [6]. About 60% of adolescent cigarette exposure is obtained from electronic media, and 10% from non-electronic media [7]. Exposure to cigarette advertisements is mostly received through TV, banners, and billboards; through internet media. Children and adolescents are greater exposed to pro-smoking messages than adults [8]. With insufficient knowledge and the ability to filter information, adolescents are easily affected to start smoking [9].

Besides affecting people to smoke, the media plays an important role in communicating the dangers of smoking. Mass media have a role in influencing people to stop smoking or prevent people from becoming new smokers, especially in children and adolescents [10]. A study shows that messages are needed to encourage people to reduce or stop smoking to outreach the dangers of cigarette advertising. A study found that advertisements describing adolescents' health, social norms and emphasizing how smoking endangering others are also considered effective among adolescents [11]. The media plays an active role in influencing public perceptions of the dangers of smoking. The frequency with which a person uses certain media types provides a great opportunity to obtain information through these media [12]. Similarly, messages on the harms of smoking on social media can change and influence individual behaviour [13]. These studies suggest that one of the efforts to protect health, socioeconomics, individuals, and society is communicating the dangers of smoking is through Public Service Advertisements (PSAs).

It is generally suggested that there is still a lack of health coverage, including messages of harmful effects of smoking in Indonesian media [14]. Anti-smoking messages create to counter tobacco advertisements and promote the adverse effects of smoking cannot compete with the immense and creative cigarette advertising or pro-smoking

messages in many media platforms [15]. Messages encouraging people to stop smoking remains low in terms of numbers and visibility, leaving people with limited information on the hazards of smoking. Furthermore, the low number and visibility of messages encouraging people to stop smoking lead to limited access to information on the hazardous effects of smoking.

The government is obliged to protect its people from the bad effects of smoking. This obligation is stated in Government Regulation PP 109/2012 article 32[16]: “Dalam rangka memenuhi akses ketersediaan informasi dan edukasi kesehatan masyarakat, Pemerintah dan Pemerintah Daerah menyelenggarakan iklan layanan masyarakat mengenai bahaya menggunakan Produk Tembakau.” Translated as “to fulfil access to the availability of information and public health education, the Government and Local Governments organize public service advertisements regarding the dangers of using Tobacco Products.” Besides PSAs, Pictorial Health Warnings (PHW) on cigarette packaging is aimed to encourage people to stop consuming tobacco addiction substances [13].

PSAs produced by the government through the Indonesian Ministry of Health lacks quantity and quality. In collaboration with the global public health organization - Vital Strategies Indonesia (VSI) and the Ministry of Health of the Republic of Indonesia, since 2014, it has produced eight PSAs broadcast through mainstream and digital media. There is still a lack of studies exploring anti-smoking advertisements. This study aims to analyze the exposure to #suaratanparokok based on people’s sociodemographic backgrounds.

2 Method

This study uses quantitative methods through the distribution of online surveys to identify exposure to public service advertisements #suaratanparokok based on socio-demographic characteristics. This research was conducted not to test hypotheses and did not require a sampling method with the term error term. This study was built based on the needs of researchers, not based on validity and reliability tests. The data that has been collected were analyzed with descriptive statistics included in the Chi-square test. The Chi-Square test itself is not carried out to test the hypothesis but to see whether there is a relationship between each indicator and the frequency of the exposure to the #suaratanparokok PSA.

This online survey was conducted and distributed via SMS and social media platforms. The survey questions include socio-demographic information that is used in analyzing research results. Data processing was carried out through the SPSS with descriptive statistical analysis. Descriptive statistics are statistics whose work level includes collecting, compiling or organizing, processing, presenting, and analyzing numerical data to provide an orderly, concise, and clear picture of a symptom, event or situation [20]. The criteria for respondents are people who have watched PSAs on social media from the age of 12 to 65 years. The data collected was then analyzed quantitatively using SPSS to measure the percentage of each indicator which was then described descriptively. The number of respondents who filled out the online survey was 399 respondents. The online survey is distributed in various regions, namely Aceh, Kalimantan, North Sumatra, Java, Bali and Papua.

3 Result and Discussion

This study analyses the socio-demographic characteristics of respondents and exposure to the #suaratanparokok PSA, namely gender, age, education, occupation, income, origins, smoking status, and social media platform used to view the ad. Three hundred-ninety eight respondents fill in the online survey.

3.1 Young People Exposed to #suaratanparokok PSA

The exposure to #suaratanparokok PSA based on gender difference is proportional. The percentage of female is 50.38% ($n = 200$), and male are 49.62% ($n = 198$). The number of females who watch PSAs is slightly more than that of males. It can be said that both males and females have viewed the #suaratanparokok PSA on YouTube.

Moreover, those most exposed to information on PSAs #suaratanparokok were 17–25 years old (50.88%). Meanwhile, those least exposed to the PSA on YouTube were those aged 65 years and over (0.25%). Figure 1 shows the exposure to #suaratanparokok PSA based on gender and age.

For the origin characteristics of the respondents, each area is represented differently. Respondents from the Sumatra region was found highly exposed to the PSA. The finding may be influenced by more people who answered the online survey compared to other regions. The Chi-square test shows that the p-value is at 0.049, which means that place of origin insignificantly correlates with the frequency of PSA viewing.

3.2 Passive Smokers Exposed to #suaratanparokok PSA

The study indicates that passive smokers are more exposed to the anti-smoking ad on YouTube (53.15%) than those smokers (16.79%), followed by those who have stopped smoking (30.08%). Smokers tend to avoid the message addressing the danger of smoking. People who actively smoke avoid advertising the dangers of smoking. Previous studies revealed that smoking cessation advertising is not effective to change smoking behaviour. Smokers prefer messages that are not scary, rational information with statistical data as evidence [17]; [18]. Moreover, both active and passive smokers are aged 17–35 years old, characterized as a group of youth and young adults.

3.3 Educated Young People Exposed to #suaratanparokok PSA

Occupation characteristics vary and represent different exposure to the anti-smoking ad. University students are most exposed to the #suaratanparokok PSA (46.37%), and the least exposed are school students (2.01%). The remaining include those working as civil servants 17.79%, in the private sector 22.56% and others 11.28%. The occupation characteristic is in line with the educational background of the respondents; undergraduate students were found to be highly exposed to the #suaratanparokok message on YouTube (31.83%), followed by postgraduate students--Masters students (16.29%), and Doctoral students (4.76%). The findings correspond to a previous study showing that education affects how people obtain information about antenatal service in healthcare which may apply to other health problems such as information on the harms of smoking [19] (Table 1).

Table 1. Respondents' Sociodemographic Characteristics

Characteristics	n	%
Gender		
Male	198	49,62%
Female	201	50,38%
Age		
65 above	1	0,25%
56–65	4	1,00%
46–55	32	8,02%
36–45	50	15,04%
26–35	95	23,81%
17–25	203	50,88%
12–16	4	1,00%
Smoking Status		
Passive Smoker	212	53,13%
Active Smoker	67	16,79%
Other	120	30,08%
Place of Origin		
Sumatera	321	80,2%
Jawa	63	15,8%
Sulawesi	6	1,5%
Kalimantan	5	1,3%
NTT	1	0,3%
NTB	1	0,3%
Papua	1	0,3%
Bali	1	0,3%
Education		
Not attending school	1	0,25%
Primary	2	0,50%
Secondary (Junior High)	1	.0,25
Secondary (Senior High)	182	45,61%
Diploma	2	0,50%
Undergraduate	127	31,83%
Postgraduate (S2)	65	16,29%

(continued)

Table 1. (continued)

Characteristics	n	%
Postgraduate (S3)	19	4,76%
Occupation		
Student	8	2,01%
University Student	185	46,37%
Civil Servant	71	17,79%
Private Sector	90	22,56%
Other	45	11,28%
Income		
Less than Rp 1.500.000	53	13,28%
Rp 1.500.000 s/d Rp 2.500.000	154	10,78
Rp 2.500.000 s/d Rp 3.500.000	43	13,03%
More than Rp 3.500.000	52	24,31%
No income	97	38,60%
Social Media		
Instagram	191	47,87%
Twitter	19	4,76%
Facebook	67	16,79%
Tiktok	19	4,76%
YouTube	75	18,80%
Other	28	7,02%
#suaratanparokok PSA mostly viewed on		
YouTube	139	34,84%
Instagram	58	14,54%
TV	142	35,59%
Others	60	15,04%

3.4 Media Used to View #suaratanparokok PSA

Based on the study findings, respondents said they view the #suaratanparokok PSA mostly on television (35.59%), followed by YouTube (34.84%) than other social media platforms. The counter cigarette advertising is less viewed through Instagram (14.54%). However, when asked about social media preference, most young respondents refer to Instagram (47.8%). The findings support the fact that the #suaratanparokok ad on YouTube can be accessed through Instagram (Figs. 2, 3 and 4).

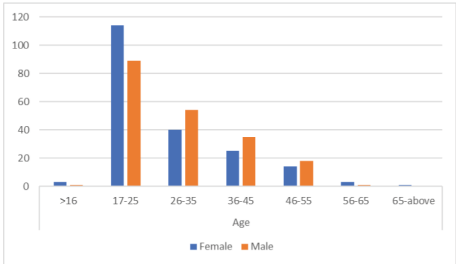


Fig. 1. Exposure to #suaratanparokok PSA based on gender

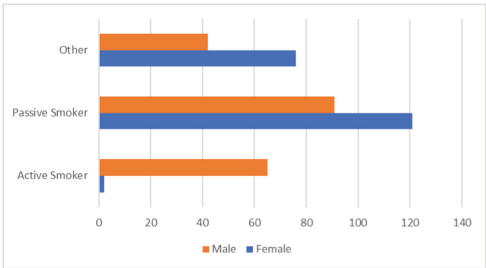


Fig. 2. Exposure to #suaratanparokok PSA based on smoking status

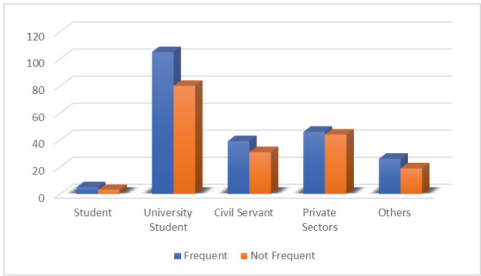


Fig. 3. Exposure to #suaratanparokok PSA based on occupation

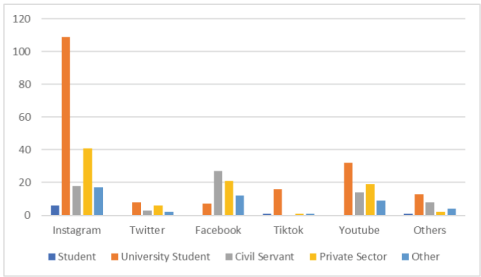


Fig. 4. Social media used to watch #suaratanparokok PSA

4 Conclusion

This study analyzed the exposure to the #suaratanparokok ad based on the respondents' sociodemographic characteristics. The study findings reveal that young people aged 17–25 were more exposed to the anti-smoking ad than other aged groups. Consequently, this age group represent those who are university students. One of the efforts to reduce smokers in their productive age is to use an effective PSA. It is necessary to have a clear policy on smoking at a certain age to limit cigarette consumption in the community.

Unfortunately, passive smokers are more likely to view the ad on television and YouTube than those smokers. Therefore, the government needs to provide counter-tobacco advertisings that appeal to youth smokers who, according to the study, are less exposed to the #suaratanparokok messages. The appealing anti-smoking messages should be distributed through social media platforms that young people prefer.

This study has limitations because it merely analyzes the sociodemographic indicators of people's exposure to the ad. Further research needs to look at the relationship of the sociodemographic characteristics to people's perception of the #suaratanparokok messages. The study suggests that besides implementing a total ban on cigarette advertisements, there is a need to provide more anti-smoking messages to educate people on the harms of smoking.

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Author's Contribution. RR planned the study design, analyzed and interpreted the findings, wrote and organized the manuscript. NS and AJ contributed to the data collection. NS and SR interpret the findings and draft the manuscript.

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