

Preference Of Pharmacies Selection And OTC Medicine Purchase With Customer Segmentation Approach: A Case Study In Magelang

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Abstract: The rapid growth of the pharmacy business at this time, making competition in this line of business become increasingly stringent. The consumer is a source of income for the pharmacy and is the most important factor that must be taken seriously. Therefore, the desires and needs of consumers must be met by the pharmacy as a service provider in order to influence consumers in repurchasing. This study aims to investigate consumer preferences in choosing pharmacies and over-the-counter (OTC) drugs. A cross-sectional study was conducted between November-December 2018 with a convenience sampling, 164 participants recruited in the Magelang, Indonesia. The main instrument used for data collection is structured questionnaire. Data analysis were used Chi Square test and descriptive statistic. The finding of these result are the profile of pharmacies selection and over-the-counter medicine purchases in pharmacies consumers shows that there is no significant difference in each segmentation. it can be concluded that pharmacies consumers in Indonesia have same perception within choose the pharmacies and OTC purchase. Therefore, there needs to be a marketing strategy related to these elements.

Index Terms: Pharmacies Selection, Customer Segmentation and OTC

1. INTRODUCTION

Patient demands on the quality of pharmacy services, require a change of service from the old paradigm to the new paradigm with the philosophy of pharmaceutical care from drug oriented to patient oriented to improve the quality of life of patients [1]. Consumers (patients) are a source of income for the company and the most important factor that must be taken seriously, therefore, the desires and needs of consumers must be met by the company [2]. Twenty-five percent of the patient's recovery is expected to be obtained from the comfort and good pharmacy services, while 75% comes from the drug the patient is using [3]. One of the reasons why customers come to the pharmacy is a prescription that must be redeemed at the pharmacy. Outpatients are one of the biggest sources of income, but it is important for pharmacies if supported by the sale of non-prescription sales (OTC drugs) [4]. This is supported by data from the Ministry of Health of the Republic of Indonesia in 2012, where 44.14% of Indonesians seek self-medication. The results of the 2013 Basic Health Research recorded that out of 294.959 households in Indonesia, 103.860 (35.2%) households stored medicines for self-medication [5]. The Indonesian Central Statistics Agency in 2009 recorded 66% of sick people through self-medication, a higher percentage than the other population who went directly to see a doctor [6]. These results indicate that the consumption of OTC drugs is more than prescription drugs. Increasing the number of consumers who buy drugs at pharmacies has a positive impact on efforts to increase profits and improve service quality. Therefore, it is important to improve the management of pharmacy services in providing services to consumers [7]. A large number of competitors results in intense business competition, so marketing strategies must be carried out by innovating to attract consumers [8]. Consumer behavior is very important for marketing pharmacists to know, because consumers are the goal of the product produced. Each consumer has different needs and revenues so it needs to be clarified target segments, as well as how their behavior. Consumer behavior is influenced by various walks of life in which he was born and raised. This means consumers from different strata of society will have different needs, opinions, attitudes and tastes [2].

According to the literature, community pharmaceutical market segmentation, based on customer behavior, the influence of OTC purchases and repurchases, as well as consumer demographic characteristics that can conclusively contribute to the development of efficient market strategies [9]. However, only a few studies classify them into clusters and compare the level of selection of pharmacy and OTC purchases in each cluster. Therefore, This study aims to investigate consumer preferences in choosing pharmacies and over-the-counter (OTC) drugs based on the division of each cluster.

2 MATERIALS AND METHODS

2.1 Study Design and Data Collection

This research is a quantitative research. A cross-sectional study was conducted on November-December 2018 in Magelang, Central Java, Indonesia with the convenience sampling. The sample of this study 164 respondents with inclusion criteria were pharmacy customers aged >17 years. The sample is grouped based on customer profiles which are divided into 3 clusters: cluster 1 consists of student or either employed, younger consumers, high or low income, high level of education, buy from various pharmacy, know probably what they need when purchase OTC and formal relationship with workers; cluster 2 consists of retired with moderate income, buy from a single pharmacy, moderate to low education, know absolutely what they need when buying OTC and close relationship with the staff; cluster 3 consists of retired or jobless with moderate to low educational degree, revenue and tend to make schedule purchases of OTC [9].

2.2 Survey Instrument

The research were used questionnaire adapted from Kevrekidis et al [9]. The structured questionnaire contains three section: the first section contained sociodemographic profile; the second section included questions about factors that may influence determinant pharmacy selection; the third section consisted of questions that assessing the factors that influence the purchasing of OTC medicines. Finally, they were asked to rate the degree from 1 (fully disagree) to 4 (fully agree) on a 4-point likert scale.

2.3 Data Analysis

Data analysis were used SPSS 21 version software with Chi Square test and descriptive statistic. In order to present in a measurable manner the preferences of consumers regarding the choice of pharmacy and OTC medicines. The means and standar deviation value of each element is mentioned in the second and third part of the questionnaire was related to their preference responses.

3 RESULT

TABLE 1. SOCIODEMOGRAPHIC PROFILE

Demographic Variables	N (%)
Gender	
Female	100 (60.97)
Male	64 (39.0)
Age (In years)	
18-25	93 (56.7)
26-35	22 (13.4)
36-45	20 (12.2)
46-55	21 (12.8)
56-65	4 (2.4)
>65	4 (2.4)
Educational level	
Elementary school	14 (8.5)
Junior High School	11 (6.7)
Senior High School	91 (55.5)
Diploma/ Bachelor	48 (29.3)
Occupation	
Student	68 (41.5)
Government Employed	16 (9.8)
Entrepreneur	24 (14.6)
Privat Employed	28 (17.1)
Farmer	12 (7.3)
Unemployed	16 (9.8)
Monthly personal income	
< 1.500.000	114 (69.5)
1.500.000-2.500.000	26 (15.9)
2.500.000-3.500.000	7 (4.3)
> 3.500.000	17 (10.4)

TABLE 2. SELECTION OF PHARMACY AND PURCHASE OF OTC MEDICINES PREFERENCES

Question	Overall N=164	C1 N=108	C2 N=40	C3 N=16	Sig.
Selection of pharmacy					
I tend to make my purchases in a single pharmacy:					
Yes, always	24	13	9	2	
Yes, most of the	60	43	13	4	0,398
No, I make my purchases in various pharmacies	80	52	18	10	

Relationship with the pharmacy staff:

I want it to be familiar	45	25	14	6	
I want it to be formal	98	68	23	7	0,346
I don't want the staff to recognize me	21	15	3	3	

OTCs purchase

When I purchase an over-the-counter medicines, usually:

I know exactly what I need	49	35	11	3	
I know approximately what I need	99	63	24	12	0,708
I don't know what I need	16	10	5	1	

When I am in a pharmacy, I tend to make unscheduled purchases of over-the-counter medicines:

Yes, often	18	11	7	0	
Yes, sometimes	111	77	21	13	0,124
Never	35	20	12	3	

Between various over-the-counter medicines with the same use, usually pick one specific product:

One specific product	73	49	15	9	
Some product randomly	81	53	22	6	0,763
A different product each	10	6	3	1	

TABLE 3. IMPORTANCE OF FACTORS INFLUENCING THE SELECTION OF PHARMACY

Selection of pharmacy	Overall		C1		C2		C3	
	M	SD	M	SD	M	SD	M	SD
Pharmacy's location	1,80	0,40	1,57	0,58	1,78	0,80	2,06	1,36
Pharmacy's staff	1,81	0,10	1,79	0,70	1,70	0,52	1,94	0,70
Drug Availability	1,57	0,04	1,49	0,65	1,60	0,71	1,63	0,64
Additional services	1,48	0,02	1,52	0,6	1,55	0,64	1,38	0,62
Membership program	2,27	0,18	2,13	0,82	2,05	0,71	2,63	1,06
Confidentiality	1,55	0,10	1,46	0,62	1,55	0,55	1,63	0,74
Store's atmosphere	1,41	0,09	1,42	0,55	1,30	0,46	1,50	0,63
Opening hours	1,84	0,19	1,67	0,71	1,78	0,70	2,06	1,03

TABLE 4. IMPORTANCE OF FACTORS INFLUENCING THE PURCHASE OF OTC MEDICINES

OTCs Purchase	Overall		C1		C2		C3	
	M	SD	M	SD	M	SD	M	SD
Drug's country of origin	1,74	0,28	2,54	0,92	2,18	0,75	2,50	1,30
Manufacturing company	2,08	0,23	2,19	0,69	1,98	0,42	2,06	0,88
Packaging	2,00	0,10	1,95	0,73	1,98	0,66	2,06	0,85
Experience of a previous use	1,87	0,07	1,79	0,66	1,75	0,71	2,06	0,80
Product's advertisement	2,26	0,15	2,42	0,82	2,30	0,65	2,06	0,52
Pharmacist's opinion	1,72	0,06	1,81	0,63	1,78	0,58	1,56	0,52
Family's/friends' opinion	2,13	0,04	2,19	0,69	2,13	0,72	2,06	0,65
Product's price	1,94	0,01	1,98	0,76	2,03	0,77	1,81	0,77

4 DISSCUSION

4.1 The selection of pharmacy

In this case also affects the management service quality that is applied to create strategies that are able to influence the patient's decision in choosing a pharmacy. Based on Table 3 , there are several factors that influence a person in choosing a pharmacy. Most respondents choose a pharmacy based on membership program. This is in accordance with the research of Peter [10] which states that membership program in the form of member card is a form of relationship marketing to increase customer loyalty. These results are similar to the results of Magnus Söderlund [11] in which the existence of membership status can increase ownership and customer satisfaction. The second factor is opening hours, this result is proven by the influence of opening hours on the satisfaction of participants BPJS (Social Security Organizing Agency) Health [12]. These results are similar to research conducted in Ethiopia which states that clinic opening hours significantly influence client satisfaction in family planning services [13]. The next factor is the pharmacy officer, one of the factors consumers in choosing a pharmacy is the service provided to consumers, services can be in the form of reality, sympathy, reliability, responsiveness and certainty. In research on service management to customer satisfaction at pharmacies in Bandung stated satisfaction with customer service makes them will always come to the pharmacy, will always use the service and tell the goodness and recommend pharmacies to families and others [14]. These results are supported by research Francesca Wirth [15] where around 44% of consumers choose a pharmacy based on the sympathy and friendliness of pharmaceutical service officers. The overall opening hours to be the second reason most consumers in selecting pharmacies to be visited, these results are in accordance with clusters 2 and 3. However, different from cluster 1 which argues that the availability of drugs is the second most choice. The same results were shown by the selection of membership programs and pharmacy's staff being the first and third most reasons in each cluster.

4.2 Purchase of over-the-counter medicines

The number of pharmaceutical companies in Indonesia has an

impact on the increasing number and types of drugs in the market [16]. Polinicencu [17], in this research stated that the marketing mix method in the over the counter drug market was elaborated by considering the product, price, distribution and promotion. Based on this, there are several factors that make consumers choose drugs. In Table 4 product advertisements are the most common reason for someone to buy over-the-counter medicines. These results are in line with research Ehsan Malik [18] which states that brand image and advertising have a significant influence on consumer buying behavior, this study illustrates the status on social media as affecting them to buy a product. The results Sohail Majeed [19] regarding the repetition of advertisements and the perception of quality have a positive impact on consumer purchasing decisions also support this result. Other research also agrees with these 2 statements which state that the presence of advertisements can have a positive impact on perceptions of product quality, loyalty and level consumer satisfaction. The second factor influencing the purchase of over-the-counter medicines is the opinion of family or friends, this result is supported by Pinki Rani [20] which states that purchasing behavior is strongly influenced by the family. In these case any differences in each cluster. In the first and third clusters of drug country origin is the most influencing factor in purchasing OTC drugs. It is different from the second cluster which assumes that product advertising is a factor that influences them in buying OTC drugs.

4.3 Customers' segmentation

In selecting the pharmacies to be visited, most respondents stated that they tend to buy drugs at different pharmacies. These results can be seen in the three clusters in a row that is 52 respondents in the first cluster, 18 respondents in the second cluster and 10 respondents in the third cluster. According to Aurelia [21] there are many factors that can influence consumer loyalty to pharmacies, including drug prices and services. Consumers will return to the same pharmacy if their needs are met. A total of 51.87% of respondents claimed to buy at various pharmacies in the past year. In addition, most prefer their relationship with formal pharmacy staff compared to familiar pharmacy staff and staff who recognize them. Regarding the purchase of OTC drugs in the first, second and third clusters assume that they know the

drugs they have to buy, but do not know more about the drugs. These results are in line with the results of Selma Siahaan's research [22] which states that public knowledge, attitudes and behavior in choosing safe and quality drugs in 3 provinces in Indonesia in 2017 are still low, so there is a need for communication, education, and information from the government especially the Agency The Food and Drug Supervisor as well as the Ministry of Health to the community still needs to be improved and carried out thoroughly. In fact, basically it is very necessary to know the drug information used to avoid medication errors. Medication errors are caused due to limited public knowledge about drugs, drug use and drug information[23]. Pharmaceutical staff consisting of pharmacists, pharmaceutical technical staff and pharmaceutical assistant staff have responsibilities that are very important in providing information about medicines to be used by consumers [24]. The existence of research results that mention pharmacological profile knowledge can be an important strategy to prevent medication errors shows the importance of knowledge of drug information used [25]. In buying drugs, most respondents in each cluster answered that sometimes they buy medicines on an unscheduled basis. The most compelling reason to visit a pharmacy is that they buy medicine only when they are sick. Most Indonesians in clusters 1,2 and 3 tend to try different types of OTC drugs, this result is seen in each cluster that chooses "some product randomly". This kind of behavior can only occur because of the many products, prices and quality that vary, causing consumers to always look for the highest value among the products offered [26]. Therefore, people tend to switch products to get the best product with the same function.

5 CONCLUSION

The profile of pharmacies selection and over-the-counter medicine purchases in pharmacies consumers shows that there is no significant difference in each segmentation, it can be concluded that pharmacies consumers in Indonesia have same perception within choose the pharmacies and OTC purchase. All segment consumers choose the pharmacies based on membership programs, opening hours and pharmacy staff. While purchasing over-the-counter medicines the consumers considering product advertisements, family's / friend's opinions and manufacturing companies. Therefore, there needs to be a marketing strategy related to these elements.

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