

**A STUDY OF CUSTOMER SATISFACTION WITH COMMUNITY
PHARMACIES IN THAILAND**



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A STUDY OF CUSTOMER SATISFACTION WITH COMMUNITY PHARMACIES IN THAILAND

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ABSTRACT

Evaluation the level of customer satisfaction may facilitate in identifying customer needs and service failure which stimulate pharmacy providers to be responsible and deliver the quality of service. This study investigated satisfaction with pharmacy services in Thailand. Quantitative survey questionnaire was distributed to 5 pharmacies located in Bangkok and upcountry. 26-item self-completion questionnaire with a 5-point rating scale were used. 73 out of 100 questionnaires were collected. Majority of dimensions were rated as satisfied. Dissatisfaction were found in dimensions such as sufficiency of car parking, availability of health screening services and private counselling area, side effects of medication are explained, keep record of prescription history and drug allergies. Location is the most important factor which has significantly positive relationship with overall satisfaction. Most customer characteristics did not have relationship with satisfaction level except for gender and place of origin. There were some rooms to improve the quality of pharmacy service in order to increase customer satisfaction and to differentiate from competitors.

KEY WORDS: Community Pharmacy / Customer satisfaction / Thailand / Pharmacy service / Factors of satisfaction

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CHAPTER I

INTRODUCTION

In today's world, the trend of beauty and healthcare industry is increasing worldwide. According to Deloitte 2014 global healthcare outlook, it has listed main factors which influence the growth of healthcare industry (Deloitte, 2014).

1. Demographic trend; Currently there is a growing in aging population group. The baby boom generation population will all turn to aging group and will become the major group of each country. This group requires more healthcare products and services for disease diagnosis, prevention and treatment of disease to increase their quality of life and well-being. Due to the growth of medical knowledge and technology, the life expectance of people extends to be longer.

2. Consumer change; There is a big change in lifestyle from the past. The people are aware more in their health. The health consciousness is growing up among ever ages of population. They commonly search and find the knowledge about beauty and healthcare in the internet to make them update on these information for their personal benefit purposes. They would like to get the consulting services about healthcare product, and also weight control and nutrition.

3. Rise in chronic diseases; As a consequence of urbanization, the lifestyle and behavior of people has changed which leads to the direction of increase in chronic diseases, so there is an increase in demand for healthcare products and services for treating them.

4. Public healthcare systems constraints; Due to the government policy about treatment cost subsidy in basic care, this leads to the long waiting lists at hospitals, so the patients will start to trade off the government subsidy to pharmacy visit for minor treatment. Many patients have started to visit pharmacies frequently for this purpose.

5. Change in technology; The innovation of new technology giving rise of new clinical therapies which turns to new more medical ailments for both preventive

and treatment. The technology of the online media can build awareness on the beauty and healthcare worldwide.

All of the changing in trends mentioned above can provide a growing customer base for pharmacy and drive the retail drug industry.

According to the data from ThaiFDA website, it can be seen that the number of authorized pharmacy in Bangkok areas are growing year by year (FDA MoPH, 2013). The trend is getting higher and higher.

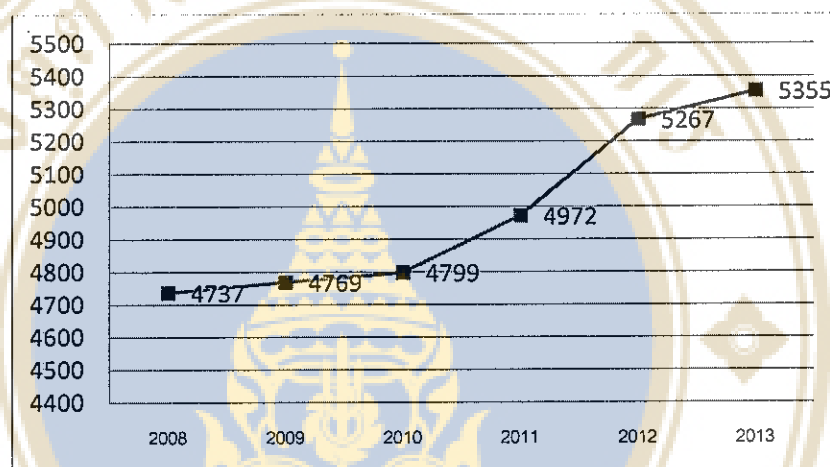


Figure 1.1 Number of authorized pharmacies in Bangkok area during 2008 to 2013

The pharmacy industry is considered as product and service providers at the same time. In the product provider aspect, it consists of retailing prescription and non-prescription medicines, over-the-counter medicines, supplementary food, beauty supply, personal care products. Also it is a kind of service provider such as counselling services and other basic health-related check-up which are monitoring of blood pressure, blood sugar for the patients with chronic diseases and also the general check-up such as body temperature, weight and height. It has to focus on both variety and quality of the products and services in order to compete with other competitors in the same industry.

The pharmacy industry is one of an increasingly competitive sector which an independent pharmacy has to compete with national (e.g. Bangkok drugstore,

Neung drugstore, Fascino, Pure, Exta etc.) and multinational chain pharmacy (e.g. Boots, Watsons, Tsuruha etc.) for market share. Therefore each pharmacy needs to differentiate itself from other and earn customer trust and satisfaction in order to get customer loyalty and total sales. Differentiation can be performed in many aspects in order to be unique such as by providing a variety of products, providing additional particular services, showing the product in an attractive layout or emphasizing any aspects which is crucial for the target customers.

Customer satisfaction is a way to measurement how products and services which are provided by a company meet or surpass the customer expectation. It seems to be a core concept in modern marketing practice today. Customer satisfaction is considered as an important indication for today's business which is mostly a customer centered (www.scribd.com). It is believed that the level of customer satisfaction has a positive effect on customer retention, customer loyalty, business's performance and profitability (Mohd BB et.al., 2010). The direction of healthcare industry becomes an outcome-based, so customer satisfaction is an important dimension and key performance to the company.

The goal of this study is to investigate the customer satisfaction with pharmacy services in Thailand by providing self-completed survey to the customers who visited the pharmacy in Thailand. The result of this study will let the healthcare providers know the satisfaction level of customer from pharmacy service aspects they received which can lead to the improvement on the quality of services to meet customers' needs and to help increase the continuity of healthcare and finally improve the better health outcome of society.

CHAPTER II

LITERATURE REVIEW

Over the last twenty years, the role of pharmacist has been totally changed. The change comes from the evolution from the traditional way of dispensing medication activity to the broader role and responsibility of healthcare (Berger B., 1993). However, pharmaceutical care need much more close and trust relationship between the pharmacist and customer than just only traditional medication dispensing (Sleath B., 1996). It is accepted that medication is crucial for using in treatment and prevention of disease (Tarn DM. et al., 2006), but the number of medication, which has been developed and approved to use, has significantly increased over the last few decades. Moreover, there are many patients who required complex and long-run therapies (Broemeling AM., et al., 2008). Study has indicated the improvement of health outcomes when the relationship between pharmacists and customers are good and satisfied (Sanah H., et.al, 2013).

The meaning of customer satisfaction has been defined from many researches and sources. Customer satisfaction is defined as “a personal evaluation or appraisal of a service or product received”(Donabedian A., 1988). Satisfaction is the final judgment after receiving the specific individual transaction (Crosby L., et.al., 1990). Term of satisfaction is more specific than customer perception (Jose ARB., 2001). Evaluation of customer satisfaction in healthcare industry can facilitate the improvement for the quality of delivery healthcare services and also optimizing resource allocation and utilization (Curtiss FR. et.al., 2004). Moreover, evaluation the level of customer satisfaction may facilitate in identifying customer needs, perceptions, concerning, and service failure which may stimulate healthcare providers to be responsible and deliver the quality of service (Ford RC. Et.al., 1997). Therefore, customer satisfaction is an essential mixture component of the quality assurance for healthcare services industry (Clearly PD., 1988) and has received lots of attention and interesting for the following purposes; performance assessment, reimbursement, quality management of health service delivery (Donabedian A., 1988). Pascoe

summarized that customer satisfaction level can be used as an indicator of health-related behavior of customers (Pascoe G., 1983). Some studies demonstrated that satisfied customers tend to remain using healthcare services more than those who did not satisfy on the service (Pascoe G., 1983) (Marquis M., et.al., 1983) (Zastowny T., et.al., 1989) (Dearmin J., et.al., 1995). Other research suggested the relationship between customer satisfaction and other dimensions which are medication compliance (Pascoe G., 1983) (Bartlett E., et.al., 1984).

It is believed that there is a strong relationship among customer satisfaction, customer retention and profitability of the company. Therefore, customer satisfaction is the major operational target for many companies. They put huge investment for performance improvement in some dimensions that can contribute high level of customer satisfaction such as quality and customer service (Mohd BB., et.al., 2010). Jose Augusto Rosa Bastos stated that service quality is difficult to evaluate since it is intangible and depends on each person perception. Kucukarslan and Schommer research demonstrated that patient satisfaction with pharmacy service depends on what they have been through in their prior experiences, market-based expectation and the ideal pharmacy in their perception (Kucukarslan S., et. al., 2002). The research of Jose Augusto Rosa Bastos set the hypothesis that service quality will have a direct positive effect on satisfaction. The result of study demonstrated that service quality has a positive relationship with customer satisfaction which means the higher service quality can lead to the higher customer satisfaction (Jose ARB., et.al., 2001). However, researchers suggested that two new variables, which are private attendance and consultation service, were important and should be included in the new study and they also identified that recently it is crucial to investigate specific aspects of each service which related to drugstore such as physical, image, parking facilities etc (Jose ARB., et.al., 2001).

Customer satisfaction also has positive relationship with behavioral intentions (loyalty) (Jose ARB., et.al., 2001). The relative retention or loyalty used to show profits better than other aspects which related to the competitive advantage. There are many factors that make customer not to switch to use the product or service of other company such as technical issue, psychological factor. Also it may because of they are satisfied with the provided product and service of this company, so they

would like to maintain this relationship with this company. That is the reason why satisfaction is the major strategy in the long-term business (Jose ARB., et.al., 2001). Customer satisfaction and loyalty will lead to continuously healthcare monitoring which is important to improve the health outcomes (Crosby L., et.al., 1990) (Amit DK, et.al., 2011). Satisfied patients have been demonstrated to have positive relationship with their healthcare provide (Marquis M., et.al., 1983) (Kamei M., et.al., 2001) and they tend to continue using healthcare services and are more likely to continue adherent to medical administration (Ross C., et.al., 1987). Customers will select the most proper pharmacist for them who can provide them the information and advice of all concerns they may have. The pharmacist can do monitoring customer's medication history that they consumed by creating and arranging the customer medication record of each case. This can prevent drug-related problem that may occurred and also increase the well-being and quality of life (Amit DK., et.al., 2011). Moreover, customer satisfaction influenced word of mouth from customer to customer. Satisfied customers tend to support the growth of pharmacy business due to repurchasing and hardly to switch to another store, extending the time in pharmacy, recommending the pharmacy to their family and friends. In the other hand, unsatisfied customers will inform the other about their bad experiences at the pharmacy (Mohd BB., et.al., 2010).

There has been a significant increase in the interesting and attention to measure customer satisfaction with healthcare services (Ford RC., et.al., 1997). Recently there are many research conducted to investigate customer satisfaction in pharmacy industry. From the literature review, researches of customer satisfaction in pharmacy have been conducted in many countries such as Japan, Malaysia, Nigeria, the United Arab Emirates, and Iran etc. It was recommended that customer satisfaction should be investigated in a regular basis to make sure that the level of satisfaction does not decrease from time to time (Mohd BB., et.al., 2010).

Mohd Baidi Bahari conducted the research to investigate the factors contributing customer satisfaction with community pharmacy in Malaysia by using a questionnaire as a cross-sectional descriptive study. Eight major dimensions were identified to help pharmacy to scope the important factors and services which need to provide to pharmacy customers and identify the rooms which need improvement. Factor analysis was conducted by having customer evaluation score of these eight

dimensions which are attitude of pharmacy/pharmacist (customer service), availability of over-the-counter drugs and a variety of products, pricing, availability of special services, facilities, convenient location, convenient hours and medication record. The 4 factors got the highest satisfaction score from majority of customers. The result of the four highest evaluation scores was listed below.

1) Convenient hours – Customer expected to get the medicine from pharmacy with short waiting time. They required pharmacist when they visited the pharmacy, so they expect the longer working hours of pharmacist at the pharmacy. Therefore they can buy medicine at their convenient time.

2) Availability of over-the-counter drugs and a variety of products – The pharmacy consists of a wide range of service provided which is from self-service (over-the-counter drug and other general health and personal care product) to the medicine which required pharmacist to dispense and explain. A variety of products in pharmacy can help customer saving their time since they can buy everything they need in the pharmacy without visiting another shop. However, not only variety of products, the owner of pharmacy needs to make sure that the products meet the need of target customer.

3) Pricing – Set the optimize price for product and service is the important part in marketing strategy. Customer mostly do survey on the prices of their items needed among few pharmacies to do the comparison and will purchase from the pharmacy which give the lowest price. Customers are willing to travel around to find out which pharmacy can give them the best price.

4) Attitude of the pharmacy/pharmacist – Malaysian customers expected a pharmacist with a good attitude and specific knowledge/skill to explain them about the information and safety of medicine in detail at the private zone.

Another research conducted in Japan to investigate the relationship between pharmacy services and overall customer satisfaction (Miwako K., et.al., 2001). Miwako Kamei, a researcher in this study, used a five-point scale questionnaires consisted of twenty-six evaluation items related to pharmacy services and overall customer satisfaction. The descending orders of these seven factors as per contribution ratio are; 1) attitude of pharmacy/pharmacist 2) availability of over-the-counter drugs 3) availability of special services 4) facilities 5) convenient location 6)

convenient hours and 7) medication record (Miwako K., et.al., 2001). This study had same seven factors as that done in Malaysia as mentioned above but this research did not have pricing factor as Malaysia's did. From these seven factors analysis, the research identified relationship between five variables of pharmacy services and satisfaction score. Four factors (attitude of pharmacy/pharmacist, facilities, availability of over-the-counter drugs, and convenient hours) found positive correlation with customer satisfaction. Attitude of pharmacy/pharmacist in this study, included pharmacist's knowledge and skill for providing and managing information, has a strong correlation to the satisfaction. For facilities, it is the second potential variable which influent customer satisfaction. It is also the only variable which the satisfaction score was higher than the importance level of the ideal pharmacy. This means that it has already met the customer's expectation in terms of customer satisfaction (Miwako K., et.al., 2001). In the other hand, one factor, availability of services found to have significant inverse correlation with customer satisfaction because it is limited to "acceptance of prescription by fax and home delivery of medications" which related to the shortage of medicine inventory at pharmacy. This can be implied that it is important for pharmacy to make sure the sufficient of medicine inventory at pharmacy since this issue can impact the customer satisfaction score (Miwako K., et.al., 2001). However, the research did not found the significant correlation of convenient location/medication record and customer satisfaction.

The strong factors which influence the customer satisfaction level may vary and different in each country, since we have different pattern of pharmacy service (Azuko CO., et.al., 2006). The law and regulation regarding pharmacy is also totally different from each other. For example, availability of genuine drugs become the strongest factor to create customer satisfaction with Pharmacy in Nigeria since the using of copy drug is very high and widely spread in the country (Miwako K., et.al., 2001). While the strong factors which influence the customer satisfaction level in United States are home delivery, proximity to home, availability of parking, and methods of payment (Mackeigan LD., 1989). However, some issues identified in the research should be developed and improved to make it exist all over globe in order to integrate the role of pharmacist into the healthcare delivery service such as the issue about nondrug service which has been found in the survey in Warri, Nigeria (Miwako

K., et.al., 2001). Purpose of pharmacy visiting has been identified in this study as well. 55% of interviewee purpose was to buy medicine and 12% of them visit the pharmacy because they seek the advice from pharmacist (Miwako K., et.al., 2001).

The type of pharmacy is one of the factors which may influent customer satisfaction. There is also a study investigated level of customer satisfaction between independent pharmacies and chain or shopping mall pharmacies (Amit DK., et.al., 2011). The service aspects evaluated in this study are quality of respect given to the customer, billing and payment system, appropriate medication record of customer, counseling service provided at the time of dispensing the medicine. The result indicated that most of customers are satisfied with the overall service quality of independent drugstore rather than shopping in chain/mall drugstore (Amit DK., et.al., 2011). From overall customer rating, 72.44% of interviewee rated retail drugstore as excellent and good due to satisfaction in the service quality such as respect given by chemist, billing and payment system, customer medication record, counseling service provided to customers at the time of dispensing medication. Almost 47.95% of interviewee rated mall pharmacy as average and also they provided comment to ask mall pharmacy improve in the quality of service in mall pharmacy (Amit DK., et.al., 2011).

Amit D. Kandhare identified that independent pharmacies are set and arranged based on patients' needs (Amit DK., et.al., 2011). They focus on the customer service as their first priority. Their services provided to customer are those which chain pharmacy never focus on. The staffs in independent pharmacies are those who are professional with well education and can efficiently provide relevant information to customers about their medicines and also the adverse events that may occurred. Not only the information about medicine, other services and information also provided such as information about vaccination, screening to prevent the disease, proper management for diabetes. They also give the delivery service with any charge. The independent pharmacies are considered as providing a wide range of prescription and non-prescription medicine together with other healthcare related products (Amit DK., et.al., 2011). For chain or mall pharmacies, the shortage of medicine and lack of variety and availability of medicine and inability to provide consultation about medicine to customers were found in the chain stores (Amit DK., et.al., 2011). These

issues make the customer irritated and may switch to visit other pharmacy. Moreover, the discount program provided to customer may have a negative perception to customer as it creates cheap impression on their mind. The billing and payment system is good but suggested to add more payment counter to reduce the waiting time (Amit DK., et.al., 2011). Management level should provide technical training to their staffs together with the tactic to manage customer effectively.

There are also studies investigated the relationship between customer demographic and level of satisfaction (Azuko CO., et.al., 2006). The impact of customer characteristic/demographic and their satisfaction level with pharmacy services is variable among studies. Age and employment status have significant difference with level of customer satisfaction (Azuko CO., et.al., 2006). However, no significant difference relationship between gender (Azuko CO., et.al., 2006), type of pharmacy visited most and customer satisfaction level (Azuko CO., et.al., 2006). Also no difference of satisfaction level were found in race and educational level (Azuko CO., et.al., 2006). Older people and unemployed people showed higher satisfaction level with pharmacy. Elderly and retiree person require more health need and support. Moreover, they are more likely to be available and spend lots of time in pharmacy (Mohd BB., et.al., 2010). Another study indicated that income is the only demographic factor which has relationship with customer satisfaction which the lower income people had higher level of satisfaction. This study also demonstrated that the purpose of visiting pharmacy has relationship with customer satisfaction (Kucukarslan S., et.al., 2002). Customer whose purpose of visiting pharmacy is to seek advice from pharmacist have a higher satisfaction score with significant difference than those who came for purchasing medicine as their main purpose (Kucukarslan S., et.al., 2002).

This study is conducted to assess factors contributing customer satisfaction with pharmacy service in Bangkok area and also to determine the impact of socio-demographic characteristics of the respondents on their satisfaction level.

Table 1.1 Overall picture of satisfaction aspects used in the researches

Satisfaction aspects	Japan	Malaysia	Nigeria	United Arab Emirates	Iran	This study
provided a through explanation of the medicine	√	√	√	√	-	√
listened to what I had to say	√	√	√	√	-	√
always receive service from the same pharmacist	√	√	-	-	-	√
the pharmacists and employees have good attitudes	√	√	-	√	√	√
the pharmacists and employees are polite	-	√	√	-	√	√
my prescription drugs are always in stock	√	√	√	√	√	√
side effects of medication are always explained	√	√	-	√	-	√
counselling on instruction to take medicine and importance of compliance are given	-	√	-	-	√	√
information about routine health maintenance is provided	√	√	√	√	√	√
patient/consumer privacy concerning prescriptions is maintained	√	√	-	-	-	√
the pharmacy is reliable	√	√	√	√	√	√
dispensed drugs are clearly, labeled, and explained	-	-	√	-	√	√
technical skill of pharmacist (thorough, careful)	-	-	√	-	-	-
advice provided on how to manage common ailments (e.g.colds, flu, fever, diarrhea)	-	-	√	√	√	-
pharmacy staff dedicates the time for attending to my needs	-	-	-	√	√	-
the pharmacy handles over-the-counter medicine and medical supplies	√	√	-	√	√	√
everyday items (sundries/toiletries) can be purchased at the pharmacy	√	√	√	√	√	√
the price of prescription drug is reasonable	-	√	√	√	-	√
the price of non-prescription medicines and other items are reasonable	√	√	√	√	-	√
the pharmacy will deliver medicine	√	-	-	-	√	-
order for prescriptions are accepted by fax/phone	√	√	-	-	-	-
availability of health screening services such as blood pressure/blood glucose/cholesterol screening	-	√	√	-	-	√
the building is impressive	√	√	√	-	-	-
the waiting area/room is comfortable	√	√	√	√	√	√
the pharmacy is sanitary	√	√	√	-	√	√
private area for counseling is available	-	√	√	√	√	√
near the hospital	√	√	√	√	-	√
near the public transport station	√	√	-	√	-	
near the working place	√	√	√	√	-	
near my house	-	√	√	√	-	
car parking is sufficient	-	√	√	-	-	√
there is an easy drive to location of pharmacy	-	-	√	-	-	-
short waiting time to get medicines	√	√	-	-	√	√
the pharmacy is open at convenient times	√	√	√	-	-	√
pharmacist is available all the time	-	√	√	-	-	√
the pharmacy keeps a record of my prescription history and drug allergies	√	√	√	-	-	√
overall satisfaction	-	-	-	√	-	√

CHAPTER III

METHODOLOGY

3.1 Sample

This study is a quantitative survey questionnaire. 5 selected pharmacies in Thailand are selected, 2 of 5 pharmacies located in Bangkok and other 3 pharmacies located in rural area. Total 100 paper questionnaires were distributed to 5 selected pharmacies with 20 were given at each pharmacy. The data collection at pharmacy were performed around 24 Oct 2014- to 9 November 2014.

3.2 Survey instrument

The assessment of customer satisfaction with pharmacy services can affect both elements; technical and interpersonal relationship, so the evaluation of customer satisfaction should impact the changes in pharmacy professional practice (Azuka CO., et.al., 2006).

From previous similar research conducted in Malaysia and Japan, the questionnaires were developed regarding the instrument created by Kamei et al.(2001) and Oprah and kikanme (2006). The study used a 26-item self-completion questionnaire with a rating response scale. 5-point very satisfied-to-very dissatisfied scale is used as a rating response scale to measure satisfaction score since Ware and Hays recommended to use this response scale for evaluating customer satisfaction level with medical encounters. The responses from customers were rated from “very satisfied” to “very dissatisfied”; very satisfied = 5, satisfied =4, fair =3, dissatisfied =2, and very dissatisfied =1. The higher score represents the higher level of customer satisfaction with pharmacy encounters. The item in each aspect was drawn from literature review of previous similar studies in Japan, Malaysia, Nigeria, the United Arab Emirate, and Iran. The survey instrument was adapted from these previous researches to use for evaluating customer satisfaction with pharmacy in Thai context.

The questionnaire was divided into 2 sections which are customer satisfaction evaluation of each aspect with pharmacy services and demographic data and detail of pharmacy visit.

The first section, customer satisfaction evaluation, consists of 26 items for satisfaction evaluation. Moreover, the overall satisfaction with pharmacy is included in this section to let customer rate their overall satisfaction score. At the last part of this section, open-ended question asking to seek out customer insight on any additional services required from pharmacy.

The second section gathers about demographic data and detail of pharmacy visit from customers. This section consists of 8 questions which are 1) gender 2) age 3) place of origin 4) marital status 5) educational level 6) employment status 7) type of product they buy at pharmacy 8) purchasing type.

The questionnaire was initially developed in the English language and then was translated into Thai language before distributing to the selected pharmacies. The questionnaires were then distributed to the selected pharmacies in Thailand. A written explanation about the questionnaire and how to complete the questionnaire were given to the pharmacist or pharmacy staff to make sure that every pharmacy understands the right way. This can ensure that they can assist the interviewees who found any difficulties on completing the survey. The customers, who visit these selected pharmacies, were selected for completing the satisfaction questionnaire since they are still fresh of what they have been served by the pharmacy so they can give the most actual feedback on satisfaction level.

CHAPTER IV

DATA ANALYSIS

4.1 Overview

After gathering the paper questionnaires from the pharmacies, the data in paper was transcribed into the electronic questionnaire created in Google Docs. The data was analyzed descriptively and also analyzed by using Analysis Toolpak program includes factor analysis, correlation analysis, regression analysis, histogram and t-test analysis.

4.2 Data analysis

The total number of questionnaires distributed was 100 and 73 completed forms were collected. The response rate for the satisfaction survey was 73% (73/100).

4.2.1 Demographic data

The demographic data and detail of pharmacy visit are given in Table 4.1.

Table 4.1 Demographic data of the respondents

Variable	Number reporting	%
N = 73		
Gender		
Female	45	62
Male	28	38
Age (years)		
Less than or equal to 20 years old	13	18
21 – 30 years old	19	26

Table 4.1 Demographic data of the respondents (cont.)

31 – 40 years old	25	34
41 – 50 years old	13	18
51 - 60 years old	3	4
More than 60 years old	0	0
Place of origin		
Bangkok and metropolitan	25	34
Upcountry	45	62
Marital status		
Single	33	45
Married	36	49
Divorced/Widowed	4	5
Highest educational level		
Primary school	5	7
Secondary school	24	33
Vocational/technical	16	22
University	26	36
Employment status		
Employed	48	66
Unemployed	9	12

Note: The sum of some demographic data may not equal to 100% due to missing in data during questionnaire completion.

4.2.2 Satisfaction score

Figure 4.1 showed the average satisfaction score of all 26 dimensions of pharmacy services. Most of them were rated the satisfaction level above or equal to 4 which means generally the customers satisfied with most pharmacy services. However, there are 5 dimensions with satisfaction level of less than 4 which are reasonable price of prescription drug (3.96), reasonable price of non-prescription medicines/other items (3.93), availability of everyday items (3.74), sufficiency of car

parking (3.73), availability of health screening services such as blood pressure/blood glucose/cholesterol screening (3.63).

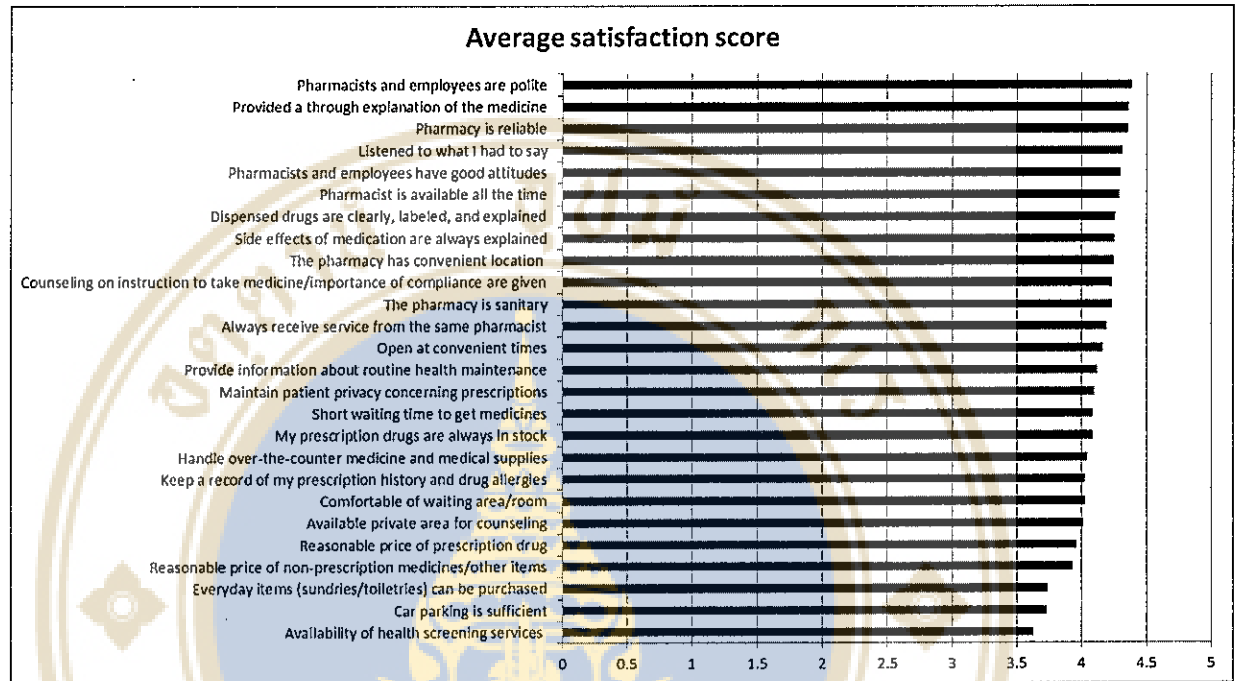


Figure 4.1 Average satisfaction score of each dimension

Respondents were most satisfied with the politeness of pharmacist and employee in the pharmacy with the average satisfaction score of 4.38 and were least satisfied with the availability of health screening services (blood pressure/blood glucose/cholesterol screening) with the average satisfaction score of 3.63.

Regarding the frequency distribution (percentage) of responses to each questionnaire item, majority of customers rated satisfaction score for each dimension as 4 and 5 which means “satisfied” and “very satisfied”, respectively. By the way, there are some dimensions which have been rated the satisfaction score by customers as 1 and 2 which means “very dissatisfied” and “dissatisfied”, respectively as listed below.

- Sufficiency of car parking (11% rated as very dissatisfied and satisfied)
- Availability of health screening services (7% rated as very dissatisfied and satisfied)

- Available private area for counseling (4% rated as very dissatisfied and satisfied)
- Side effects of medication are always explained (4% rated as very dissatisfied and satisfied)
- Keep a record of my prescription history and drug allergies (3% rated as very dissatisfied and satisfied)
- Provide information about routine health maintenance (3% rated as very dissatisfied and satisfied)

4.2.3 Derivation of dimensions by factor analysis*

As a result of factor analysis by looking at correlation within each dimension, 26 dimensions of pharmacy service were categorized into the ten factors which can be defined as per **table 4.2**.

*Factors were identified by using a combination of qualitative judgment and quantitative information. For items grouped together into a factor, it is required (1) it is plausible for them to be grouped together, and (2) the average intra-factor correlation (between items of the same factor) is higher than the average of inter-factor correlation (between items of the other factors).

Table 4.2 Result of factor analysis and average satisfaction score of each factor

Dimensions/evaluation items	Average satisfaction score
Factor 1: Attitude of pharmacy/pharmacist	4.2464
Provided a through explanation of the medicine	
Listened to what I had to say	
Always receive service from the same pharmacist	
Pharmacists and employees have good attitudes	
Pharmacists and employees are polite	
My prescription drugs are always in stock	

Table 4.2 Result of factor analysis and average satisfaction score of each factor (cont.)

Side effects of medication are always explained	
Counseling on instruction to take medicine and importance of compliance are given	
Provide information about routine health maintenance	
Maintain patient privacy concerning prescriptions is maintained	
Pharmacy is reliable	
Dispensed drugs are clearly, labeled, and explained	
Factor 2: Availability of over-the-counter drugs and a variety of products	3.8904
Handles over-the-counter medicine and medical supplies	
Everyday items (sundries/toiletries) can be purchased	
Factor 3: Pricing	3.9447
Reasonable price of prescription drug	
Reasonable price of non-prescription medicines and other items	
Factor 4: Availability of special services	3.6301
Availability of health screening services such as blood pressure/blood glucose/cholesterol screening	
Factor 5: Facilities	4.0913
Comfortable waiting area/room	
The pharmacy is sanitary	
Available private area for counseling	
Factor 6: Location	4.2466
The pharmacy has convenient location	
Factor 7: Parking service	3.7324
Sufficiency of car parking	
Factor 8: Convenient hour	4.1233
Short waiting time to get medicines	
Open at convenient times	

Table 4.2 Result of factor analysis and average satisfaction score of each factor (cont.)

Factor 9: Availability of pharmacist	4.2877
Pharmacist is available all the time	
Factor 10: Medical Record	4.0274
The pharmacy keeps a record of my prescription history and drug allergies	

4.2.4 Purchasing characteristics

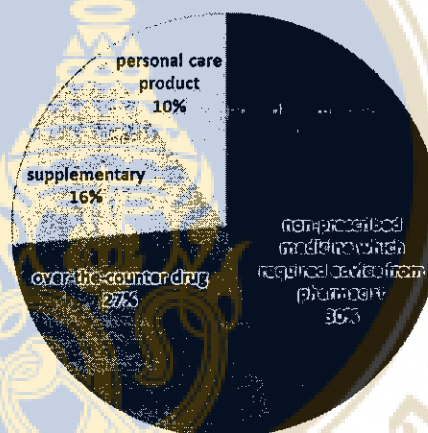


Figure 4.2 Type of product they bought from the pharmacy



Figure 4.3 Purchasing type

To investigate purchasing characteristic of customers, the study collected the data about type of products they recently bought from the pharmacy and purchasing type at this visit.

According to **Figure4.2**, majority of products they bought are medicines (prescribed medicine, non-prescribed medicine and over-the-counter drug) rather than other non-medicine products (supplementary and personal care product).

From **Figure4.3**, 73% of customers did planning prior visiting the pharmacy while only 27% of customer's visiting is impulse purchasing.

4.2.5 Relationship among factors with overall satisfaction

To find out the relationships between overall satisfaction and each factor, regression analysis was used to understand how the typical value of overall satisfaction changes when any one of each factor is varied, while other factors are held fixed. However, we cut-off four samples who missed to rate the overall satisfaction score.

According to the regression analysis result in table4.3, it is found that only factor6 "location" has significantly positive relationship with overall satisfaction with p-value of 0.0198. This means that the higher level of satisfaction in convenient location of the pharmacy (for example; near hospital, near public transport station, near my house, near working place etc.) can directly influence higher level of overall satisfaction with the pharmacy with statistically significant.

Table 4.3 Regression analysis result between overall satisfaction and the factors

Adjusted R Square = 0.5547

	Coefficients	P-value
Intercept	0.4300	0.3660
Factor1: Attitude of pharmacy/pharmacist	0.2443	0.1447
Factor2: Availability of over-the-counter drugs and a variety of products	0.1332	0.2315
Factor3: Pricing	-0.0738	0.5074

Table 4.3 Regression analysis result between overall satisfaction and the factors (cont.)

Factor4: Availability of special services	0.0759	0.4294
Factor5: Facilities	0.01857	0.8952
Factor6: Location	0.2542	0.0198
Factor7: Parking service	0.0527	0.4483
Factor8: Convenient hour	0.1529	0.3062
Factor9: Availability of pharmacist	0.0016	0.9892
Factor10: Medical Record	0.0700	0.5958

4.2.6 Relationship between degree of satisfaction and customer characteristics

This study showed that gender has an influence upon satisfaction on few dimensions which are my prescription drugs are always in stock, side effects of medication are always explained and everyday items (sundries/toiletries) can be purchased, with male customers tending to indicate higher level of satisfaction with statistically significant ($p < 0.05$).

Further investigation showed that customer's place of origin also has positive influence upon satisfaction level on some dimensions which are everyday items (sundries/toiletries) can be purchased, comfortable of waiting area/room, available private area for counseling and sufficiency of car parking, with upcountry people tending to indicate higher level of satisfaction with statistically significant ($p < 0.05$). This result may cause from the available and larger space in upcountry, so they can have more area to put more products in their stores, set the area for counseling and waiting, and also prepare parking area for their customers.

However, most of demographic data and characteristic data of customers were found as no significantly different in relationship with the tested aspects.

4.2.7 Statistically interpretation

Most factors tested in this study did not show up significant. It may because of the truly no relationship among them or limitation in the survey method (e.g., sample size or the way the questions were asked etc.)

Although the study demonstrated that gender and location showed significant difference, they do not consider as major factors. These few differences in this study are speculative since the study tested 26 aspects at the 95% confident level which means that the study still have a chance of mistaking a statistical fluke result for a true difference. Therefore, it is fair to expect 1 or 2 demographic or characteristic difference purely as a random fluke.

4.3 Data discussion and recommendation

4.3.1 Room to improve for pharmacy

From the finding of this study, most customer satisfied with the pharmacy service, so the pharmacy should maintain or improve their strength to be even better. However, there are still room to improve for some dimensions which are categorized into three groups below.

Health-related service and information: Very dissatisfied and dissatisfied were found in these dimensions which are “availability of health screening services”, “Keep a record of my prescription history and drug allergies”, “Provide information about routine health maintenance”, and “Side effects of medication are always explained”. The pharmacy should focus more on providing specific health-related services and health and medicine-related information with free of charge in order to satisfy the customers and also improve the holistic healthcare outcome of customers and community. Moreover, the pharmacy should pay more attention on this point since the growing level of health concern is higher and higher.

Availability of products including everyday items: There are low satisfaction scores rated on this aspect. It is understand that the pharmacy must focus on medicine as first prioritize product. However, if the pharmacy can provide variety of product such as everyday items, it can be a one-stop shopping point for customers

and can also increase the percentage of impulse purchasing customers and at the same time. Also the sales proportion of personal care products can get higher.

Availability of area: It seems to be an issue about availability of area in the pharmacy since “available private area for counseling”, “comfortable of waiting area/room”, and “sufficiency of car parking” were found very dissatisfied and dissatisfied from the survey. Since the personal health problem and medicine they received are perceived as individually confidential information, so they would like to get the counseling service with privacy provided. Also availability of car parking space is a problem which may hardly to solve especially in Bangkok and metropolitan area.

In the competitive environment today, the pharmacy should consider and improve these aspects in order to differentiate themselves among other competitors to be survive in this industry.

4.3.2 Recommendation for new pharmacy

As the study result showed that the location is the only factor which has statistically significant positive direct impact to overall customer satisfaction with the pharmacy. Therefore, in case of opening the new pharmacy, the location is the most important factor to consider to gain high customer satisfaction level.

Moreover, considering to invest more on the three categories as mentioned above is the must to do because it can make your pharmacy differentiate from the existing ones and can also respond to customers' needs.

4.3.3 Customer characteristics with satisfaction level

Although the result showed that female customers have lower satisfaction level than male customers in some aspects. However, it does not mean that the pharmacy should treat female better than male to gain higher satisfaction level from them. The pharmacy should provide good standard of service equally in all customers but may add on some customized special service as per individual needs, if any.

4.3.4 Further research

As we can learn the quantitative result from this study, it is recommended to do a further research in both quantitative and qualitative researches.

Quantitative research: It is recommended to do more quantitative research to gain large sample size from all parts in Thailand which can be representative of all Thai customers. The research may also include both individual pharmacy and chain pharmacy to see any impact on the type of pharmacy.

Qualitative research: It is necessary to get more in-depth information on customer's need. The finding from this study or other quantitative research can use as a guide on how to do further qualitative research in order to learn customer insight for pharmacy service. For example, finding from this study such as satisfaction level of availability of product variety was still low, so the qualitative research should investigate about the product category which customers think that they should be available in the pharmacy.

CHAPTER V

LIMITATIONS AND CONCLUSION

5.1 Limitations

- Only individual pharmacy is selected in this study. There is no any respondent from customer of chain drugstores.
- The selected pharmacies are not covered all parts of Thailand.
- The data collection was done by the customer completed the paper questionnaire and send back to the owner or staff of pharmacy. This method can create a bias. The customers may not rate the satisfaction level as they actual perceived since they know that they have to hand the questionnaire back to owner or staff of pharmacy.
- The sample size is not large as it should in order to be a representative of all Thai customers.

5.2 Conclusion

This study listed the twenty-six dimensions determining customer satisfaction toward the pharmacy service which were categorized into ten factors which are; attitude of pharmacy/pharmacist, availability of over-the-counter drugs and a variety of products, pricing, availability of special services, facilities, location, parking service, convenient hour, availability of pharmacist, and medical record. Among these twenty-six dimensions, majority of them were rated as satisfied. However, there were still a rating of very dissatisfied and dissatisfied by responders in some dimensions which were sufficiency of car parking, availability of health screening services, availability of private area for counseling, side effects of medication are always explained, keep a record of my prescription history and drug allergies, provide information about routine health maintenance, and everyday items can be purchased. level and differentiate the pharmacy among other competitors. It is

found that location is the most important factor which has significantly positive relationship with overall satisfaction which means location can directly influence the overall satisfaction. Most of customer characteristics did not have relationship with satisfaction level except for gender and place of origin. Related customer characteristics, such as gender and place of origin, also have an impact upon satisfaction level in few dimensions. There were some rooms to improve the quality of pharmacy service in order to increase customer satisfaction and also differentiate the pharmacy from other competitors.



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APPENDIX A: Questionnaire Section I, Aspects of satisfaction with pharmacy services

	Very satisfied5	Satisfied 4	Neutral 3	Dissatis- fied 2	Very dissatisfied 1
Provided a through explanation of the medicine					
Listened to what I had to say					
Always receive service from the same pharmacist					
Pharmacists and employees have good attitudes					
Pharmacists and employees are polite					
My prescription drugs are always in stock					
Side effects of medication are always explained					
Counseling on instruction to take medicine and importance of compliance are given					
Provide information about routine health maintenance					
Maintain patient/consumer privacy concerning prescriptions					
Pharmacy is reliable					
Dispensed drugs are clearly, labeled, and explained					
Handles over-the-counter medicine and medical supplies					
Everyday items (sundries/toiletries) can be purchased at the pharmacy					
Reasonable price of prescription drug					
Reasonable price of non-prescription medicines and other items					
Availability of health screening services such as blood pressure/blood glucose/cholesterol screening					
Comfortable waiting area/room					
The pharmacy is sanitary					
Available private area for counseling					
The pharmacy has convenient location					
Sufficiency of car parking					
Short waiting time to get medicines					
Open at convenient times					
Pharmacist is available all the time					
The pharmacy keeps a record of my prescription history and drug allergies					
Overall satisfaction					

Any additional services required from pharmacy: _____

APPENDIX B: Questionnaire Section II, Demographic data and detail of pharmacy visit

Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Age (years)	<input type="checkbox"/> Less than or equal to 20 <input type="checkbox"/> 21-30 <input type="checkbox"/> 31-40 <input type="checkbox"/> 41-50 <input type="checkbox"/> 51-60 <input type="checkbox"/> More than 60
Place of origin	<input type="checkbox"/> Bangkok and metropolitan area <input type="checkbox"/> Upcountry
Marital status	<input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Divorced/Widowed
Educational level	<input type="checkbox"/> Primary school <input type="checkbox"/> Secondary school <input type="checkbox"/> Vocational/technical <input type="checkbox"/> University
Employment status	<input type="checkbox"/> Employed <input type="checkbox"/> Unemployed
Type of product that you recently bought from this pharmacy	<input type="checkbox"/> Prescribed medicine <input type="checkbox"/> Non-prescribed medicine which required advice from pharmacist <input type="checkbox"/> Over-the-counter drug <input type="checkbox"/> Supplementary <input type="checkbox"/> Personal care product
Purchasing type	<input type="checkbox"/> Planned purchasing <input type="checkbox"/> Impulse purchasing