

Why do people choose to purchase generic antibiotics?

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Abstrak

Latar Belakang: Penggunaan obat generik pada pengobatan infeksi dapat menghemat biaya pengobatan dan membantu masyarakat untuk memperoleh obat yang baik dengan harga terjangkau. Tujuan penelitian ini untuk mengetahui faktor dominan faktor yang mempengaruhi masyarakat membeli antibiotika generik.

Metode: Sampel pada penelitian potong lintang ini terdiri dari pasien yang membeli antibiotika generik dan non generik di dua apotek di Purwokerto (Jawa Tengah). Data yang dikumpulkan memakai kuesioner yang berisi pertanyaan beberapa karakteristik subjek, pertimbangan harga, pengalaman penggunaan antibiotika generik sebelumnya, dan asal informasi pemilihan antibiotika generik/non generik. Wawancara dilakukan pada bulan Maret 2010 pada jam kerja apotek pukul 8 pagi sampai 9 malam WIB terhadap subjek yang baru saja membeli antibiotika generik dan antibiotika non generik. Regresi Cox digunakan untuk mengetahui faktor dominan terhadap pembelian antibiotika generik.

Hasil: Di antara 100 responden, 71% subjek membeli antibiotik generik. Subjek yang membeli dan tidak membeli antibiotika baik generik maupun non generik terdistrusi sama dalam hal jenis kelamin, tingkat pendapatan, tingkat pendidikan, dan sumber informasi untuk membeli obat antibiotika generik dan non generik. Pertimbangan harga merupakan faktor dominan untuk membeli obat antibiotik generik. Subjek yang memperimbangkan harga memiliki kemungkinan tiga kali lebih besar untuk membeli antibiotika generik dibandingkan yang tidak memperimbangkan harga [risiko relatif (RR) =2.94; 95%CI=1, 64-5, 29).

Kesimpulan: Faktor harga menjadi alasan pasien membeli antibiotik generik di Purwokerto. Hal ini merupakan masukan bagi pemerintah untuk menetapkan strategi lain guna meningkatkan penggunaan antibiotik generik. (*Health Science Indones 2010; 1: 33 - 36*)

Kata kunci: harga, antibiotika, generik, non generik

Abstract

Background: Generic antibiotics use help community to get economic infectious diseases threat. The study aimed to analyze dominant factors that influence community to purchase generic antibiotics.

Methods: Subjects of this cross sectional study were patients who purchased generic and non generic antibiotics in two selected private pharmacies in March 2010. We were collected information on several characteristics of subjects, price consideration, generic antibiotics experiences, and information resource before purchased generic and non generic antibiotics. Data was collected in pharmacy working hours. Cox regression was used to identify dominant risk factors on consideration to purchase generic antibiotics.

Results: Most of subjects were females, low to moderate income. Out of 100 subjects who participated in this study, 71% subjects purchased generic antibiotics. Those who bought generic and non generic antibiotics were similarly distributed with respect to gender, income level, education level, and information resource for purchasing generic and non generic antibiotics. Those who used price consideration had almost 3 fold to purchased generic antibiotics compared to who did not use price consideration [crude relative risk (RR) =2.94; 95%CI=1.64-5.29].

Conclusion: Price consideration influences patient's decision to purchase generic antibiotics. This result can be important information for government to conduct another strategy to increase generic antibiotics use. (*Health Science Indones 2010; 1: 33- 36*)

Key words: price, antibiotic, generic, non generic

The government has been conducted various effort to increase generic medicines use, namely by legalization of national policy, prescription practices by physicians, brand loyalty, and regulatory and reimbursement systems, including retail pharmacy regulation and practices.¹ This strategy decided to reduce drugs cost in order to increase cost savings in health sector.¹ In addition, to provide affordable health care for communities.² In spite of the government effort, several people purchase non generic antibiotics, because those people thought that non generic antibiotics had better quality than generic ones.³

Green's theory which quoted in Wong, Alsagoff and Koh study said that there are predisposing, enabling and reinforcing factors that influence health seeking behaviour.⁴ Predisposing factor consists of knowledge, attitudes, belief, and values. Personal skills, time, money, and community resources are including in enabling factor. Reinforcing factor is a factor adopted following behavioral change, divided into reward, incentives and punishment with their contributions to persistence or extinction of that new behavior.

Related to Green theory, a Malaysian study showed that the lack of Malaysian consumer's awareness of generic medicines, their willingness and the reasons behind their choice influenced by lacking of their knowledge about generic medicines.⁵

Indonesia still had limited studies of factors that influence patients to purchase generic and non generic antibiotics. Therefore, it is important to presents factors which influence patients to purchase generic and non generic antibiotics.

METHODS

The subjects of this cross sectional study were purposive selected patients who purchased generic and non generic antibiotics in two pharmacies at Purwokerto District, Central Java. Data collection conducted in March 2010 during working hours from 8 AM to 9 PM local time.

We asked patient who just bought generic as well as non generic antibiotic to participate in the study. Those who agreed to participate in the study were asked to fulfill the questionnaire in comfort area inside/outside of pharmacy.

We used a questionnaire consisted of seven closed questions: age, gender, income level, education level, price consideration, and generic antibiotics experience and information resource before purchasing generic and non generic antibiotics. We assisted subjects who had difficulties in answering the questions.

For the analysis, age divided into 3 subgroups (16-30, 31-44, and 45-60 years); income level (high=Rp 1,200,000 or more/month, moderate=Rp. 600,000 - 1.200.000/month, and low (less than Rp. 600,000/month); education level low=primary and junior high school, moderate=senior high school, high=bachelor degree or higher).

Price consideration is a financial factor that include in respondent consideration before purchasing generic and non generic antibiotics (yes or no). Generic antibiotics experience is generic antibiotics previous consumption experiences that respondent had (yes or no).

Information resource for purchasing generic and non generic antibiotics was external resource that gave information's to subjects before purchasing generic and non generic antibiotics (into friends, relatives, doctor or pharmacist).

We used Stata released 9 software for data analysis.⁷ Cox regression is used to identify dominant risk factors related to purchasing generic and non generic antibiotics.⁸

RESULTS

We had 100 subjects participated in this study. Table 1 shows that majority subjects purchased generic antibiotics (71%) compare to non generic (29%). Most of the subjects were females (54.9%), low and moderate income level (39.4% for each), and moderate education level (42.3%). Most subjects took price consideration before purchasing generic antibiotics (80.3%). Most of subjects did not

have experiences with previous generic antibiotics consumption (59.2%).

Those who bought generic and non generic antibiotics were similarly distributed with respect to gender, income level, education level,

and information resource for purchasing generic and non generic antibiotics.

Those who used price consideration had almost 3 fold to purchased generic antibiotics compared to who did not use price consideration [crude relative risk (RR) =2.94;

Table 1. Risk factor for purchasing generic and non generic antibiotics in Purwokerto

	Non generic antibiotics		Generic antibiotics		Crude Relative risk	95 % confidence intervals	P
	n=29	29%	n=71	71 %			
Age (years)							
16-30	12	41.4	21	29.6	1.00	Reference	
31-44	7	24.1	25	35.2	1.22	0.68-2.19	0.488
45-60	10	34.5	25	35.2	1.12	0.62-2.00	0.696
Gender							
Male	13	44.8	32	45.1	1.00	Reference	
Female	16	55.2	39	54.9	0.99	0.624-1.59	0.990
Income level							
Low	12	41.4	28	39.4	1.00	Reference	
Moderate	10	34.5	28	39.4	1.05	0.62-1.77	0.848
High	7	24.1	15	21.1	0.97	0.52-1.82	0.934
Education level							
Low	8	27.6	22	31.0	1.00	Reference	
Moderate	14	48.3	30	42.3	0.92	0.53-1.61	0.795
High	7	24.1	19	26.8	0.99	0.53-1.84	0.991
Price consideration							
No	28	96.6	14	19.7	1.00	Reference	
Yes	1	3.4	57	80.3	2.94	1.64-5.29	0.000
Generic antibiotics experiences							
No	19	65.5	42	59.2	1.00	Reference	
Yes	10	34.5	29	40.8	1.07	0.67-1.73	0.750
Information resource for purchasing generic and non generic antibiotics							
Friends	3	10.3	13	18.3	1.00	Reference	
Relatives	11	37.9	32	45.1	0.91	0.48-1.74	0.789
Doctor/pharmacist	15	51.7	26	36.6	0.78	0.40-1.51	0.466

DISCUSSION

The limitations of study were the pharmacies and subjects were purposively selected. Secondly, respondent's knowledge on generic antibiotics was not measured. In spite of this limitation, the study was a primary research to identify the risk factors influencing generic and non generic antibiotics consumption. This result might become an additional reference to support

another study that focus in generic and non generic antibiotic consumption.

The results of this study was similar to the study of Thomas and Vitry in Malaysia that middle age (31-59 years), female, and secondary school has higher percentage as generic antibiotic buyers.⁵

Our study found that subject's price consideration on generic antibiotics had lower price than non generic similar with Choudry

et al. They said that subjects will choose generic medicine if its price less expensive than branded one.⁹ The reason for generic antibiotics had less expensive price so that a lot of people buy generic medicines similar to Al-Gedadi, Hassali and Shafie AA.¹⁰ However, a study by Thomas and Vitry as well as Al-Gedadi et al. show there was a lack of generic antibiotic knowledge although they already bought generic antibiotics.

Furthermore, knowledge of generic medicines would be better to get involved in other studies in Indonesia. Thomas and Vitry study noted that consumers with generic medicines experience give positive response to generic antibiotics use. On the other side, this result is different with another study that showed experiences with generic medicines might reduce purchasing them. Perhaps there was a negative experience with generic medicines.¹⁰ In conclusion, price consideration influences patient's decision to purchase generic antibiotics in Purwokerto.

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