



Research Article

The Correlation Of Cough Medicine Advertisement In Television On Community Self-Medication In Krajan Sae Beji Village Junjero Batu City (Based on BPOM Head Regulation Number 8 in 2017)

Mutiara Titani^{[1]*}, Rahmat Hidayat^[1], Ika Ratna Hidayati^[1]

¹ Department of Pharmacy, Faculty Health of Science, University of Muhammadiyah Malang, Malang

* Email: mutiara@umsida.ac.id

ARTICLE INFO

Article History

Received October 28, 2019

Revised December 30, 2019

Accepted January 10, 2020

Keywords

Self-medication

Cough medicine

Cough medicine advertisement

Doi

10.22219/farmasains.v4i2.12505

ABSTRACT

Self-medication is a treat for action by selecting and taking their own medications to remove diseases and symptoms. The populations acquired knowledge of the signs and medications from various sources while doing self-medication, for instance from television ads. The aim of this research is therefore to determine the relationship between cough medicine ads on television and self-medication attitudes in Krajan Sae, Beji Village, Junrejo Subdistrict, Batu City. This research is a descriptive study with quantitative approach. Random sampling technique was applied using questionnaires instruments that had been validated. The calculations of samples determined using Slovin's formula with 97 respondents. Statistical analysis conducted using SPSS and Microsoft Excel to find the correlation between cough medicine advertisements on television with public self-medication actions. The indicators that affected self-medication were clear, appraised by the larger calculated *t-value* of 2.360 compared to the *t-table* value 1.988 (df = 95). The simple linear regression equation of the results is $Y = 7.618 + 0.303x$ which can be interpreted as self-medication action toward cough medicines advertised on television will increase by 0.303 (b) units for each addition of one cough medicine advertisement unit on television. The results of the correlation study were analyzed using Ms. Excel obtained the results of R count 0.298 (N = 97, alpha = 0.05), with R table 0.195 (N = 100, alpha = 0.05). Thus, it can be concluded that in Krajan Sae, Beji Village there is relationship between cough medicine self-medication and television cough medicines advertisements.



Open Access

This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, as described at <http://creativecommons.org/licenses/by/4.0/>.

INTRODUCTION

The Health is a basic thing that must be fulfilled by humans for survival. Based on [Health Law No. 36 \(2009\)](#), health is a physical, mental, spiritual and social healthy condition. Health is an element of well-being and human right that is realized in accordance with the ideals of the Indonesian people as stated in Pancasila and the 1945 Constitution of the Republic of Indonesia.

The public self-medication as an alternative to obtaining health to make time and money efficient (Meriati, Goenawi & Wiyono, 2013).

Self-medication according to the World Health Organization is an action taken to treat by taking action on its own from assessing complaints and symptoms to the selection and use of drug (World Health Organization [WHO], 1998). Self-medication is an alternative society in improving the affordability of treatment (Meriati et al., 2013). The community conducts self-medication on minor illnesses they experience, such as cough, flu, cough, diarrhea, and other (Yulianto & Ikhsanudin, 2014). Several factors influence the process of self-medication, one of which is due to the development of information and technology so that it can be accessed, both general information and health information (Izzatin, 2015).

Cough medicine is one of the drugs with the intensity of the advertisement display in many categories. Cough medicine classifies into over-the-counter medicine. Cough medicine cannot be used for all types of cough. Expectorants and antitussives are cough medicines that are often to be found in the market. The function of expectorants is to stimulate the expectoration of phlegm from the respiratory tract. While the function of mucolytic to get rid of phlegm. Thus, expectorants and mucolytic are used to treat phlegm cough. While the function of antitussives is to suppress the cough reflex that it is used to overcome dry cough (Meriati et al., 2013). Advertisement is defined as a means to present the promotion of ideas, goods or services by a particular sponsor to influence consumers. Media for advertising as in newspapers, radio, and television In advertising medicines, there are regulations. Those regulations are regulated by the Food and Drugs Supervisory Agency or Badan Pengawas Obat dan Makanan (BPOM) in Regulation Number 8 (2017), concerning guidelines for drug advertising supervision. Advertising criteria consist of 3 components which are complete, objective, and not misleading.

Television is a potential medium for delivering information and influencing the formation of one's behavior. Television is an audiovisual media that can provide information messages (Winata & Nurcahya, 2017). 94% of messages and information delivered, absorbed, and affected in television viewers and led them to remember 50% of the information conveyed with just one look (Hernawati & Palapah, 2011). Based on the Marketeers data in 2015, Indonesia

shows that television is the most frequently used media at 52.2%, internet at 42.1%, radio at 0.4%, newspapers at 5%, tabloids at 0.1% and magazines 0.2%. It shows that television is a media that often used in Indonesia. The essence of television both its content and advertisements will affect Indonesians' perceptions.

Self-medication as an alternative for the community when experiencing an illness including coughing (Meriati et al., 2013). Cough is making people selective in choosing drugs for themselves and their families. The selection of cough medicines in the community is based on several sources that are considered reliable, one of which is medicine advertising on television. Because of this, the researcher wanted to know the effect of television advertising on the selection of cough medicines in the self-medication process in the Krajan Sae Hamlet, Beji Village, Junrejo District, Batu City.

RESEARCH METHOD

This research is a descriptive study that aims to describe the facts and the nature of a particular population or area systematically, factually and thoroughly. Descriptive research can be done by taking data by giving questionnaires or surveys (Soetriono, 2007). This research approach is a quantitative approach because in this study there is a causal relationship between the independent variable and the control variable (Sugiyono, 2007).

This research is expected to give an idea of the influence of cough medicine advertisements on television concerning the selection of medicine of self-medication by the community in Krajan Sae Hamlet Beji Village, Junrejo District, Batu City. The number of samples used refers to the Slovin formula as follows. So that 97 samples were obtained in the study.

$$n = \frac{N}{1+N(d^2)}$$

Explanation:

n = sample size

N = population size

d = fault tolerance limits (Saud, Taufiq & Jalil, 2017).

The inclusion criteria in this study were individuals who lived in Beji Village, Krajan Sae Hamlet, Junrejo District, Batu City, male and female, aged over 17 years, who had taken self-medication by consuming advertised cough medicines at least one time. Those people are willing to fill in the questionnaire. The exclusion criteria are self-medication for cough

medicines with direct information sources such as consultation with family, friends, and pharmacists. And also through audio media such as radio, sources of information through print media such as newspapers, magazines, brochures, and others.

The method for gaining data collection used questionnaires in the form of open and closed question types. Before the questionnaire was distributed to respondents, the face validity, content validity, construct validity, and reliability tests were tested. Data analysis techniques used are descriptive analysis, correlation analysis, simple linear regression analysis, and analysis of partial significance tests (*t-test*) using SPSS.

RESULT AND DISCUSSIONS

Based on **Table 1**, it is known that the majority of respondents studied by sex are women (73.2%), for the age of respondents aged 26-45 years (43.3%), based on education are elementary school graduates/equivalent (49.5%), and based on work are mothers household (48.5%).

Based on **Table 2**, the results obtained are 99.0% of respondents have experienced dry cough or phlegm cough, 97.9% know the symptoms of dry cough or phlegm cough. The majority of known cough symptoms are sore throat which is 95.9% when symptoms appear immediately treated (93.5%). 56.7% bought Komix cough medicine. As many as 66.0% believe television advertisements in self-medication, and the majority of information related to cough medicines obtained apart from television is from other health workers such as doctors, nurses, and midwives (15.5%).

Based on **Table 3**, it can be seen that the results of *r-score* = 0.242 (0.05, N = 97), and the value of *r-table* (N = 100) is 0.195. Because of the value of *r-score* (0.242) > *r-table* (0.195), there is a relationship between advertised cough medicine on television and self-medication. This value is in the interval of the correlation coefficient $0.20 < |r| \leq 0.40$, which means the strength of the relationship is low or weak but certain.

Based on **Table 4**, the simple linear regression equation $Y = 7.618 + 0.303x$ is obtained. The results of the equation mean that the self-medication action toward cough medicines advertised on television will increase by 0.303 (b) units for each addition of one cough medicine advertisement unit on television.

Based on **Table 5**, shows that the three indicators that most influential on self-medication is the

Table 1. Frequency distribution of of respondent characteristics according to age, sex, education, occupation.

Characteristics	Frequency	Percentages
Age		
18-25 years old	13	13.4 %
26-45 years old	42	43.3 %
46-65 years old	35	36.8 %
>65 years old	7	7.2 %
Gender		
Male	26	26.8 %
Female	71	73.2 %
Education		
Primary school graduated	48	49.5 %
Junior high school graduated	23	23.7 %
Senior high school graduated	23	33.7 %
College graduated	3	3.1 %
Others	0	0.0 %
Occupation		
Student	6	6.19 %
Civil servant	0	0.0 %
Entrepreneur	23	23.7 %
House wives	47	48.5 %
Other	20	20.6 %
Unemployed	1	1.0 %
Total	97	100.0%

indicator are not misleading because it has the largest *t-value* of 2.360 with *t-table* 1.988 (df = 95) ($t \text{ count } 2.360 > t \text{ table } 1.998$).

Based on **Table 6**, it can be seen that the most influential from the sixth of the sub-indicators on self-medication is "language" because it has the largest *t-score* which is 1.991 (df = 95). The study was conducted concerning PKBPOM No. 8 of 2017 concerning guidelines for drug advertising supervision. There are three indicators in the questionnaire examined which include objective, complete, and not misleading (BPOM, 2017). Based on the results of this study it was found that 100% of respondents had watched and knew the cough medicine brand advertised on television. It shows that the advertising of drugs brand on television has been published by PKBPOM in 2017. Respondents remember the name or brand of this drug in line with the aim of advertising which is to make consumers always remember a certain product (Cahaya, Adawiyah & Intannia, 2018).

Based on the research results obtained as much as 59.79% answered that the cough medicine advertisements on television provide information on side effects. In fact, medicine advertisements do not provide complete information. It is a must to show the indications and names of the pharmaceutical industry. Also, they must include the side effects and contraindications (Wiedyaningsih, Primayani & Warastuti, 2011). People considered that some

Table 2. Frequency distribution of Respondents' Answers .

Questions	Frequency	Percentage
Have you ever experienced a dry cough or cough with phlegm?		
Yes	96	99.0 %
No	1	1.0 %
When was the last time you consume medicine?		
Two weeks ago	41	42.3 %
A month ago	32	33.0 %
Three month ago	15	15.5 %
Six month ago	9	9.3 %
A year ago	0	0.0 %
Do you know the symptoms of dry cough or cough with phlegm?		
Yes	95	97.9 %
No	2	2.1 %
What kind of symptoms do you know?		
Sore throat	93	95.9 %
Diarrhea	1	1.0 %
Heartburn	1	1.0 %
I don't know	2	2.1 %
Do you consume medicine right after symptoms?		
Yes	81	93.5 %
No	14	14.4 %
I don't know	2	2.1 %
Have you ever bought advertised cough medicine?		
Yes	97	100.0 %
No	0	0.0 %
What were the branded cough medicines you bought?		
Komix	55	56.7 %
Vicks Formula 44	21	21.7 %
Siladex	4	4.1 %
Konidin	10	10.3 %
Komix, Konidin	1	1.0 %
Vicks, Konidin	1	1.0 %
Komix, Vicks 44	1	1.0 %
Komix, Vicks 44, Konidin	1	1.0 %

medicine advertisements give information about side effects and some not.

Based on the research results 99.88% of cough medicine advertisements on television are attractive and influencing. As its purpose, the advertisement is to persuade and convince customers that a company's services or products are the best (Lukitaningsih, 2013)

From the finding of the study, 67.01% of respondents answered in selecting cough medicines, the television advertisements engaged them. Moreover, more than half of the respondents think that in selecting cough medicine it can be done alone by the means of advertisements on television, this assumption is supported by the results of the SPSS correlation of the two variables which are related.

The main analysis is conducted by using the Spearman Rank Correlation analysis technique to test the hypothesis of the relationship or correlation involving ordinal data (Sugiyono, 2007). The results of the analysis using SPSS 18.0 are 0.247. This value is in the interval of the correlation coefficient value

$0.20 < | r | \leq 0.40$ which means the strength of its relationship is low or weak but certain (Azizah, Darmawan & Nurani, 2017) . Based on the data of 97 respondents who have been analyzed with the results of *r-score* which is 0.298 (N = 97, alpha = 0.05), with *r-table* which is f 0.195 (N = 100, alpha = 0.05). Therefore, the value of *r-score* > *r-table* show the relationship between cough medicine in practicing self-medication with cough medicine advertisements on television in Krajan Sae Hamlet Beji Village, Junrejo District, Batu City. It is because television is the most-watched media compared to other media 52.2% (Cahaya, Adawiyah, & Intannia, 2018). The cough medicine advertisement on television is related to the preference of cough medicine in the Krajan Sae Hamlet community of Beji Village, Junrejo District, Batu City.

From the results of the regression data obtained by the results of multiple linear regression equations, which is $Y = 7.618 + 0.303x$. It means that the practice of self-medication by consuming cough medicines advertised on television increased by 0.303 (b) units for each addition of one unit of cough

Table 3. Correlation analysis.

Correlation			Advertised Medicines	Self-medication
Spearman's rho	Advertised Medicines	Correlation Coefficient	1.000	0.242*
		Sig. (2-tailed)	.	0.017
		N	97	97
	Self-medication	Correlation Coefficient	0.242*	1.000
		Sig. (2-tailed)	0.017	.
		N	97	97

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4. Simple linear regression analysis.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	7.618	0.353		21.601	0.000
swamedikasi	0.303	0.111	0.269	2.727	0.008

medicine adverts on television.

information such as the language used, interesting

Table 5. Analysis of *t*-test (partial).

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.978	1.178		0.830	0.409
Objective	0.176	0.194	0.095	0.908	0.366
Complete	0.176	0.385	0.047	0.457	0.649
Non-misleading	0.271	0.115	0.237	2.360	0.020

In complete research indicator, objective and not

Table 6. Analysis of *t*-test (partial) sub indicators.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.849	0.649		1.308	0.194
Indications	0.084	0.260	0.032	0.322	0.748
Side Effects	0.368	0.269	0.138	1.369	0.174
Information	0.561	0.355	0.161	1.582	0.117
Language	0.504	0.253	0.200	1.991	0.049
Actress	-0.081	0.290	-0.028	-0.281	0.780
Scene	0.286	0.193	0.148	1.484	0.141

misleading, a partial *t*-test was used to find out whether this indicator influenced self-medication. In the objective variable, the result of the *t*-score is 0.908 which means that $t\text{-score} < t\text{-table}$. The objective indicators on advertising do not affect the practice of self-medication. In the complete variable, it is obtained that the value of the *t*-score is 0.457 which means that $t\text{-score} < t\text{-table}$. The complete indicator of the advertisement does not affect the attitude of self-medication. In the non-misleading variable, the result of the *t*-score 2.360 means that $t\text{-score} > t\text{-table}$. The indicator is non-misleading on advertising influences self-medication practice. It proved that branded medicines and side effects were unnoticed by the community of people. They tend to engage in non-misleading advertising

scenes in advertisements, and the information related to medicine advertisements. It supported by studies in which advertised medicine information has a significant relationship with self-medication (Setiawan, Fudholi & Satibi, 2016).

As can be seen in Table 6 that of the sixth sub-indicators most influential on self-medication is the delivery language because it has the largest *t*-score which is 1.991 (df = 95). Advertising is a marketing communication tool. Advertising creates the same impression to show the difference between one product and another (Stephanie, 2013).

According to Keraf (2009), language style is the manner of expressing thoughts through language which shows the personality of the speaker. To

create good ads, ad makers choose wordings that will be used. It is important to choose words that contain language style. Besides, the meaningful words also influence will sound persuasive.

About 97 sampled respondents in this study had bought advertised cough medicine. Komix, branded medicine, is one of the cough medicines they bought 56.70%. Komix is the most preferable medicine. In another research stated that komix became the most-prescribed medicine for self-medication (Satibi, 2001). It shows that Komix advertisement is certainly persuasive (Widyatama, 2007).

According to Widyatama (2007), slogans can affect consumer's memories both audio and visual. The memorable advertising slogan of Komix is easy to remember by the community such as "little, cough, cluck" ("kecil-kecil, batuk, keok"). That is the factor most of the people attract and choose Komix. Komix good vibes ad tugged at their heart. Communication in an advertisement is also an effort to convey ideas, emotions, and desires with certain formats and variations. Thus, the striking message in the advertisement can persuade and lead people to practice self-medication in Krajan Sae Hamlet, Beji Village, Junrejo District, Batu City.

CONCLUSION

From the results of data analysis of 97 respondents, it can be concluded that there was a relationship between cough medicine in practicing self-medication and cough medicine advertisements on television in Krajan Sae Hamlet, Beji Village, Junrejo District, Batu City. The most influential indicator in the self-medication is the non-misleading indicator.

The most influential factor in cough medicine advertisements of self-medication is the language style with the highest value of t which is 1.991 in Krajan Sae Hamlet Beji Village, Junrejo District, Batu City.

REFERENCES

- Azizah, N., Darmawan, E., & Nurani, L. H. (2017). Efek Kapsul Ekstrak Etanol Kelopak Bunga Rosella (*Hibiscus sabdariffa* L.) terhadap Kadar Bilirubin Sukarelawan Sehat. *Jurnal Farmasi dan Ilmu Kefarmasian Indonesia*, 4(1), 13-18.
- Badan Pengawas Obat dan Makanan [BPOM]. (2017). *Peraturan Kepala Badan Pengawas Obat dan Makanan Republik Indonesia Nomor 8 Tahun 2017 Tentang Pedoman Pengawasan Periklanan Obat*. Jakarta, Indonesia: Authors.

- Cahaya, N., Adawiyah, S., & Intannia, D. (2018). Hubungan Persepsi Terhadap Iklan Obat Laksatif di Televisi dengan Perilaku Swamedikasi Masyarakat di Kelurahan Sungai Besar Kecamatan Banjarbaru Selatan. *PHARMACY: Jurnal Farmasi Indonesia (Pharmaceutical Journal of Indonesia)*, 14(1), 108-126-126.
- Hernawati, R., & Palapah, M. A. O. (2011). Televisi dalam Kehidupan Anak. *Prosiding SNaPP: Sosial, Ekonomi Dan Humaniora*, 2(1), 477-484.
- Izzatin, I. A. N. (2015). Persepsi Pasien Terhadap Pelayanan Swamedikasi Oleh Apoteker Di Beberapa Apotik Wilayah Surabaya Selatan. *Calypra*, 4(2), 1-15.
- Keraf, D. G. (2009). *Diksi dan Gaya Bahasa*. Jakarta, Indonesia: Gramedia Pustaka Utama.
- Lukitaningsih, A. (2013). Iklan yang efektif sebagai strategi komunikasi pemasaran. *Jurnal Ekonomi Dan Kewirausahaan*, 13(2), 116-129.
- Meriati, N. W. E., Goenawi, L. R., & Wiyono, W. (2013). Dampak Penyuluhan Pada Pengetahuan Masyarakat Terhadap Pemilihan Dan Penggunaan Obat Batuk Swamedikasi Di Kecamatan Malalayang. *Pharmacon*, 2(3), 100-103.
- Saud, M., Taufiq., Jalil, I. A. (2017). Tingkat pengetahuan masyarakat di Desa Talungen Kabupaten Bone tentang swamedikasi. *Jurnal Kesehatan*, 1(1).
- Satibi. (2011). The influence of drug information on drug selection and usage cough preparation at self medication in Godean Subdistrict. *Indonesian Journal of Pharmacy*, 12(4), 194-197.
- Setiawan, P. Y. B., Fudholi, A., & Satibi, S. (2016). Pengaruh bauran pemasaran terhadap kepuasan dan Loyalitas pelanggan produk. *Journal of Management and Pharmacy Practice*, 6(2), 115-124.
- Soetrisno. (2007). *Filsafat ilmu dan Metodologi Penelitian*. Jakarta, Indonesia: Andi Offset.
- Stephanie, E. (2013). Analisa Pengaruh Rio Dewanto Dan Donita Sebagai Celebrity Endorser Terhadap Minat Beli Produk AXE Anarchy Dengan Daya Tarik Iklan Dan Efek Iklan Sebagai Variabel Intervening. *Jurnal Strategi Pemasaran*, 1(2), 1-9.

- Sugiyono. (2007). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung, Indonesia: Penerbit Alfabeta.
- Widyatama, R. (2007). *Pengantar periklanan*. Yogyakarta, Indonesia: Pustaka Book Publisher.
- Wiedyaningsih, C., Primayani, N., & Warastuti. (2011). Medicine advertisements: evaluation and implementation of cema-community method. *Indonesian Journal of Pharmacy*, 22 (4), 286-292.
- Winata, A., & Nurcahya, I. K. Pengaruh Iklan Pada Media Televisi Terhadap Minat Beli (Studi Pada Calon Konsumen Bukalapak. com Di Kota Denpasar). *E-Jurnal Manajemen Universitas Udayana*, 6(10), 5660-5692.
- World Health Organization [WHO]. (1998). *The Role of the pharmacist in self-care and self-medication: report of the 4th WHO Consultative Group on the Role of the Pharmacist, The Hague, The Netherlands, 26-28 August 1998 (No. WHO/DAP/98.13)*. Geneva, Swiss: World Health Organization.
- Yulianto, D., & Ikhsanudin, A. (2014). Pengaruh Pengetahuan Dan Sikap Orang Tua Terhadap Swamedikasi Obat Demam Pada Anak-Anak. *Media Farmasi*, 11(2), 221-231.