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Research Article

Relationship Between Perceptions of Flu Advertisement with Self-medication Behavior in the Community of Sungai Besar Sub-district, Banjarbaru Selatan

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ABSTRACT

Flu is one of the diseases that can be treated with self-medications, and information about these drugs is often obtained through advertisements on television, which will influence self-medication behavior. The purpose of this study was to analyze the relationship between perceptions of cold medicine advertisements and self-medication behavior using cold medicines. The method used in this study was an analytic survey with a cross-sectional research design and the sampling technique used was quota sampling. The sample of this study was 94 respondents with the majority of sample aged 17-27 years, female, high school/vocational high school graduates, who work as housewives. The results showed that respondents' perceptions of drug advertisements in self-medications were 10.64 % of respondents were affected and 89. 36 % of respondents were not affected. The self-medication behavior done by the respondents was 65.96% rational and 34.04% irrational. The results of the chi-square analysis showed that there was no significant relationship between perceptions of cold medicine advertisements and self-medication behavior using cold medicines (p value = 0.225). The results of the evaluation and the completeness of advertisements for cold medicine on television showed that some advertisements for cold medicines broadcast on television were still incomplete and inappropriate. The importance of rational use of medications should be a guide in all self-medication for the safety and maintenance of public health.

INTRODUCTION

According to the World Health Organization (WHO), self-medication is treatment that is done by a person independently starting from recognizing the disease or symptoms experienced to selecting and using drugs for treatment (WHO, 1998). The prevalence of self-medication, based on factual data from the Central Bureau of Statistics or Badan Pusat Statistik (BPS, 2009), indicated that as many as 66.8% of sick people in Indonesia do self-medication as the first attempt in overcoming their illness. This percentage tends to be remarkably higher than the 33.2% of the population who go straight to the doctor for outpatient treatment. According to Basic Health Research (2013), as many as 55.5% of the proportion of households in South Kalimantan store medicines at home and this number is the highest among all provinces in Indonesia.

According to Sukasediati (2000), the most widely used source of information by the Indonesian people in conducting self-medication is advertising, especially drug advertisements on television by as many as 24-36%. The results of Nasrullah's research (2017) stated that responses obtained from respondents in the Guntung Manggis sub-district, Landasan Ulin sub-district, in Kota Banjarbaru, South Kalimantan, regarding drugs used in self-medication, as many as 35% of respondents obtained information about self-medication from print or electronic media. These results match the findings of the research conducted by Kartika (2010), which found that most of the information that influences a person's attitude in terms of

health comes from advertisements in print and electronic media, so that the provision of health information through these media should be appropriate and correct in order that people do not receive the wrong information.

Drug advertisements sometimes provide incomplete and even misleading information, which is why it is important to evaluate advertisements and their compliance with the Indonesian Minister of Health Decree issued in 1994. The main functions of television mass media such as informative, educative and recreational functions must always be considered. It is feared that advertisements for cold medicines on television without further understanding can cause medication errors in self-medication behavior in the community. The results of a study conducted by Kristina *et al.* (2008) stated that as many as 67.8% of all respondents in the Yogyakarta area were irrational in treating themselves. Self-medication that is carried out irrationally allows medication errors to occur in self-medication behavior. This unhealthy pattern of behavior is in accordance with research conducted by Sari (2018) that found 29.3% of all respondents in the South Banjarbaru sub-district pharmacy did self-medication inappropriately, which indicated that self-medication carried out by that community is still not rational.

Banjarbaru Selatan District has a total of four sub-districts, one of which is the Sungai Besar sub-district. BPS data for the City of Banjarbaru for 2016 indicated that the Sungai Besar sub-district has the largest number of households, namely 7,173 households and 34 village communities or Rukun Tetangga (RTs) compared to all of the sub-districts in Banjarbaru City. This dense population cluster underlies the need to conduct research related to the evaluation and relationship between perceptions of drug advertisements on television with the self-medication behavior of the people of Sungai Besar Village, South Banjarbaru District.

METHODS

This study used an analytic survey method (Dahlan, 2010), namely studying the relationships between variables and using a cross-sectional approach. The cross-sectional approach used in this type of research emphasizes the time of measurement or observation of the independent and dependent variables only once at the same time (Notoatmodjo, 2013). This research has also received a statement of ethical feasibility with the number 739/LEPK-FK UNLAM/EC/VIII issued by the health research ethics commission, Medical Faculty, Lambung Mangkurat University. The population of this study was all households in the Sungai Besar sub-district, while the sample in this study were Sungai Besar residents who had seen advertisements for cold medicines on television and met the inclusion and exclusion criteria.

The inclusion criteria for this study were:
(1) Being registered as a resident of the Sungai Besar sub-district can be identified through an Identity Card (KTP).
(2) Age ≥ 17 years.
(3) Ever seen an advertisement for cold medicine on television.
(4) Using cold medicines (over-the-counter drugs, limited over-the-counter drugs, traditional medicines) for oneself on a self-medication basis.
(5) Willing to be a research respondent.

The exclusion criteria for this study were:
(1) Working as a health worker and having a background in health education.
(2) Being seriously ill which will make it difficult for the respondent to communicate with the researchers.

The sample size in this study used a cross-sectional sampling formula:

$$N = \frac{Z\alpha 2 \times P\,(1-P) \times N}{d2\,(N-1) + Z\alpha\, p\,(1-p)}$$

$$= \frac{(1.96)\ 2 \times 0.555\ (1-0.555) \times 7173}{(0.1)\ 2\ (7173-1) + (1.96)2 \times 0.555\ (1-0.555)}$$

= 94 respondents.

Instruments to determine the completeness of cold medicine advertisements on television in this study included:
(1) The evaluation rubric of cold medicine advertisements on television, (source: Decree of the Minister of Health number 386, 1994), was done by the researchers with a checklist in the selected boxes.
(2) The rubric of information completeness from drug advertisements on television, (source: PKBPOM number 8, 2017), was checked by the researchers with a checklist in the selected boxes.

The instruments to determine the respondents' perceptions and self-medication behaviors in this study included:
(1) The consent form to be a respondent (informed consent), was filled in by the respondent with the instructions given by the researcher.
(2) Respondent demographic questionnaire: respondents filled out forms with instructions given by the researchers.

(3) Questionnaire on perceptions of cold medicine advertisements on television: this form was filled out by respondents with instructions given by the researchers.
(4) Self-medication questionnaire: respondents filled out forms according to what they had done during the treatment of flu and the drugs used.
The independent variable in this study was any advertisement for cold medicine on television.
The dependent variables in this study included:
(1) Perceptions of completeness of cold medicine advertisements and respondent's self-medication behavior.
(2) Perceptions of the influence of cold medicine advertisements and respondents' self-medication behavior.
Data collection carried out included:
(1) Data collection was conducted for 45 days in Sungai Besar Village, South Banjarbaru District, by meeting respondents who were in their respective homes.
(2) The researchers provided an explanation about this research, then asks for the willingness of the research object to participate in the research through an informed consent form.
(3) Collecting data to see the perceptions and behavior of respondents on self-medication which was divided proportionally according to the number of households in the Sungai Besar sub-district.
(4) Researchers interviewed respondents using a questionnaire about perceptions of cold medicine advertisements on television and self-medication behavior with cold medicines for each respondent. Then the researchers filled out a questionnaire based on the respondents' answers.
(5) Data collection to evaluate advertisements for cold medicines on television was carried out by the researchers by looking at television advertisements for cold medicines, containing at least antihistamines and decongestants, by looking at as many as five national television stations. The results of a survey of television stations that are often watched by the public was found, by looking at least 1 week at 1 television station, after that looked at the next television station. Ad showtimes were taken at 09:00-13:00 and 16:00-23:00 and the duration of the ad shown was at least 3 minutes.
Data analysis was conducted in this study, and involved evaluating public perceptions of public perception of drug advertisements on television and self-medication behavior, using descriptive analysis and presented in percentage form. The data testing was conducted to find out the relationship between perceptions of cold medicine advertisements on television and self-medication behavior. The analysis was conducted with the Chi-Square values obtained after the data were entered into the software. The hypothesis obtained from the results of the Chi-Square test was as follows:
(1) H0 = There is no relationship between perceptions of cold medicine advertisements on television and self-medication behavior.
(2) H1 = There is a relationship between perceptions of cold medicine advertisements on television and self-medication behavior.
If the p value obtained is <0.05 then H0 is rejected and H1 is accepted, it can be concluded that there is a relationship between perceptions of advertisements for cold medicines on television and self-medication behavior, otherwise if the p value is > 0.05 then H0 is accepted and H1 is rejected so it can be stated that there is no relationship between perceptions of cold medicine advertisements on television with self-medication behavior.

RESULTS AND DISCUSSION

This research was conducted as an analytic survey study with a cross-sectional design, which aimed to analyze people's perceptions in the Sungai Besar sub-district towards flu medicine advertisements on television, assess the self-medication behavior of the people in Sungai Besar Kelurahan in treating flu, find out the relationship between perceptions and self-medication behavior, and evaluating the completeness of advertisements for cold medicines on television, according to Decree of the Minister of Health number 386 (1994) and PKBPOM number 8 (2017). This research lasted for one month in Sungai Besar Village, and the sampling technique used was quota sampling. This technique is a quota sampling technique which is carried out by determining a number of sample members by quota (Notoatmodjo, 2013).

The results of the study in Table 1 show that there are more females than males, with 52.13% of female respondents and 47.87% of males. This finding is in line with research by Junaedi and Nur (2011) and Virdha (2010), which stated that the percentage of women watching television is higher than that of men. With respondents who watch television to fill their free time and fulfill entertainment needs, the more often someone watches television, the more often they watch advertisements on television.

Table 1. Distribution of the characteristics of respondents in Sungai Besar Village.

No.	Characteristics of Respondents	Amount (n)	Percentage (%)
1.	Age		
	17-27 years	36	38.30
	28-37 years	16	17.02
	38-47 years	23	24.47
	48-60 years	19	20.21
	Total	**94**	**100**
2.	Gender		
	Female	49	52.13
	Male	45	47.87
	Total	**94**	**100**
3.	Last education		
	Elementary school	15	15.96
	Junior high school	15	15.96
	Senior High School	40	42.55
	College	24	25.53
	Total	**94**	**100**
4.	Work		
	Doesn't work	18	19.15
	Housewife	30	31.91
	Government employees	25	26.60
	Self-employed	21	22.34

The results of Kristina's research (2010) showed that female respondents were more involved in self-medication behavior, because women provided more information than men, amounting to 69.7% and men amounting to 30.3%. Also, generally, the women were able to carry out treatment for their family members compared to male respondents, and this will affect their self-medication behavior.

The majority of respondents who had seen advertisements for cold medicines on television and used cold medicines on a self-medication basis based on Table 1 were respondents who had completed high school education at 42.55%. This is consistent with research conducted by Mahsud (2013), that found the majority of respondents who watch television to relax and fill their free time in Makassar city are dominated by respondents with the last education graduated from high school (59.4%). According to Supardi and Raharni (2006), respondents with the last education level of SMA or equivalent are included in the category of continuing education. As explained in previous studies, people with a good level of education have a higher prevalence of self-medication (Gupta *et al*., 2011). Most people with this level of education use over-the-counter medicines for the treatment of minor illnesses (Islam, 2007).

The results of the research based on Table 1 explain that in the occupational category the majority of respondents who had seen advertisements for cold medicines on television and used cold medicines on a self-medicated basis were housewives at 31.91%. This is consistent with research conducted by Rumambi *et al.* (2013), that found housewives tend to spend a lot of time at home (83 hours per week), most of their time is spent watching television compared to work, and television media is still considered a favorite media compared with print media. Research conducted by Fauzia (2014) in Purwakarta found many housewives carry out self-medication on the grounds that they do not need to waste money paying for transportation to the Puskesmas, when they are sick the medicines they need can be easily found locally, and the prices are affordable with information sources. through television commercials.

Perceptions regarding the completeness of cold medicine advertisements are a person's perspective on drug advertisements on drug

television which greatly influences the information received.

The results of measuring perceptions of the completeness of cold medicine advertisements, respondents in Sungai Besar Village, showed that respondents' perceptions were 90.43% appropriate and 9.57% inappropriate (Table 2). The respondent's perception is said to be incomplete if the score obtained on the questionnaire statement ranges from 6 -15, and if the resulting score ranges from 16-24, then the respondent's perception is said to be complete. As an example, it can be seen in Appendix 8 of the 4th statement, the respondent agrees that information about the rules for using drugs must be in the drug advertisements that are broadcast on television. The impact if there is a misperception of the completeness of drug advertisements, namely the information received is incomplete and can even be misleading, therefore consumers have the right to accurate information from advertisements, namely correct, clear and honest information regarding the condition of goods or services (Turisno, 2012).

Perceptions of cold medicine advertisements are a person's point of view of drug advertisements on television which are very influential in decision making.

The results of measuring the perception of flu medicine advertisements by respondents in Sungai Besar Village towards flu medicine advertisements on television (Table 3), showed that 10.64% of respondents were affected by advertisements and 89.36% unaffected by advertisements. Respondents are said to be unaffected by advertising if the score obtained on the questionnaire statement ranges from 10-25, and if the resulting score ranges from 26-40, then the respondent is said to be affected by the advertisement. The impact if there is a wrong perception of drug advertisements includes several outcomes, namely excessive use of drugs, use of drugs in conditions that do not really need drugs, wrong selection of over-the-counter drugs, use of drugs by people who are not supposed to use them, and mistaking the side effects of a drug as a symptom of another disease (Turisno , 2012).

Table 2. The results of measuring perceptions regarding the completeness of flu medicine advertisements by respondents in Sungai Besar Village towards flu medicine advertisements on television

Perception of advertising	Frequency	Percentage (%)
Complete	85	90.43
Incomplete	9	9.57
Total	**94**	**100**

Table 3. Results of measuring perceptions of the influence of flu medicine advertisements by respondents in Sungai Besar Village on flu medicine advertisements on television

Perception of advertising	Frequency	Percentage (%)
Affected	10	10.64
Not affected	84	89.36
Total	**94**	**100**

Table 4. Results of measuring the rationality of self-medication for cold medicine in the community in Sungai Besar Village.

Self-medication Behavior	Frequency	Percentage (%)
Irrational	32	34.04
Rational	62	65.96
Total	**94**	**100**

Table 5. Completeness results of cold medicine advertisements on television based on PKBPOM number 8 year (2017).

No.	Flu Drug Ads	Conclusion
1.	Flu Drug Ads a	incomplete
2.	Flu Drug Ads b	incomplete
3.	Flu Drug Ads c	incomplete

Self-medication is said to be rational if the use of drugs for self-medication meets the six criteria for rational drug use, including accuracy of drug indication, accuracy of drug dosage, absence of drug side effects, absence of contraindications, absence of drug interactions, and absence of polypharmacy or the use of two or more types of drugs that have the same indication. Table 4 shows the results of measuring the rationality of self-medication in the community in Sungai Besar Village.

Based on the results shown in Table 4, the majority of people in Sungai Besar Village (65.96%) self-medicate using cold medicines rationally. According to Harahap *et al.* (2017) respondents who self-medicated were categorized as rational at 59.4%, and research by Sudjaswadi *et al.* (2008) stated that most respondents in Sleman district had rational self-medication behavior of 67.8%. Promotion of rational drug use in the form of effective communication, information and education through various media needs to be continuously provided by health workers, so that people's rational self-medication behavior will increase.

Advertising equipment is regulated by Decree of the Minister of Health Number 386/SK/4/1994 concerning Advertising of Over-the-Counter Drugs, Traditional Medicines, Cosmetics, Food and Beverages, Household Health Supplies, and Medical Devices, which states that information regarding medicinal products in advertisements must comply with established criteria. These criteria are objective, complete and not misleading. The advertisements obtained in this study were as many as three advertisements aired at 10.00 and 13.00 WITA, on as many as three different television stations. Based on the results of observations made by researchers, referring to the Decree of the Minister of Health number 386 (1994) and PKBPOM number 8 (2017), advertisements for cold medicines shown on television are inappropriate and incomplete. The results of the completeness of cold medicine advertisements on television based on PKBPOM number 8 year (2017) can be seen in Table 5.

Based on the results of the observations made by the researchers referred to the information completeness rubric of the cold medicine advertisements on television, as many as three cold medicine advertisements aired on television at 10.00 and 13.00 WITA, with as many as three different television stations and different types or advertisements for the cold medicine. Complete information from drug advertisements (PKBPOM number 8 of 2017) for cold medicine advertisements that are aired is still lacking because they do not include the name of the active substance, do not include whether there are contraindications, and do not include whether there are side effects from the use of drugs contained in cold medicine advertisements.

According to Turisno (2012), most drug advertisements carry misleading messages due to incomplete information, advertisements only provide half-truths, namely they do not convey risks in the form of negative reality but only convey things that are seen as positive. Drug advertisements that carry incomplete messages are misleading information, and as a result, the impact is excessive drug use, drug use in conditions where drugs are not actually needed, selection of over-the-counter drugs is wrong, drug use by people who are not supposed to use it, and assuming side effects of a drug medication as a symptom of another disease.

Data from the chi-square analysis of the relationship between perceptions of the completeness of cold medicine advertisements and self-medication behavior and the relationship between perceptions of the influence of cold medicine advertisements and self-medication behavior using cold medicine, in the people of Sungai Besar Village can be seen in Table 6.

The results of the chi-square analysis are shown in Table 10 (p value = 0.152 > 0.05) and (p value = 0.090 > 0.05). If the p value obtained is <0.05 then the null hypothesis (H0) is rejected and H1 is accepted, and as a result, it can be it can be concluded that there is a relationship between perceptions of advertising for flu medicine on television and self-medication behavior. Meanwhile, conversely if the p value > 0.05 then H0 is accepted and H1 is rejected, so it can be stated that there is no relationship between perceptions of advertising for flu medicine on television with self-medication behavior.

Table 6. The results of the chi-square analysis of the relationship between perceptions of completeness and the influence of cold medicine advertisements and self-medication behavior using cold medicines in the community in Sungai Besar Village.

Perception	**Self-medication Behavior**		***p value***
	Rational	Irrational	
Complete	58 %	27 %	0.152
Incomplete	4 %	32 %	
Perception	**Self-medication Behavior**		***p value***
	Rational	Irrational	
Affected	9 %	1 %	0.090
Not affected	53 %	31 %	

The results of the chi-square analysis can be concluded that there is no relationship between perceptions of completeness of advertisements and the influence of cold medicine advertisements on the self-medication behavior of people who use cold medicines because of the value (*p* value > 0.05). These results indicate that it is not only the perception factor that influences the community in carrying out self-medication, but there are other factors, for example, sociodemographic factors and knowledge. This is not in line with research conducted by Adawiyah *et al.* (2017), that found there is a significant relationship between perceptions of advertising and self-medication behavior with *p* value = 0.000.

According to research conducted by Dianawati *et al.* (2008), perceptions of drug advertisements on television have a significant influence on adolescent self-medication behavior in Surabaya, Indonesia. If the perception of drug advertisements becomes stronger, then the self-medication behavior that is done will show indications of even greater deviations. According to Wuryaningsih (2008), perception is a physiological factor that has an important role in influencing a person's behavior. The participation of the community (consumers), producers (business actors), and the POM Agency is needed to increase rational self-medication behavior. Consumers should be careful in receiving drug information presented through advertisements on television, must study it properly so that they are not easily influenced which results in deviant self-medication behavior, the closest health workers and producers as business actors, should provide clear, accurate information, and adequately depict risks and benefits without dishonesty to consumers because consumers have the right to these facts. Many factors influence the choice of self-medication, including knowledge, a person's sociodemographics, urgent medical needs, first aid for sick patients, low economy, lack of health services, lack of public trust in medical personnel, the influence of information from advertisements, and availability of medicines that are easy to obtain at varied prices as well as the uneven access to healthcare services, especially in remote areas (Phalke *et al.*, 2006).

CONCLUSIONS

Respondents' perceptions in the Sungai Besar sub-district regarding the completeness of advertisements for cold medicines on television were categorized as completely affected by as many as 90.43% of respondents while 89.36% of respondents were not affected by advertisements. Respondents' self-medication behavior in Sungai Besar subdistrict in treating flu was categorized as rational by 65.96% of respondents and irrational by 34.04% of respondents. Based on the respondents in this study, there is no relationship between perceptions of the completeness of advertising and self-medication behavior using cold medicine with a p-value = 0.152 and there is no relationship between perceptions of the effect of advertising and self-medication behavior using cold medicine with a p-value = 0.090. However, the importance of rational use of medications should be a guide in all self-medication for the safety and maintenance of public health.

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CONFLICT OF INTEREST

The author declares there is no conflict of interest and equivalent.

REFERENCES

Dahlan, M.S., 2010. Besar Sampel dan Cara Pengambilan Sampel. Salemba Medika, Jakarta.

Dianawati, O., Fasich F., and Athijah, U., 2008. Hubungan persepsi terhadap iklan di televisi dengan perilaku swamedikasi pelajar SMU Negeri di Surabaya. *Majalah Farmasi Airlangga*, 6(4), 10-16.

Fauzia, R., 2014. Faktor yang Mempengaruhi Perilaku Pengobatan Sendiri pada Kelompok Ibu Rumah Tangga di Kabupaten Purwakarta Tahun 2014. [Skripsi]. Fakultas Kedokteran, Universitas Islam Bandung.

Gupta, P., PBobhate, P.S., and Shrivastava, S.R., 2011. Determinants of self-medication practices in an urban slum community. *Asian Journal Pharmaceutical and Clinical Research*, 4 (2), 113 – 119.

Harahap, N.A., Khairunnisa, K. and Tanuwijaya, J. 2017. Tingkat pengetahuan pasien dan rasionalitas swamedikasidi tiga apotek Kota Panyabungan. *Jurnal Sains Farmasi & Klinis*, 3(4), 186-192.

Islam, M. S., 2007. Self-medications among higher educated population in Bangladesh: An email-based exploratory study. *The Internet Journal of Health*, 2 (4), 140 – 149.

Junaedi, F. and Nur R., T.H., 2010. Banalitas Informasi dalam Jurnalisme Infotainment di Media Televisi dan Dampaknya Terhadap Penonton Infotainment. *Jurnal Komunikasi*, *4*(2), 131–142.

Kartika, I., 2010. Pengaruh media periklanan terhadap pengambilan keputusan siswa smu untuk mendaftar di Universitas Kristen Maranatha: sikap konsumen sebagai variabel moderasi (studi kasus siswa SMU di Bandung). *Jurnal Bisnis dan Ekonomi (JBE),* 2(4) ,109-120.

Kristina, S.A., Prabandari. Y.S., and Sudjaswadi, R., 2008. Perilaku pengobatan sendiri yang rasional pada masyarakat Kecamatan Depok dan Cangkringan Kabupaten Sleman. *Majalah Farmasi Indonesia*, 2 (4), 200-218.

Mahsud, R. 2013. Pola Menonton Televisi Lokal pada Pemirsa di Kota Makassar. [Skripsi], Program Studi Ilmu Komunikasi, Universitas Hasanuddin, Makassar.

Nasrullah, 2017. Studi Observasional Pola Swamedikasi Masyarakat Guntung Manggis Kecamatan Landasan Ulin. [Skripsi]. Program Studi Farmasi. Universitas Lambung Mangkurat. Banjarbaru.

Notoatmodjo, S., 2010. Ilmu Perilaku Kesehatan. Penerbit Rineka Cipta, Jakarta.

Peraturan Kepala Badan Pengawasan Obat dan Makanan., 2017. Pedoman Pengawasan Periklanan Obat. BPOM RI, Jakarta.

Phalke, V.D., Phalke, D.B. and Durgawale, P.M., 2006. Self-medication practices in rural Maharashtra: An epidemiological study of cigarette smoking among male college students of Delhi University. *Indian Journal of Community Medicine,* 31(1), 34-35.

Rumambi, L. J., Kaihatu, T.S., and Djati, S. P., 2013. Membidik Pasar Ibu di Indonesia: Sebuah Kajian Efektivitas Pemilihan Media Beriklan. Staf Pengajar, Fakultas Ekonomi, Universitas Kristen Petra, Surabaya.

Sari, N.P., 2018. Analisa Kesalahan Pengobatan Sendiri pada Responden Apotek di kecamatan Banjarbaru utara kota banjarbaru. [Skripsi]. Program Studi Farmasi. Universitas Lambung Mangkurat. Banjarbaru.

Sudjaswadi, R., 2008. Perilaku Pengobatan sendiri di Kabupaten Sleman. *Majalah Farmasi Indonesia,* 19 (4), 32-40.

Sukasediati, N., 2000. Peningkatan Mutu Pengobatan Sendiri Menuju Kesehatan untuk Semua. Puslitbang Farmasi, Badan Litbangkes, Jakarta.

Turisno, B.E., 2012. Perlindungan konsumen dalam iklan obat. MMH. Jilid 41 No. 1.

World Health Organization. 1998. The Role of The Pharmacist in Self Medication. WHO, The Hague.

Wuryaningsih, T. 2008. Hubungan Antara Pengetahuan dan Persepsi Dengan Perilaku Masyarakat dalam Pemberantasan Sarang Nyamuk Demam Berdarah Dengue (Psn Dbd) di Kota Kediri. [Tesis]. Program Pasca Sarjana, Universitas Sebelas Maret, Surakarta.