A Survey on Customer Satisfaction with Community Pharmacies

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A B S T R A C T

Background: Customer satisfaction with community pharmacies is one of the primary outcomes to be achieved, especially in Malaysia. **Objective:** To evaluate the customer satisfaction with community pharmacies and to identify the customer service needs in Klang. **Method:** A cross-sectional study design was used to assess the customer's satisfaction with community pharmacies. The data was collected from the customers who are heading to the community pharmacies through a structured questionnaire, comprising four parts: demographics, customer service needs, elements related to customer satisfaction evaluation and finally, overall customer satisfaction with community pharmacies. The data was analysed by using Predictive Analytics Software (PASW) version 18. **Results:** In this study, a total of 412 respondents participated, and the majority of them were found to be satisfied with various aspects of community pharmacies. Significant results (p-value<0.01) obtained by age groups (>60 years) who visited pharmacies for health supplements and herbal consultation, as well as to seek diabetes education, blood glucose, blood pressure/cholesterol monitoring. In terms of education levels, uneducated persons demonstrated more satisfaction with smoking cessation activity. Additionally, the higher income group demonstrated better satisfaction with an attitude of pharmacies/pharmacists. **Conclusion:** It was concluded that the customer needs from the pharmacies are fulfilled. Majority of customers were willing to pay for services they received. Customer's satisfaction was found to be more concerned to age and income status of the customers rather than education levels.

INTRODUCTION

Community pharmacy is a community-based pharmacy. Their main responsibilities of a community pharmacy include appropriate procurement, storage, dispensing and documentation of medicines. Therefore, the community pharmacists should have the required education, skills and competence to deliver the professional services. They are also responsible for providing appropriate counselling to patients/customers as well as dispensing drugs based on the prescription to the patient/customer. Modern community health seeks to bring together all the available health services, for example, medical care, mother and child care, family planning services, environmental sanitation, laboratory services, disease control programme and health education(NCPA-Pfizer Digest, 2007). Customer or patient satisfaction becomes the primary outcome that can be

defined as the extent to which an individual needs (Bahari & Yip, 2010). The current health care consumer is better educated and the best informed it has ever been. According to Baidi and Yip (2010), customers demand that the service industries accommodate their busy lifestyles and fulfil their need for information, as cited by Surjit et al. (2002. Health care organisations must address those aspects of service that consumers most readily appreciate: access to care; relationships between physicians, meaningful and understandable information and participation in their own health care and treatment decision-making processes.

Community pharmacy, which is often referred to as retail pharmacy or retail drug outlet, is the place where medicines are stored and dispensed, supplied or sold according to Subai Chandra Basak and Dondeti Sathyanarayana (2009). Besides that, community pharmacy, commonly referred to as "medical stores", general population. Community pharmacies offer a variety of medication-related goods and services. Community pharmacists are the most accessible health care professionals to the public (Hassali et al., 2009).

Satisfaction is defined as the extent to which an individual's needs and wants are met. This is linked with attitudes toward the medical care system, as well as expectations and perceptions regarding quantity and quality of care received (Desselle & Zgarrick, 2009). The health care industry began to recognise the importance of satisfaction with services as patients have become increasingly recognised as customers over the past decades. Since every service must first satisfy customer needs before a pharmacist's personnel and professional goals can be met, potential customers of a service should be the first aspect to be considered. In a study carried out by Jayaprakash et al. (2009), satisfaction is defined as 'an individual's judgment about the extent to which a product or service provides a pleasurable level of consumption-related fulfilment.

As stated in a previous study, customer satisfaction is different from customer service. Customer service is an aspect of customer satisfaction. Satisfying a customer involves anticipation of the items a customer is looking to buy, inventory of the product, location of the product in the store, availability of the personnel to service the customer in a timely and friendly manner, convenience and price of the product which is adapted from Desselle et al. (2006). Community pharmacies have increasing involvement in the self-management of minor illnesses because of the availability of a wider range of over-the-counter (OTC) products (Watson et al., 2002). In their study, they are more concerned about whether pharmacists gave patients appropriate advice about OTC medicines. In another study

carried out by Baidi and Yip (2010), the product mix should be aimed at providing innovative services and satisfying the customer. The product consists of health and beauty-related OTCS, home care, etc, together with the dispensary, which defines the general or specialist nature of the pharmacy.

Price sensitivity has been studied about several different consumption factors, such as customer satisfaction, as cited by Lodorfos et al. (2006) in their study. Similarly, an investigation carried out by Thomas and Vitry (2009) suggests that the cheaper cost of generic medicines was found to be one of the factors for choosing these medicines. Customers also tend to compare prices of their medicines at a few pharmacies and then demand the lowest price from the pharmacy they used to visit (Baidi & Yip, 2010). According to Baidi and Yip (2010), the availability of special services is considered an additional point to assess customer satisfaction towards community pharmacies, as customers are becoming more educated and health-conscious. Some pharmacies do offer special services besides the traditional services of dispensing medications and educating patients. They also offer special care for disease management, high blood pressure and high cholesterol levels. Besides that, a survey done by New Consumer Research (NCR) in the U.S. reveals that integrating self-service solutions, such as orders made by phone or fax, can eventually increase patient satisfaction.

In Malaysia, services within the community pharmacy setting are still left behind from developed countries (Badri & Yip, 2010). Community pharmacies have to compete with other general practitioners as well as Chinese medical practices, traditional medical practices and other retailers to provide excellent customer service. In addition to that, other general practitioners are also allowed to dispense medication to their patients or customers. Hence, the pharmacist needs to work to win their customers by providing good quality of service. Currently, it seems there is a lack of studies conducted in Malaysia investigating customer satisfaction with community pharmacies and their services provided by pharmacists. My current study aims to focus on customer satisfaction with community pharmacies from selected community pharmacies in Klang town. To assess the reason for visiting the pharmacies and to find out the consumer (patients) satisfaction with community pharmacy services based on demographic factors.

METHODOLOGY
Study design
A cross-sectional study was carried out to obtain the objectives regarding customer satisfaction with community

pharmacies. In this section, the customer service needs from the pharmacy were evaluated about the demographics of respondents as well as satisfaction with different aspects.

Inclusion criteria

Voluntarily participating participants were included in the survey.

Participants from the general population, who are customers of community pharmacies, were included in the survey.

Exclusion criteria

Those participants were excluded who were less than 21 years old

Participants who were not been customers of community pharmacies were excluded from the survey

Sampling technique

A convenience sampling technique was used to find out the customer's satisfaction among the general population regarding various aspects in the community pharmacies. About twelve community pharmacies were selected, which are located in Klang town, and fifty questionnaires were distributed in each community pharmacy.

Sample size calculation

The sample size was determined by using the Raosoft® website. In the current study, a total of 800 questionnaires were distributed to selected community pharmacies with a detailed explanation of the objective of the survey. This is to ensure the results are more accurate and to provide maximum opportunity for the general population to participate in the study. Among the respondents, 412 completed questionnaires were received.

Instruments

A questionnaire was developed based on previous studies on customer satisfaction formulated by Kamei et al (2010), which was further reconstructed by Baidi and Yip (2010).

These studies concerned the customer service needs from the pharmacy, customer evaluation items and overall customer satisfaction on all aspects received from community pharmacies.

Validation of the questionnaire

Validation of the questionnaire was based on previous study carried out by Baidi and Yip (2010) using a pilot study (N=25). Since the previous study was also conducted in Malaysia, the current questionnaire is considered to be valid. However, from the previous validation done by Baidi and Yip (2010), the Cronbach alpha value was obtained to be 0.89 which is considered reliable.

Statistical analysis

Data was analysed using the Predictive Analytics Software (PASW) version 18. The content of the questionnaire was analysed by using parametric and non-parametric statistics such as descriptive, ANOVA and independent t-test. A descriptive test was used to describe the frequencies of satisfaction evaluation and the frequencies of respondents. One-way ANOVA was used to find significant differences between demographic factors (race, age, income and education levels) of the customers with satisfaction level in various dimensions. Significant differences between gender and levels of satisfaction are analysed using an independent t-test. A P-value below 0.05 was considered significant.

RESULTS AND ANALYSIS

Demographic data

Of the 800 questionnaires distribution, 412 were completed and 35 questionnaires excluded from the analysis due to incomplete data and rest 353 questionnaires did not return. Thus, the response rate was found to be 51.5%. A summary of the customer's demographic data is described in Table 1.

Table 1: Demographics of respondents (n=412).

Particulars	Frequency	Percentage (%)
Gender		
Male	182	44.2
Female	230	55.8
Race		
Malay	137	33.3
Chinese	117	28.4
Indian	148	35.9
Others	10	2.4
Age		
21 – 30 years old	202	49.0
31 – 40 years old	110	26.7
41 – 50 years old	67	16.3

51 – 60 years old	26	6.3
>60 years old	7	1.7
Marital status		
Married	212	51.5
Single	191	46.4
Divorced	9	2.2
Education levels		
Not educated	1	0.2
Primary school	26	6.3
Secondary school	149	36.2
Higher Learning Institution	236	57.3
Income		
RM 500 – 1,000	40	9.7
RM 1,001 – 5,000	242	58.7
RM 5,001 – 10,000	36	8.7
➢ RM 10,000	6	1.5
Unemployed	88	21.4
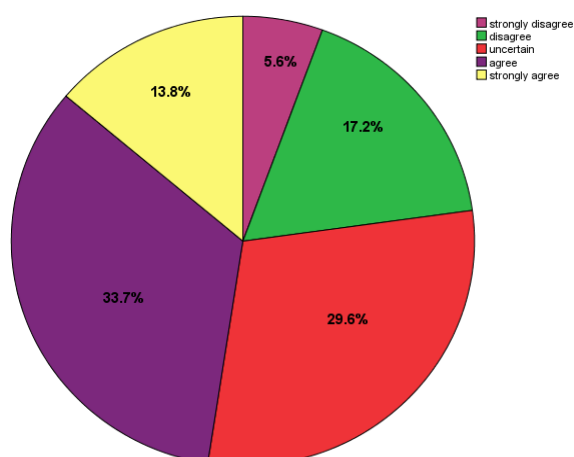
Figure 1: Customer's response to go to the pharmacy for health supplements and herbal consultation.
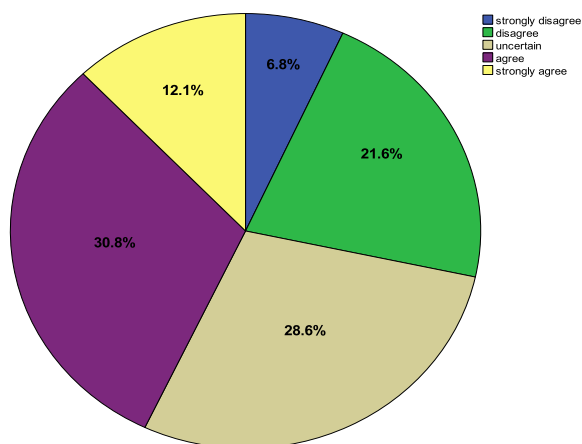
Figure 2: Customer's response to go to pharmacies to check body weight, BMI and body fat analysis.
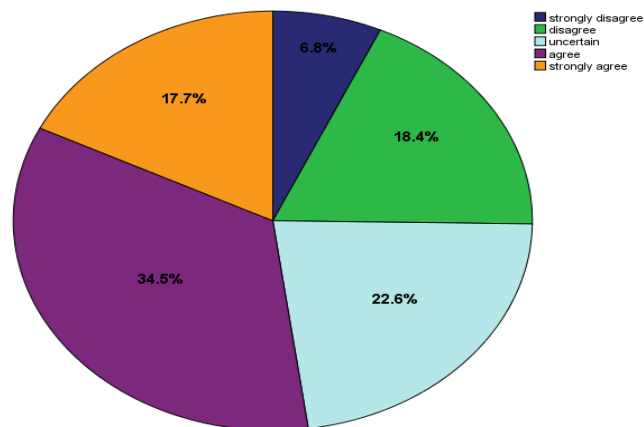
Figure 3: Customer's response on the reason to go to the pharmacy to seek diabetes education, blood pressure/cholesterol monitoring.
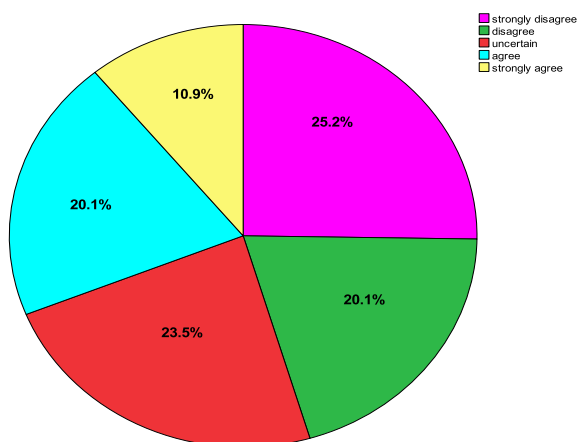
Figure 4: Customer's response on the reason to go to the pharmacy to seek smoking cessation.
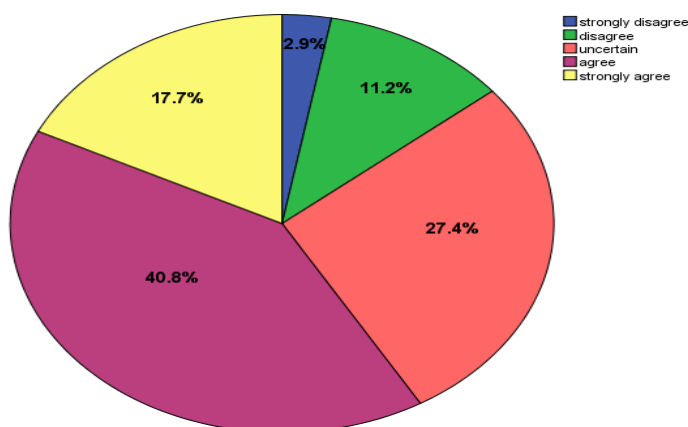
Figure 5: Customer's response on willingness to pay for services from the pharmacy.

Then, the customer's response on service needs was evaluated based on gender, race, age, education levels and household income. Customer's response to customer service needs by gender does not show any significant difference

(Table 3). Among the different age groups that had been analysed, only 'To seek diabetes education, blood pressure/cholesterol monitoring' shows significant results (Table 3).

Analysis based on education levels shows a significant difference in the aspect 'Seek smoking cessation' and 'Willing to pay for services from the pharmacy' with a p-value less than 0.05 (Table 4).

Table 3: Customer's response on service needs from pharmacy, by age.

| Statement	Age	Mean (Std dev)	95% confidence interval		p-value*
			Lower	Upper	
Health supplement and herbal consultation	21-30	3.38(1.021)	3.24	3.52	0.171
	31-40	3.29(1.120)	3.08	3.50	
	41-50	3.40(1.181)	3.11	3.69	
	51-60	2.85(1.008)	2.44	3.25	
	>60	3.57(1.512)	2.17	4.97	
To check body weight, BMI and body fat analysis	21-30	3.15(1.136)	2.99	3.31	0.373
	31-40	3.38(1.066)	3.18	3.58	
	41-50	3.12(1.094)	2.85	3.39	
	51-60	3.04(1.216)	2.55	3.53	
	>60	3.14(1.069)	2.15	4.13	
To seek diabetes education, blood pressure/cholesterol monitoring	21-30	3.25(1.164)	3.09	3.41	0.030
	31-40	3.66(1.111)	3.45	3.87	
	41-50	3.15(1.234)	2.85	3.45	
	51-60	3.50(1.068)	3.07	3.93	
	>60	4.29(0.951)	3.41	5.17	
Seek smoking cessation	21-30	2.68(1.289)	2.50	2.86	0.207
	31-40	2.66(1.329)	2.41	2.91	
	41-50	2.81(1.510)	2.44	3.17	
	51-60	2.62(1.203)	2.13	3.10	
	>60	3.86(0.900)	3.03	4.69	
Willing to pay for services received from the pharmacy	21-30	3.64(0.983)	3.51	3.78	0.328
	31-40	3.64(0.974)	3.45	3.82	
	41-50	3.49(1.035)	3.24	3.75	
	51-60	3.42(1.027)	3.01	3.84	
	>60	3.00(1.291)	1.81	4.19	

*One way-ANOVA; p-value <0.05

Table 4: Customer's response on customer service needs, by education levels.

Statement	Edu levels	Mean (Std dev)	95% confidence interval		p-value*
			Lower	Upper	
Health supplement and herbal consultation	NE	3.00(0.000)	0.00	0.00	0.780
	PS	3.19(1.167)	2.72	3.66	
	SS	3.29(1.080)	3.11	3.46	
	HLI	3.37(1.086)	3.23	3.51	
To check body weight, BMI and body fat analysis	NE	2.00(0.000)	0.00	0.00	0.554
	PS	3.35(1.093)	2.90	3.79	
	SS	3.24(1.057)	3.07	3.41	
	HLI	3.16(1.156)	3.01	3.31	
To seek diabetes education, blood pressure/cholesterol	NE	5.00(0.000)	0.00	0.00	0.189
	PS	3.27(0.919)	2.90	3.64	

		Mean (Std dev)	Lower	Upper	p-value
monitoring	SS	3.50(1.037)	3.34	3.67	
	HLI	3.31(1.265)	3.14	3.47	
	NE	5.00(0.000)	0.00	0.00	
Seek smoking cessation	PS	2.69(1.594)	2.05	3.34	0.001
	SS	3.01(1.257)	2.81	3.22	
	HLI	2.52(1.309)	2.35	2.68	
	NE	1.00(0.000)	0.00	0.00	
Willing to pay for services received from the pharmacy	PS	3.58(0.987)	3.18	3.98	0.014
	SS	3.48(0.949)	3.32	3.63	
	HLI	3.68(1.014)	3.55	3.81	

NE = not educated; PS = primary school; SS = secondary school; HLI = higher learning institution

Customer's response on customer service needs by income shows significant difference with p-value less than 0.05 for all the statements, except 'To check body weight, BMI and body fat analysis' doesn't show any significant differences (Table 5).

Table 5: Customer's response on customer service needs, by income.

Statement	Income	Mean (Std dev)	95% confidence intervals		p-value*
			Lower	Upper	
Health supplement and herbal consultation	RM500 – 1000	3.15(0.975)	2.84	3.46	
	RM1001 – 5000	3.34(1.047)	3.21	3.47	
	RM5000 – 10000	3.36(1.397)	3.39	4.33	0.012
	>RM10000	3.67(1.366)	2.23	5.10	
	Unemployed	3.15(1.023)	2.93	3.36	
To check body weight, BMI and body fat analysis	RM500 – 1000	3.20(0.823)	2.94	3.46	
	RM1001 – 5000	3.21(1.097)	3.07	3.35	
	RM5000 – 10000	3.58(1.360)	3.12	4.04	0.143
	>RM10000	2.83(1.722)	1.03	4.64	
	Unemployed	3.03(1.108)	2.80	3,27	
To seek diabetes education, blood pressure/cholesterol monitoring	RM500 – 1000	3.48(0.987)	3.16	3.79	
	RM1001 – 5000	3.33(1.154)	3.18	3.47	
	RM5000 – 10000	3.97(1.230)	3.56	4.39	0.020
	>RM10000	3.50(1.378)	2.05	4.95	
	Unemployed	3.23(1.201)	2.97	3,48	
Seek smoking cessation	RM500 – 1000	2.83(1.217)	2.44	3.21	
	RM1001 – 5000	2.73(1.323)	2.56	2.90	
	RM5000 – 10000	3.36(1.313)	2.92	3.81	0.003
	>RM10000	3.50(1.095)	0.85	3.15	
	Unemployed	2.40(1.335)	2.11	2.68	
Willing to pay for services received from the pharmacy	RM500 – 1000	3.13(0.992)	2.81	3.44	
	RM1001 – 5000	3.51(0.969)	3.39	3.63	
	RM5000 – 10000	4.39(0.994)	4.05	4.73	0.000
	>RM10000	3.50(1.225)	2.21	4.79	
	Unemployed	3.72(0.883)	3.53	3.90	

RM = ringgit Malaysia; *One-way- ANOVA; p-value <0.05

Customer satisfaction evaluation
Attitude of pharmacy/pharmacist (customer service)
In this part, there were ten evaluation items to identify customer (patients) satisfaction with the attitude of the pharmacy or pharmacist. Responses by frequency and percentages were summarised in the table below (Table 6).

Analysis based on education levels on the attitude of pharmacy or pharmacist shows a statistically significant p- value (<0.05) for the statement 'Listened to what I had to say' (Table 7).

Table 6: Customer satisfaction response with evaluation items.

Statement	Responses, N (%)				
	SD	D	U	S	SS
Provided a thorough explanation of the medicine	7 (1.7)	51 (12.4)	117 (28.4)	177 (43.0)	60 (14.6)
Listened to what I had to say	3 (0.7)	16 (3.9)	104 (25.2)	237 (57.5)	52 (12.6)
Always received service from the same pharmacist	5 (1.2)	51 (12.4)	152 (36.9)	167 (40.5)	37 (9.0)
My prescription drugs are always in stock	22 (5.3)	43 (10.4)	140 (34.0)	176 (42.7)	31 (7.5)
Side effects of the medications are always explained	15 (3.6)	59 (14.3)	95 (23.1)	189 (45.9)	54 (13.1)
Counselling on instructions to take medications	8 (1.9)	36 (8.7)	107 (26.0)	200 (48.5)	61 (14.8)
Importance of compliance with medication	6 (1.5)	27 (6.6)	103 (25.0)	215 (52.2)	61 (14.8)
Information about routine health maintenance is provided	9 (2.2)	38 (9.2)	140 (34.0)	163 (39.6)	62 (15.0)
Consumer privacy concerning prescription is maintained	6 (1.5)	34 (8.3)	121 (29.4)	184 (44.7)	67 (16.3)
The pharmacy is reliable	6 (1.5)	21 (5.1)	146 (35.4)	181 (43.9)	58 (14.1)

SD = strongly dissatisfied; D = dissatisfied; U = uncertain; S = satisfied; SS = strongly satisfied

Table 7: Customer satisfaction evaluation on attitude of pharmacy/pharmacist, by education levels.

Statement	Edu levels	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Provided a thorough explanation of the medicine	NE	3.00(0.000)	0.00	0.00	0.323
	PS	3.85(0.881)	3.49	4.20	
	SS	3.50(0.949)	3.34	3.65	
	HLI	3.58(0.944)	3.46	3.70	
Listened to what I had to say	NE	4.00(0.000)	0.00	0.00	0.014
	PS	3.88(0.711)	3.60	4.17	
	SS	3.62(0.810)	3.49	3.75	
	HLI	3.86(0.685)	3.77	3.95	
Always received service from the same pharmacist	NE	4.00(0.000)	0.00	0.00	0.440
	PS	3.23(0.951)	2.85	3.61	
	SS	3.50(0.935)	3.35	3.65	
	HLI	3.42(0.808)	3.32	3.52	
My prescription drugs are always in stock	NE	3.00(0.000)	0.00	0.00	0.865
	PS	3.35(1.294)	2.82	3,87	
	SS	3.32(0.880)	3.18	3.46	
	HLI	3.40(0.964)	3.27	3.52	
Side effects of the medications are	NE	4.00(0.000)	0.00	0.00	0.259

		Mean (Std Dev)	Lower	Upper	p-value
always explained	PS	3.62(1.061)	3.19	4.04	
	SS	3.38(1.056)	3.20	3.55	
	HLI	3.57(0.971)	3.45	3.70	
	NE	4.00(0.000)	0.00	0.00	
Counselling on instructions to take medications	PS	3.50(1.241)	2.99	4.00	0.119
	SS	3.53(0.919)	3.38	3.68	
	HLI	3.74(0.842)	3.63	3.85	
	NE	4.00(0.000)	0.00	0.00	
Importance of compliance with medication	PS	3.88(0.863)	3.53	4.23	0.757
	SS	3.69(0.835)	3.56	3.83	
	HLI	3.72(0.854)	3.61	3.82	
	NE	3.00(0.000)	0.00	0.00	
Information about routine health maintenance is provided	PS	3.76(1.243)	3,26	4.27	0.288
	SS	3.69(0.889)	3.31	3.60	
	HLI	3.60(0.914)	3.48	3.71	
	NE	4.00(0.000)	0.00	0.00	
Consumer privacy concerning prescription is maintained	PS	3.88(0.951)	3.50	4.26	0.526
	SS	3.67(0.832)	3.54	3.81	
	HLI	3.62(0.930)	3.50	3.74	
	NE	4.00(0.000)	0.00	0.00	
The pharmacy is reliable	PS	3.76(0.908)	3.40	4.13	0.989
	SS	3.79(0.848)	3.65	3.92	
	HLI	3.80(0.876)	3.69	3.92	

NE = not educated; PS = primary school; SS = secondary school; HLI = higher learning institution; *One-way ANOVA; p-value <0.05

Customer satisfaction evaluation on attitude of pharmacy/pharmacist was analyzed by income and four evaluation items has shown significant p-values (Table 8).

Availability of OTC and variety of products

Overall customer satisfaction with the availability of OTC products was analyzed. 43.9% of the respondents were satisfied that the pharmacy handles OTC products and medical supplies, whereas only 1.5% of the respondents were strongly dissatisfied with the statement. 42% of the respondents were satisfied that everyday items can be purchased at the pharmacy. The summary of responses is shown in Table 9.

Table 8: Customer satisfaction evaluation on attitude of pharmacy/pharmacist, by income.

Statement	Income	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Provided a thorough explanation of the medicine	RM500 – 1000	3.63(0.925)	3.33	3.92	0.066
	RM1001 – 5000	3.48(0.884)	3.37	3.60	
	RM5000 – 10000	3.97(1.082)	3.61	4.34	
	>RM10000	3.67(1.033)	2.58	4.75	
	Unemployed	3.58(1.014)	3.36	3.79	
Listened to what I had to say	RM500 – 1000	3.68(0.764)	3.43	3.92	0.191
	RM1001 – 5000	3.74(0.725)	3.65	3.83	
	RM5000 – 10000	4.00(0.894)	3.70	4.30	
	>RM10000	3.50(0.837)	2.62	4.38	
	Unemployed	3.84(0.693)	3.69	3.99	
Always received service from the same	RM500 – 1000	3.53(0.784)	3.27	3.78	0.157
	RM1001 – 5000	3.36(0.914)	3.27	3.50	

pharmacist	RM5000 – 10000	3.75(0.806)	3.48	4.02	
	>RM10000	3.67(0.516)	3.12	4.21	
	Unemployed	3.39(0.784)	3.22	3.55	
	RM500 – 1000	3.53(0.784)	3.27	3.78	
My prescription drugs are always in stock	RM1001 – 5000	3.29(0.936)	3.17	3.40	
	RM5000 – 10000	3.53(1.362)	3.07	3.99	0.279
	>RM10000	3.17(1.472)	1.62	4.71	
	Unemployed	3.47(0.830)	3.29	3.64	
	RM500 – 1000	3.43(1.010)	3.10	3.75	
Side effects of the medications are always explained	RM1001 – 5000	3.52(0.947)	3.40	3.64	
	RM5000 – 10000	3.78(1.260)	3.35	4.21	0.182
	>RM10000	2.83(1.169)	1.61	4.06	
	Unemployed	3.42(1.036)	3.20	3.64	
	RM500 – 1000	3.62(0.837)	3.36	3.89	
Counselling on instructions to take medications	RM1001 – 5000	3.50(0.935)	3.39	3.62	0.000
	RM5000 – 10000	4.00(0.792)	3.73	4.26	
	>RM10000	4.16(0.482)	3.73	4.59	
	Unemployed	3.89(0.817)	3.72	4.07	
	RM500 – 1000	3.80(0.722)	3.56	4.03	
Importance of compliance with medication	RM1001 – 5000	3.68(0.799)	3.58	3.78	0.142
	RM5000 – 10000	3.72(1.278)	3.28	4.15	
	>RM10000	3.00(1.090)	1.85	4.14	
	Unemployed	3.84(0.770)	3.76	4.00	
	RM500 – 1000	3.70(0.790)	3.44	3.95	
Information about routine health maintenance is provided	RM1001 – 5000	3.40(0.920)	3.28	3.51	
	RM5000 – 10000	4.16(1.055)	3.80	4.52	0.000
	>RM10000	4.33(0.516)	3.79	4.87	
	Unemployed	3.63(0.846)	3.45	3.81	
	RM500 – 1000	3.42(0.980)	3.11	3.73	
Consumer privacy concerning prescription is maintained	RM1001 – 5000	3.63(0.845)	3.52	3.73	
	RM5000 – 10000	4.00(1.060)	3.64	4.36	0.069
	>RM10000	3.50(1.378)	2.05	4.94	
	Unemployed	3.71(0.857)	3.53	3.89	
	RM500 – 1000	3.60(0.928)	3.30	3.89	
	RM1001 – 5000	3.73(0.855)	3.63	3.84	
The pharmacy is reliable	RM5000 – 10000	4.25(1.024)	3.90	4.59	0.007
	>RM10000	4.00(1.024)	3.33	4.66	
	Unemployed	3.86(0.760)	3.70	4.02	

RM = ringgit Malaysia; *One-way ANOVA; p-value <0.05

Table 9: Customer satisfaction response on availability of OTC and variety of products.

Statement	Responses, N (%)				
	SD	D	U	S	SS
The pharmacy handles OTC products and medical supplies	6 (1.5)	21 (5.1)	146 (35.4)	181 (43.9)	58 (14.1)
Everyday items (toiletries/sundries) can be purchased at the pharmacy	17 (4.1)	44 (10.7)	108 (26.2)	173 (42.0)	70 (17.0)

SD = strongly dissatisfied; D = dissatisfied; U = uncertain; S = satisfied; SS = strongly satisfied

Then, the customer's satisfaction response on availability of OTC and variety of products was evaluated based on age, education levels and household income. Regarding the customer's response on availability of OTC products and variety of products based on age, a significant finding was obtained for the item, 'Everyday items can be purchased from the pharmacy', with p-value <0.05 (Table 10).

In addition, customer's response on availability of OTC products and variety of products was analyzed by education levels. The analysis has shown statistically significant p-values (Table 11).

Table 10: Customer satisfaction evaluation on availability of OTC products and variety of products, by age.

Statement	Age	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
The pharmacy handles OTC products and medical supplies	21-30	3.71(0.854)	3.59	3.83	0.292
	31-40	3.62(0.876)	3.46	3.79	
	41-50	3.53(0.636)	3.38	3.69	
	51-60	3.42(0.857)	3.07	3.76	
	>60	3.42(1.272)	2.25	4.60	
Everyday items (toiletries/sundries) can be purchased at the pharmacy	21-30	3.73(1.023)	3.59	3.88	0.007
	31-40	3.43(1.071)	3.23	3.63	
	41-50	3.43(0.839)	3.22	3.63	
	51-60	3.42(0.945)	3.04	3.80	
	>60	2.71(1.253)	1.55	3.87	

*One-way ANOVA; p-value <0.05

Table 11: Customer's response on availability of OTC products and variety of products, by education levels.

Statement	Edu Levels	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
The pharmacy handles OTC products and medical supplies	NE	4.00(0.000)	0.00	0.00	0.000
	PS	3.34(0.936)	2.96	3.72	
	SS	3.45(0.874)	3.31	3.59	
	HLI	3.78(0.776)	3.68	3.88	
Everyday items (toiletries/sundries) can be purchased at the pharmacy	NE	2.00(0.000)	0.00	0.00	0.000
	PS	3.34(1.017)	2.93	3.75	
	SS	3.32(1.055)	3.15	3.49	
	HLI	3.75(0.967)	3.63	3.87	

NE = not educated; PS = primary school; SS = secondary school; HLI = higher learning institution

Analysis on customer's response on availability of OTC products and variety of products based on income was found to be statistically significant (Table 12).

Pricing

Overall customer satisfaction response on pricing revealed 44.2% of the respondents were satisfied that the price of prescription drugs was reasonable, and 1.7% strongly dissatisfied with the statement. 38.8% of respondents were satisfied that the price of non-prescription drugs was reasonable, whereas 4.6% of respondents were strongly dissatisfied with the statement. Overall customer's response was illustrated in Table 13.

Table 12 Customer satisfaction response on availability of OTC products and variety of products, by income.

Statement	Income	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
The pharmacy handles OTC products and medical supplies	RM500 – 1000	3.62(0.867)	3.34	3.90	0.010
	RM1001 – 5000	3.54(0.805)	3.44	3.64	
	RM5000 – 10000	3.88(0.747)	3.63	4.14	

	>RM10000	3.16(1.722)	1.35	4.97	
	Unemployed	3.84(0.828)	3.66	4.01	
	RM500 – 1000	3.17(1.034)	2.84	3.50	
Everyday items (toiletries/sundries) can be purchased at the pharmacy	RM1001 – 5000	3.45(1.027)	3.32	3.58	
	RM5000 – 10000	4.02(0.999)	3.68	4.37	0.000
	>RM10000	4.00(0.632)	3.33	4.66	
	Unemployed	3.85(0.916)	3.65	4.04	

*One-way ANOVA; p-value <0.05

Table 13: Customer satisfaction response on pricing.

Statement	Responses, N (%)				
	SD	D	U	S	SS
The price of prescription drugs is reasonable	7 (1.7)	39 (9.5)	134 (32.5)	182 (44.2)	50 (12.1)
The price of non-prescription drugs is reasonable	19 (4.6)	48 (11.7)	134 (32.5)	160 (38.8)	51 (12.4)

SD = strongly dissatisfied; D = dissatisfied; U = uncertain; S = satisfied; SS = strongly satisfied

A similar analysis based on age (Table 14) has shown a statistically significant p- p-value for 'The price of non-prescription drugs is reasonable'.

Analysis based on customer satisfaction response based on education levels also has shown a significant p-value for item 'The price of prescription drugs is reasonable' (Table 15).

Table 14: Customer satisfaction evaluation on pricing, by age.

Statement	Age	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
The price of prescription drugs is reasonable	21-30	3.55(0.919)	3.42	3.68	
	31-40	3.66(0.838)	3.50	3.82	
	41-50	3.44(0.821)	3.24	3.64	0.058
	51-60	3.61(0.804)	3.29	3.94	
	>60	2.71(1.112)	1.68	3.74	
The price of non-prescription drugs is reasonable	21-30	3.55(0.946)	3.42	3.68	
	31-40	3.35(1.009)	3.16	3.54	
	41-50	3.34(1.023)	3.09	3.59	0.043
	51-60	3.15(1.047)	2.73	3.57	
	>60	3.42(1.002)	1.23	4.19	

*One-way ANOVA; p-value <0.05

Table 15: Customer satisfaction evaluation on pricing, by education levels.

Statement	Edu Levels	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
The price of prescription drugs is reasonable	NE	2.00(0.000)	0.00	0.00	
	PS	3.34(1.017)	2.93	3.75	0.807
	SS	3.32(1.055)	3.15	3.49	
	HLI	3.75(0.967)	3.63	3.87	
The price of non-prescription drugs is reasonable	NE	4.00(0.000)	0.00	0.00	
	PS	3.53(0.811)	3.21	3.86	0.039
	SS	3.60(0.837)	3.46	3.73	
	HLI	3.52(0.924)	3.40	3.64	

Customer's satisfaction response on pricing by income (Table 16) has shown a significant p-value (0.020).

Availability of special services

Satisfaction response of the customers on availability of special services has shown majority of them (49.5%) were

uncertain about whether orders of prescription were accepted by phone or fax. In contrast, 41.7% of respondents were satisfied that health screening services such as blood pressure, blood glucose and cholesterol screening were available in the pharmacy (Table 17).

Table 16: Customer satisfaction response on pricing, by income.

| Statement | Income | Mean (Std Dev) | 95% confidence intervals | | p-value* |
			Lower	Upper	
The price of prescription drugs is reasonable	RM500 – 1000	3.55(0.814)	3.28	3.81	0.020
	RM1001 – 5000	3.50(0.870)	3.39	3.61	
	RM5000 – 10000	4.02(0.970)	3.69	4.35	
	>RM10000	3.33(1.032)	2.25	4.41	
	Unemployed	3.52(0.870)	3.33	3.70	
The price of non-prescription drugs is reasonable	RM500 – 1000	3.15(1.027)	2.82	3.47	0.130
	RM1001 – 5000	3.40(0.981)	3.27	3.52	
	RM5000 – 10000	3.69(1.141)	3.30	4.08	
	>RM10000	3.83(0.983)	2.80	4.86	
	Unemployed	3.48(0.970)	3.28	3.69	

Table 17: Customer satisfaction response on availability of special services.

| Statement | Responses, N (%) | | | | |
	SD	D	U	S	SS
Orders of prescription are accepted by phone/fax	26 (6.3)	64 (15.5)	204 (49.5)	92 (22.3)	26 (6.3)
Availability of health screening services such as blood pressure/blood glucose/cholesterol screening	20 (4.9)	28 (6.8)	130 (31.6)	172 (41.7)	62 (15.0)

SD = strongly dissatisfied; D = dissatisfied; U = uncertain; S = satisfied; SS = strongly satisfied

Analysis on customer's satisfaction evaluation on availability of special services was also conducted based on age, education level and household income. Table 18 shows customer's satisfaction evaluation on availability of special service, by age and 'Orders of prescription are accepted by phone/fax' has shown to be significant.

Significant value was obtained for the analysis of customer's satisfaction on availability of special service, by education levels in item 'Orders of prescription are accepted by phone/fax' (Table 4.30) whereby similar analysis by income shown non-significant values (Table 19).

Table 18 Customer satisfaction evaluation on availability of special service, by age.

| Statement | Age | Mean (Std Dev) | 95% confidence intervals | | p-value* |
			Lower	Upper	
Orders of prescription are accepted by phone/fax	21-30	2.97(0.948)	2.84	3.10	0.005
	31-40	2.98(0.958)	2.80	3.16	
	41-50	3.29(0.798)	3.10	3.49	
	51-60	3.57(0.902)	3.21	3.94	
	>60	3.00(1.000)	2.07	3.92	
Availability of health screening services such as blood pressure/blood glucose/cholesterol screening	21-30	3.55(0.935)	3.42	3.68	0.339
	31-40	3.50(0.993)	3.31	3.68	
	41-50	3.47(1.146)	3.19	3.75	
	51-60	3.92(0.934)	3.54	4.30	

| | >60 | 3.71(0.951) | 2.83 | 4.59 |

*One-way ANOVA; p-value <0.05

Table 19: Customer satisfaction evaluation on availability of special service, by education levels.

Statement	Edu levels	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Orders of prescription are accepted by phone/fax	NE	4.00(0.000)	0.00	0.00	0.002
	PS	3.65(1.093)	3.21	4.09	
	SS	3.13(0.941)	2.98	3.28	
	HLI	2.95(0.893)	2.84	3.07	
Availability of health screening services such as blood pressure/blood glucose/cholesterol screening	NE	5.00(0.000)	0.00	0.00	0.541
	PS	3.53(1.207)	3.05	4.02	
	SS	3.54(1.003)	3.38	3.71	
	HLI	3.55(0.954)	3.43	3.67	

NE = not educated; PS = primary school; SS = secondary school; HLI = higher learning institution

Convenient hours

Customer satisfaction response to convenient hours was summarised in Table 20. Customer's satisfaction evaluation on convenient hours by age has shown to be significant with the statement 'The pharmacy is open at convenient hours' (Table 21).

Table 20: Customer's satisfaction response on convenient hours.

Statement	Responses, N (%)				
	SD	D	U	S	SS
Short waiting time to get medications	18 (4.4)	22 (5.3)	92 (22.3)	198 (48.1)	82 (19.9)
The pharmacy is open at convenient times	8 (1.9)	35 (8.5)	72 (17.5)	216 (52.4)	81 (19.7)
A pharmacist is available all the time	17 (4.1)	43 (10.4)	134 (32.5)	147 (35.7)	71 (17.2)

Table 21: Customer satisfaction evaluation on convenient hours, by age.

Statement	Age (years)	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Short waiting time to get medications	21-30	3.82(0.923)	3.69	3.95	0.230
	31-40	3.75(1.033)	3.55	3.94	
	41-50	3.50(1.035)	3.25	3.76	
	51-60	3.61(1.022)	3.20	4.03	
	>60	3.71(0.951)	2.83	4.59	
The pharmacy is open at convenient times	21-30	3.87(0.859)	3.75	3.99	0.010
	31-40	3.84(0.900)	3.67	4.01	
	41-50	3.52(1.005)	3.27	3.76	
	51-60	3.88(0.952)	3.50	4.26	
	>60	3.00(1.290)	1.81	4.19	
A pharmacist is available all the time	21-30	3.47(1.065)	3.32	3.62	0.510
	31-40	3.61(0.985)	3.43	3.80	
	41-50	3.49(0.990)	3.25	3.73	
	51-60	3.57(0.945)	3.19	3.95	
	>60	3.00(1.154)	1.93	4.06	

Customer satisfaction evaluation on convenient times by education levels is significant, with the statement 'Short waiting time to get medications' (Table 22). Similarly non-significant values were obtained in the analysis of customer's satisfaction evaluation on convenient hours, by income (Table 23).

Table 22: Customer satisfaction evaluation on convenient hours, by education levels.

Statement	Edu levels	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Short waiting time to get medications	NE	5.00(0.000)	0.00	0.00	0.002
	PS	3.07(1.055)	2.65	3.50	
	SS	3.83(1.022)	3.66	3.99	
	HLI	3.74(0.933)	3.62	3.86	
The pharmacy is open at convenient times	NE	4.00(0.000)	0.00	0.00	0.097
	PS	3.38(1.022)	2.97	3.79	
	SS	3.87(0.887)	3.72	4.01	
	HLI	3.78(0.921)	3.67	3.90	
A pharmacist is available all the time	NE	4.00(0.000)	0.00	0.00	0.532
	PS	3.53(0.989)	3.13	3.93	
	SS	3.60(0.950)	3.45	3.75	
	HLI	3.51(1.077)	3.31	3.59	

NE = not educated; PS = primary school; SS = secondary school; HLI = higher learning institution; *One-way ANOVA; p-value <0.05

Table 23: Customer's satisfaction evaluation on convenient hours, by income.

Statement	Income	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Short waiting time to get medications	RM500 – 1000	3.65(1.921)	3.35	3.94	0.099
	RM1001 – 5000	3.67(0.983)	3.54	3.79	
	RM5000 – 10000	3.97(1.424)	3.49	4.45	
	>RM10000	3.16(0.983)	2.13	4.19	
	Unemployed	3.89(0.727)	3.74	4.05	
The pharmacy is open at convenient times	RM500 – 1000	3.85(0.769)	3.60	4.09	0.078
	RM1001 – 5000	3.49(0.952)	3.60	3.83	
	RM5000 – 10000	3.80(1.451)	3.34	4.32	
	>RM10000	2.83(1.329)	2.13	4.19	
	Unemployed	3.45(0.882)	3.84	4.13	
A pharmacist is available all the time	RM500 – 1000	3.62(0.952)	3.32	3.92	0.170
	RM1001 – 5000	3.49(0.998)	3.36	3.61	
	RM5000 – 10000	3.80(1.451)	3.31	4.29	
	>RM10000	2.83(1.329)	1.43	4.22	
	Unemployed	3.45(0.882)	3.26	3.64	

*One-way ANOVA; p-value <0.05

Facilities

In the analysis of customer's satisfaction based on facilities in the pharmacy, 34% of the respondents satisfied that the waiting room/area is comfortable. 53.4% of the respondents were satisfied that the pharmacy is sanitary.

Convenient location

Customer satisfaction response to the convenient location was summarised in Table 25.

On the statements of 'Near my house' and 'near my working area', significant values were obtained Table 26.

Table 24: Customer satisfaction response on facilities.

Statement	Responses, N (%)				
	SD	D	U	S	SS
The waiting area/room is comfortable	10 (2.4)	60 (14.6)	114 (27.7)	140 (34.0)	88 (21.4)
The pharmacy is sanitary	12 (2.9)	11 (2.7)	65 (15.8)	220 (53.4)	104 (25.2)

Table 25: Customer's satisfaction response on convenient location.

Statement	Responses, N (%)				
	SD	D	U	S	SS
Near the hospital	24 (5.8)	71 (17.2)	139 (33.7)	134 (32.5)	44 (10.7)
Near my house	16 (3.9)	39 (9.5)	80 (19.4)	188 (45.6)	89 (21.6)
Near my working area	37 (9.0)	58 (14.1)	113 (27.4)	158 (38.3)	46 (11.2)

SD = strongly dissatisfied; D = dissatisfied; U = uncertain; S = satisfied; SS = strongly satisfied

Table 26: Customer's satisfaction evaluation on convenient location, by income.

Statement	Income	Mean (Std Dev)	95% confidence intervals		p-value*
			Lower	Upper	
Near the hospital	RM500 – 1000	3.25(0.926)	2.95	3.54	
	RM1001 – 5000	3.26(1.071)	3.12	3.39	
	RM5000 – 10000	3.75(1.180)	3.35	4.14	0.008
	>RM10000	3.50(0.836)	2.62	4.37	
	Unemployed	3.00(0.922)	2.80	3.19	
Near my house	RM500 – 1000	3.82(0.844)	3.55	4.09	
	RM1001 – 5000	3.64(1.065)	3.50	3.77	
	RM5000 – 10000	4.13(0.798)	3.86	4.40	0.092
	>RM10000	3.50(0.837)	2.62	4.37	
	Unemployed	3.70(1.074)	3.47	3.93	
Near my working area	RM500 – 1000	3.32(0.997)	3.01	3.64	
	RM1001 – 5000	3.35(1.096)	3.21	3.49	
	RM5000 – 10000	3.69(1.166)	3.29	4.08	0.004
	>RM10000	3.00(1.549)	1.37	4.62	
	Unemployed	2.93(1.112)	2.69	3.16	

Overall customer satisfaction

Customer's response on receiving the best service from the community pharmacy

Overall customer's satisfaction reveals that more than half of the respondents (68.4%) think that they received the best service from pharmacy and 12.4% said 'No' to the statement. 19.2% of the respondents were uncertain (Table 27).

Table 27: Customer's response on receiving the best service from the community pharmacy.

Statement	Responses, N (%)		
	Yes	No	Uncertain
Do you think that you received the best service from the community pharmacy?	282 (68.4)	51 (12.4)	70 (19.2)

The customer's response on receiving the best service from the pharmacy has shown significant value regarding the age of the respondents (Table 28).

Overall customer satisfaction

Overall customer satisfaction with community pharmacies reveals that the majority of the respondents (45.6%) were satisfied to some extent with all aspects received. Descriptions were elaborated in Table 29 (Figure 6).

However, statistically significant values were obtained for overall customer satisfaction by education levels (Table 30) and by income (Table 31).

Table 28: Customer's response on receiving the best services from the community pharmacy, by age.

Age	Mean (Std Dev)	95% confidence intervals		p-value*
		Lower	Upper	
21-30 years old	1.57(0.826)	1.45	1.68	
31-40 years old	1.30(0.616)	1.19	1.42	
41-50 years old	1.65(0.897)	1.43	1.87	0.027
51-60 years old	1.42(0.808)	1.09	1.74	
>60 years old	1.57(0.975)	1.18	2.47	

Table 29: Customer's overall satisfaction with all aspects received from the community pharmacy.

Statement	Responses, N (%)				
	SS	S	SE	D	SD
Overall customer satisfaction	52 (12.6)	150 (36.4)	188 (45.6)	18 (4.4)	4 (1.0)
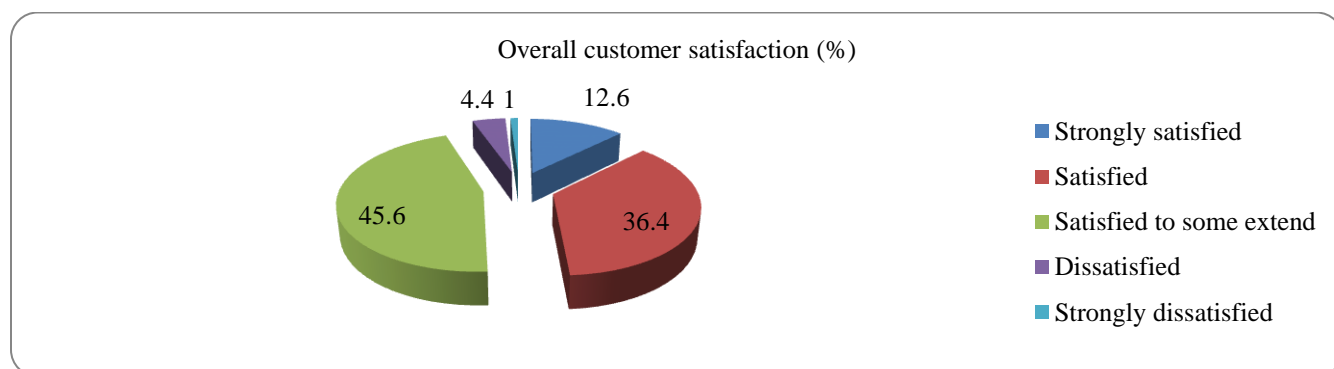
Figure 6: Overall customer satisfaction with community pharmacies (%).

Table 30: Customer's overall satisfaction with all aspects received from community pharmacies, by education levels.

Education levels	Mean (Std Dev)	95% confidence intervals		p-value*
		Lower	Upper	
Not educated	3.00(0.000)	0.00	0.00	
Primary school	2.69(0.837)	2.35	3.03	0.009
Secondary school	2.58(0.755)	2.45	2.69	
Higher learning institution	2.33(0.816)	2.22	2.43	

Table 31: Customer's overall satisfaction with all aspects received from community pharmacies, by income.

Income	Mean (Std Dev)	95% confidence intervals		p-value*
		Lower	Upper	
RM500 – 1000	2.55(0.638)	2.34	2.75	
RM1001 – 5000	2.49(0.758)	2.40	2.59	0.008
RM5000 – 10000	2.13(1.073)	1.77	2.50	

>RM10000	3.16(1.169)	1.93	4.39
Unemployed	2.32(0.798)	2.16	2.49

DISCUSSION

The current study is composed of an evaluation of customers' service needs and customer's satisfaction evaluation. In this study N=412 of the respondents surveyed by using the convenient sampling technique.

Customer service needs

In this study, 33.7% of the respondents agreed that they visited community pharmacies to obtain health supplements and herbal consultation. These results were found to be similar to those findings in a study carried out by Thornley (2006), who discovered that the majority of the population visited community pharmacies to seek health product purchase or advice. Besides that, about 65% of the population agreed to visit a pharmacy to check body weight, BMI and body fat analysis as well as to seek diabetes education, blood pressure or cholesterol monitoring. Similar findings have been obtained from a study conducted by Baidi and Yip (2010) in which more than 70% of the customers were interested in weight control, body fat analysis, diabetes education and blood pressure/blood glucose/cholesterol monitoring. In addition, the majority of the customers (25.2%) were less likely to visit a pharmacy to seek smoking cessation. In the study conducted by Baidi and Yip (2010), it was also found that less than 50% of the customers were interested in smoking cessation consultation. It has been found that 40.8% of the customers were willing to pay for the services they received from the pharmacy. A contradictory result has been shown in a study where 64.1% of the customers expected to get free services from the pharmacy, performed by Baidi and Yip (2010).

For the age group more than 60 years old significant (p < 0.030) found that they had visited the pharmacy to seek diabetes education, blood pressure/cholesterol monitoring. These results were found to be similar to a study conducted by Namara et al. 2010 which states that the elderly with concomitant diseases such as diabetes and cardiovascular disease would like to seek the expertise of community pharmacist in their medicine management, as well as health promotion and management of risk factors of these diseases. In terms of education levels, uneducated customers significantly (p=0.001) visited community pharmacies more often to seek smoking cessation. This result was found to be relevant to a study conducted by Kurko, Linden, Pletila, Sandstrom and Airaksinen (2010 which emphasises the role of community pharmacist involvement in smoking cessation consultation. Additionally, uneducated customers were more

interested in seeking advice on smoking cessation as they lacked knowledge from other sources. For the education levels, too, customers who were educated in higher learning institutions are willing to pay for services from community pharmacies. Thus, the result was found to be like those studies performed by Amponsah et al. (2009, which recognised that higher educated customers were more satisfied with services they acquired from pharmacies, thus willing to pay for the service.

Customers with household incomes of more than RM 10,000 were more interested in visiting the pharmacy for health supplements and herbal consultation. It was reported that in the higher income group, they were more likely to purchase products that their doctor had recommended, which include health supplements and herbal products, compared to lower income groups. Additionally, customers with household income between RM 5,000 to RM 10,000 had agreed to visit a pharmacy to seek diabetes education, blood pressure/cholesterol monitoring. This result may be due to the willingness of the customers to pay for value-added services. Besides that, the higher income group (>RM 10,000) were also found to seek smoking cessation from pharmacies. The result may be due to their affordability to obtain pharmacological smoking cessation therapy such as Nicotine Replacement Therapy (NRT) (Kurko et al., 2010).

Customer satisfaction evaluation

Attitude of pharmacy/pharmacist (customer service)

In the current study, almost 43% of the respondents were satisfied that they were provided a thorough explanation of the medicine. A study conducted by Subai et al. (2009) customers' expectations on proper advice on how and when medicines to be taken correlated with results from the current study. It was observed that (57.5%) of the respondents were also satisfied that the pharmacist listened to what they had to say, and (40.5%) of respondents were satisfied with the statement that they always received service from the same pharmacist. These results were found to be similar to a study by Jayaprakash, Rajan and Sivam (2009 which concludes that interpersonal skills and attitude of pharmacists influence customer satisfaction towards pharmacist and their service. In addition, the majority of respondents were satisfied that side effects of medications are explained, and 48.5% of respondents were satisfied regarding counselling by a pharmacist on instructions to take medications. A study conducted by McDonough and Bennett (2006 were also found that emphasize patients'

counselling on medications is an important responsibility for pharmacists. Importance of compliance with medication resulted in (52.2%) of the respondents, which was found to be related to an investigation by McDonough et al. (2006. In this study, 39.6% of respondents revealed that they were satisfied with the information about routine health maintenance provided to them. Additionally, the majority of the respondents were satisfied that their privacy concerning their prescription was maintained. Among the total respondents, 181 of them (43.9%) expressed satisfaction that the pharmacy is reliable. These results seemed to influence customer satisfaction as stated by Kamei et al. (2000).

Based on the education levels of the respondents, a higher mean with significant values (p=0.009) was obtained in the aspect that pharmacists listened to what they had to say. The findings revealed that customers who are not educated are more satisfied with the statement. This may be due to the belief and trust of customers who have a more positive relationship and response with their pharmacist. A contradictory result was discussed in a study conducted by Jayaprakash et al. (2009 which found that greater satisfaction was obtained among secondary education qualified customers. In another study carried out by Baidi and Yip (2010) found that there was no statistical difference between the education levels of customers and the degree of satisfaction.

In terms of household income, the high-income group, between RM 5,000 to 10,000 and more than RM 10,000, had experience higher degree of satisfaction with counselling on instruction to take medications were given and provided information about routine health maintenance (p-value=0.000). Customers in these groups were also satisfied that the pharmacy is reliable. The result may be because customers with high income tend to trust and have higher expectations of the pharmacist.

Availability of OTC and variety of products

In this dimension, the majority of customer's satisfied that the pharmacy handles OTC products and medical supplies and are satisfied that everyday items (toiletries/sundries) can be purchased at the pharmacy. It was found that significant results (p<0.05) were obtained for 'Everyday items (toiletries/sundries) can be purchased at the pharmacy with a mean score between the ages of 21 – 30 years old. This may be because customers of that age expect not only to purchase medications, but also a wide range of products to be available in the pharmacy so that they can purchase everything needed in the pharmacy and to save time (Baidi and Yip,2010). Analysis based on education levels, it was observed that customers who qualified at higher learning institutions attained greater satisfaction, as OTC products and a variety of products were available in the pharmacy. Such a result may be revealed because this group of customers is more knowledgeable about health issues and concerned about self-medication as well as OTC products.

In addition to that, the higher income group (RM 5,000 – 10,000) was more likely to be satisfied with the availability of OTC products and the variety of products. Reflection of this study may be because they can afford to buy these products from the pharmacy, thus satisfied. These results were found to be similar to a study performed by Lodorfos et al. (2006, which revealed that customers' satisfaction in the higher income group increases price affordability, thus they become more satisfied.

Pricing

Customer's satisfaction on pricing acquired most of the respondents were satisfied with the pricing of prescription drugs and non-prescription drugs. In terms of age group, younger customers aged between 21 – 30 years obtained greater satisfaction with the price of non-prescription drugs. The result may be due to higher patronage of non-prescription drugs among these age groups. Among customers who are not educated, they attained greater satisfaction with the price of non-prescription drugs. These may be attributed to lesser knowledge of prices in other medical stores among this group of customers. Among respondents of higher income (RM 5,000 – 10,000), they were more likely to be satisfied with the price of prescription drugs. The possible reason may be that they can afford to buy the prescription drugs regardless of whether they are cheap or expensive.

Availability of special services

From the total number of respondents, the majority of the respondents were uncertain about availability of special services such as orders of prescription, can be accepted by phone/fax. However, most of respondents were satisfied that health screening services such as blood pressure/blood glucose or cholesterol screening were available from the community pharmacy.

For the age group between 51 – 60 years old, it was found that they were more satisfied that orders of prescription can be made by phone/fax. Probably this may be because elderly people are unable to come directly to the pharmacy, thus feel more satisfied when their orders of prescription can be made via phone/fax. By education levels, respondents who were not educated were more likely to be satisfied that orders of medications are accepted by phone/fax. The reason for such results may be because it felt more convenient to

order their prescription via phone/fax, and eventually, they can save more time.

Convenient hours

Most of the respondents were satisfied that they encountered a short waiting time to get medications. They also stated that the pharmacy is open at convenient times and a pharmacist is available all the time. The results obtained from the current study were found to be similar to a study performed by Baidi and Yip (2010) in which customers did not go for treatments because of dissatisfaction due to the long waiting time to get their prescription filled. A study performed by Amponsah et al (2009) stated that longer waiting times are associated with lower levels of satisfaction.

In terms of age groups, the elderly aged between 51 – 60 years old attained greater satisfaction that the pharmacy is open at convenient times, with significantly (p=0.010). The result may be because they can go to the pharmacy according to their feasibility and obtained related health services from the pharmacist. By education levels, customers who are not educated gained greater satisfaction because they had a short waiting time to get medications. Contradictory results were found in a survey conducted by Baidi and Yip.,2010 in which education levels do not found to be significant with convenient hours.

Facilities

Among the respondents participated in the survey, majority of them were satisfied on facilities in the pharmacy. However, statistically non-significant results were found on customer's satisfaction with facilities of the pharmacy based on gender, race, age, education levels and income (p-value>0.05). These results may be due to appearance of pharmacy does not influence customer satisfaction with community pharmacy.

Convenient location

In the study, most of respondents were uncertain about location of pharmacy which is near to the hospital but most of them were satisfied that they pharmacy is located near their house and near their working area. The results were found to be similar to an investigation carried out by Amponsah et al (2009), which revealed longer the distance to the nearest health care facility, the lower the level of satisfaction. Based on age and education levels did not find any significant difference significantly on customer's satisfaction. However, customers with high income (RM 5,000 – 10,000) were found to be more satisfied with pharmacies which are located near hospitals and near to their working area. This may be because they feel more convenient to go to the pharmacies which are located near to the hospital and their working areas.

Overall customer satisfaction

Customer's response on receiving the best service from the community pharmacy

More than half of the respondents (68.4%) claimed 'yes' that they received the best service from community pharmacies. In addition to that, customers aged 41 – 50 years old were found to agree that they received the best service from the community pharmacy. The results obtained may be because customer's at this age group more frequently obtained various services and felt more satisfaction with services compared to other age groups.

Customer's overall satisfaction with all aspects received from the community pharmacy

From this study, it was discovered that most of the respondents were satisfied to some extent regarding all services they received from the community pharmacies. Only 12.6% of respondents were strongly satisfied with all services received from the pharmacies. However, customers who are not educated seemed to be more satisfied compared to other groups of customers within education levels. Additionally, customers in the higher income group, more than RM 10,000, were identified to be satisfied compared to customers with lower income. The findings were that higher-income customers tend to afford services from the pharmacy, hence feel more satisfied with the overall aspects received from the community pharmacies.

CONCLUSION

From this study, it was concluded that customers of the community pharmacies were satisfied to a certain extent with the services provided by the community pharmacies. In addition to that, elderly people were found to be more interested in visiting community pharmacies to seek health supplements and herbal products as well as to seek diabetes education, blood pressure or cholesterol monitoring. Smoking cessation consultation is more common with customers who are not educated. Customers with high household income are more willing to pay for their services from the pharmacist. Additionally, customers' satisfaction with the attitude of the pharmacy or pharmacist, availability of OTC and variety of products, pricing, convenient hours, facilities and convenient location was good. Customers with higher household income were found to be more satisfied with the attitude of the pharmacy/pharmacist and the availability of OTC products, and the variety of products. In the aspect of pricing, the younger group of customers (21 - 30 years old) were more satisfied. Elderly customers were more satisfied with the availability of special services such as health screening services (blood pressure, blood glucose,

cholesterol screening) and convenient hours of the community pharmacies and availability of pharmacists in the pharmacy. However, the location of the pharmacies was found to be non-significantly among age groups and on education levels. Customers aged between 41 -50 years old believe they received the best service from the pharmacies, whereby overall customer satisfaction with all aspects of the pharmacies resulted in satisfaction to a definite extent only.

LIMITATIONS OF THE STUDY

The response rate was 51.5%. Thus, no information about those 48.5% who did not respond; it was possible to reach the majority of the population. This study was focused mainly on the urban population, and almost all the participants were educated and with high household incomes; thus, future studies are required to conduct such studies in the remote rural populations and also to cover illiterate populations. The opinions expressed in this study may not be generalised for a large population of Malaysia, as the study was conducted with a cross-section of people in the state of Selangor. In addition, the above observation may be true for only the urban population because of convenient sampling and can only be generalised for the urban population, not to other populations belonging to different socioeconomic or cultural backgrounds.

FUTURE STUDIES AND RECOMMENDATIONS

For the level of customer satisfaction with community pharmacies, even satisfactory results were obtained. Measures should be taken by the pharmacies to improve their customer loyalty by improving the elements that affect customer satisfaction. More studies can be conducted on the effectiveness of pharmacist or pharmacists in providing various health services to customers. Pharmacist should also improve their knowledge and communication skills. They should emphasise more on customer service needs rather than focus on their business. Besides that, awareness should be created among the public about the role of pharmacists, so that they will know what to expect from pharmacy services.

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