DETERMINANTS OF CONSUMER'S PERCEPTION ON DRUGSTORE STANDARDS: CASE STUDY OF PRACHANIVET 3 VILLAGE, NONTHABURI PROVINCE, THAILAND

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จุฬาลงกรณ์มหาวิทยาลัย
Chulalongkorn University

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นวากาญจน์ นวานุช : ปัจจัยที่กำหนดการรับรู้ของผู้บริโภคต่อมาตรฐานร้านยา: กรณีศึกษาหมู่บ้านประชานิเวศน์ 3 จังหวัดนนทบุรี ประเทศไทย. (DETERMINANTS OF CONSUMER'S PERCEPTION ON DRUGSTORE STANDARDS: CASE STUDY OF PRACHANIVET 3 VILLAGE, NONTHABURI PROVINCE, THAILAND) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: รศ. ดร.ไพฑูรย์ ไกรพรศักดิ์, อ.ที่ปรึกษาวิทยานิพนธ์ร่วม: รศ. สถิตพงศ์ ธนวิริยะกุล, 4 หน้า.

การศึกษาปัจจัยที่กำหนดการรับรู้ของผู้บริโภคต่อมาตรฐานร้านยา:กรณีศึกษาหมู่บ้านประชานิเวศน์ 3 จ.นนทบุรี ประเทศไทย มีวัตถุประสงค์เพื่อศึกษาหาระดับการรับรู้ของผู้บริโภคต่อมาตรฐานร้านยาในกลุ่มประชากรที่มีลักษณะแตกต่างกันและเปรียบเทียบปัจจัยกำหนดต่างๆที่มีผลต่อการรับรู้ของผู้บริโภคต่อมาตรฐานร้านยาในครัวเรือนที่อาศัยอยู่ในหมู่บ้านประชานิเวศน์ 3 วิธีการเก็บข้อมูลเป็นแบบสุ่มตามสะดวก จำนวน 200 ตัวอย่างโดยใช้แบบสอบถาม

จากผลการศึกษาพบว่าระดับความสำคัญของมาตรฐานร้านยาในภาพรวมอยู่ในระดับมาก ($\bar{x}$= 4.22) และเมื่อพิจารณาเป็นรายมาตรฐานพบว่า

มาตรฐานที่ 1 ด้านสถานที่ อุปกรณ์และสิ่งสนับสนุนการให้บริการ มีระดับความสำคัญอยู่ในระดับมาก ($\bar{x}$ = 4.21) ปัจจัยที่กำหนดคือเพศและความถี่ในการใช้ร้านยา

มาตรฐานที่ 2 ด้านการบริหารและการจัดการด้านคุณภาพ มีระดับความสำคัญอยู่ในระดับมาก ($\bar{x}$ = 4.24) ปัจจัยที่กำหนดคือเพศ รายได้ต่อครัวเรือนและความถี่ในการใช้ร้านยา

มาตรฐานที่ 3 ด้านการบริหารทางเภสัชกรรมที่ดี มีระดับความสำคัญอยู่ในระดับมาก ($\bar{x}$ = 4.18) ปัจจัยที่กำหนดคืออาชีพ สิทธิรักษาพยาบาลและรายจ่ายในร้านยา

มาตรฐานที่ 4 ด้านการปฏิบัติตามกฎระเบียบ ข้อบังคับและจรรยาบรรณทางด้านวิชาชีพ มีระดับความสำคัญอยู่ในระดับมาก ($\bar{x}$= 4.34) ปัจจัยที่กำหนดคือเพศ รายได้ต่อครัวเรือนและบุคคลที่มีอิทธิพลในร้านยา

มาตรฐานที่ 5 ด้านความร่วมมือต่อสังคม มีระดับความสำคัญอยู่ในระดับมาก ($\bar{x}$ = 4.16) ปัจจัยที่กำหนดคือเพศ อายุ รายจ่ายในร้านยาและบุคคลที่มีอิทธิพลในร้านยา

การศึกษานี้ทำให้ทราบถึงมุมมองของผู้บริโภคที่มีต่อมาตรฐานร้านยาทั้ง 5 ด้าน ซึ่งผู้กำกับคุณภาพมาตรฐานร้านยา, เจ้าของกิจการร้านยาและผู้เกี่ยวข้อง สามารถนำข้อมูลจากการศึกษานี้ไปใช้ประโยชน์ในการพัฒนาร้านยาให้เป็นที่ยอมรับและน่าเชื่อถือของประชาชนต่อไป

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5585610729 : MAJOR HEALTH ECONOMICS AND HEALTH CARE MANAGEMENT
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NAVAKAN NAVANUCH: DETERMINANTS OF CONSUMER'S PERCEPTION ON DRUGSTORE STANDARDS: CASE STUDY OF PRACHANIVET 3 VILLAGE, NONTHABURI PROVINCE, THAILAND. ADVISOR: ASSOC. PROF. PAITOON KRAIPORNSAK, PH.D.,ASSOC. PROF. SATHITPONG THANAVIRIYAKUL, 4 pp.

The study of determinants of consumer's perception on drugstore standards in Prachanivet 3 village, Nonthaburi Province, Thailand is subjected to investigate about the consumer's perception on drugstore standards in different characteristic of people and comparison among many determinants that impact the consumer's perception on drugstore standards in families living in Prachanivet 3 Village. The method using in this study was convenient sampling for 200 samples by questionnaire survey.

The results discovered that the perception levels of all drugstore standards are important(x= 4.22), whereas the perception level of each drugstore standard was found that

Standard no.1: Place, equipment and service support issues, the perception level is important (x = 4.21); determinants are gender and frequency of using drugstore.

Standard no.2: Administration and management for quality, the perception level is important (x = 4.24); determinants are gender, household income and frequency of using drugstore.

Standard no.3: Good pharmacy services, the perception level is important (x = 4.18); determinants are occupation, right to medical care and money spend in drugstores.

Standard no.4: Compliance with rules, regulations and professional ethics, the perception level is important (x= 4.34); determinants are gender, household income and influenced person in drugstore.

Standard no.5: Services and participation to the community and society, the perception level is important (x= 4.16); determinants are gender, age, money spend in drugstores and influenced person in drugstore.

This study found out about consumer's perception of all 5 drugstore standards. The regulator of drugstore standards, owners of drugstore and general public can use this study to improve drugstores to be more acceptable and more reliable for Thai people.

Field of Study: Health Economics and Health Care Management

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The study of determinants of consumer's perception on drugstore standards: Case study of Prachanivet 3 Village, Nonthaburi Province, Thailand has been completed with the great empathy of my advisor Assoc. Prof. Paitoon Kraipornsak, Ph.D. and co-advisor Assoc. Prof. Sathitpong Thanaviriyakul. I really appreciate for their thoughtful advice and follow up to my work regularly. Also, thank you to Assoc. Prof. Siripen Supakankunti, Ph.D., Assoc. Prof. Sauwakon Ratanawijitrasin, Ph.D. and Assoc. Prof. Shiva Adhikari, Ph.D. for their times to give me useful advices.

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CHAPTER I

INTRODUCTION

1.1 BACKGROUND AND SIGNIFICANCE PROBLEMS

Nowadays, human beings have more risks in their sickness than before. The present world is full of pollution hazardous to people health. People in crowded cities where there are the high degree of pollution are likely to be unhealthy. Moreover, the speedy way of living amidst time constraint leads to less taking care of their health with unavoidable consequence of some sickness. Through those situation, their daily lives have been affected with difficulties both their job and time. It is necessary to treat and alleviate their disease conditions. If slightly conditions, they need only common treatment by themselves, not hospital. As a result, the drugstore business has been increased.

The drugstore is a private medical service place closest to the consumers due to its convenience and time saving. The drugstore plays the important role as the first step of healthcare service with accessibility towards people who have slightly sickness conditions. In addition, the drugstore can be a place where people can get advices for their health. Presently, the drugstore business is quite highly competitive because of the view on good profit of this type of business. The continuous improvement of this business has been defined to serve the needs of the new generation consumers' way of life, and its business survival in the future similar to other types of business. We can see the improvement from drugstore window displays and decoration, and the services from knowledgeable pharmacists. The consumers need the right information for their purchase decision. Apart from selling drugs, the drugstores sell health and beauty products, other types of goods, e.g. supplements and related products, medical equipment and other consuming products including cosmetics.

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Therefore, the Office of Drugstore Development Project under the Public Health Ministry has arranged the drugstore quality standards based on the evidences and the needed drugstore model to serve the present and future situation of integrated health system reengineering and improvement. But there are only few drugstores to be considered as quality drugstore due to their lack of intentions, lack of understanding and also all drugstore standards information does not reach to all population. Different people will have a different perception on drugstore standards. Some may think it's important or some may think it's not as a result the role of drugstore in healthcare system in Thailand does not play a big part

The researcher is interested in study of consumer's perception on drugstore standards among population in Prachanivet 3 Village, Nonthaburi Province, Thailand. This follows the concept of quality drugstore for the benefits of its entrepreneurs who realize the improvement way for the drugstore business and the improvement of drugstore standards where consumer's perception do not seem to reach to very important level.

1.2 RESEARCH QUESTIONS

- Which determinants impact consumer's perception on drugstore standards?
- How does different characteristics of people aware of each drugstore standard?

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1.3 OBJECTIVES OF THE STUDY

- To investigate consumer's perception on drugstore standards
- To find out significance perception level of each drugstore standard according to different characteristics of people

1.4 CONCEPTUAL FRAMEWORK

The study of determinants of consumer's perception on drugstore standards is subjected to investigate the perception level of each drugstore standard from consumer's perspective and to investigate the determinants that impact consumer's perception on drugstore standards. The determinants that will be used to analyze are characteristics of people and basic information of using drugstore. The conceptual framework is shown below.

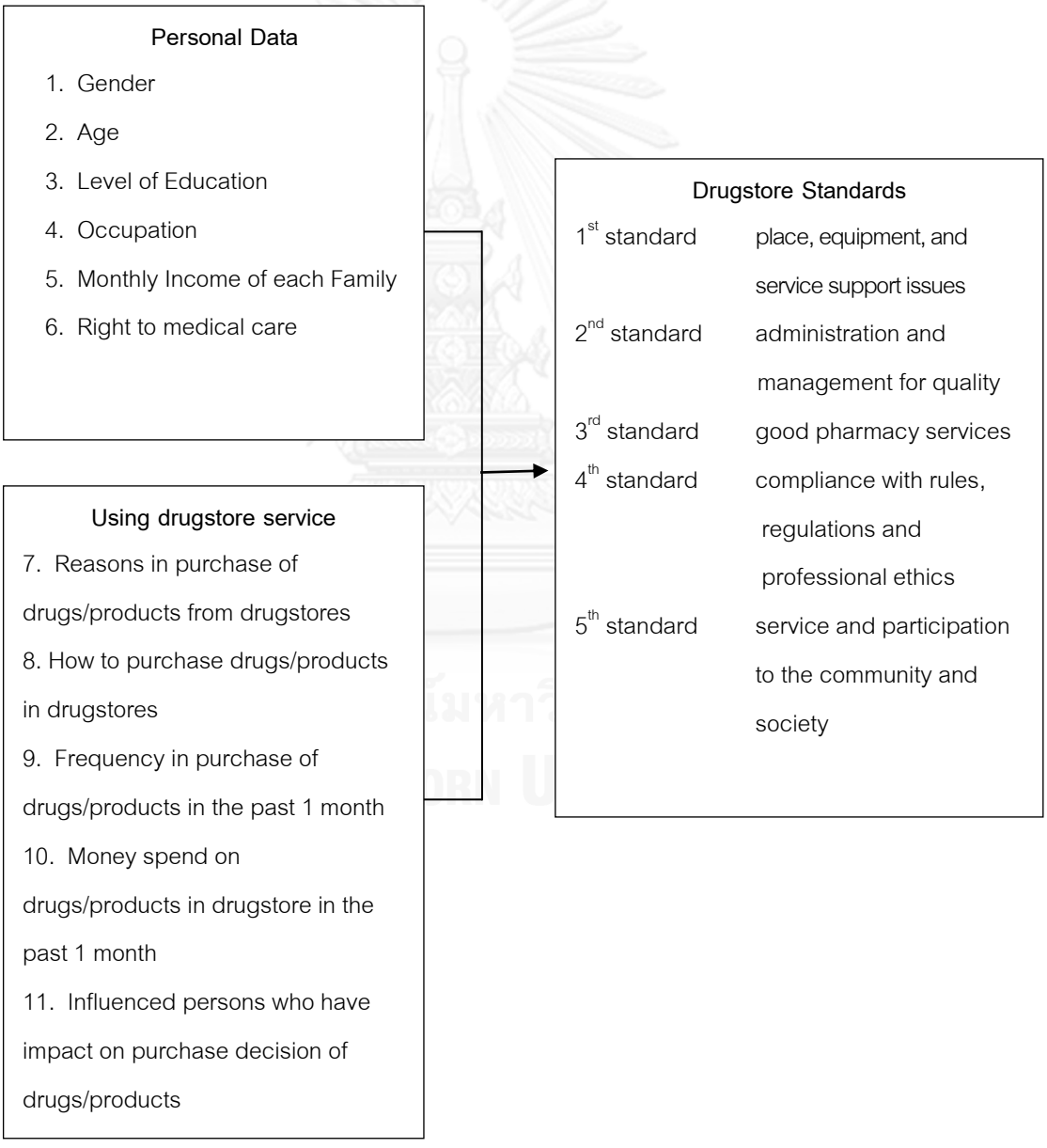

Figure 1: Conceptual Framework

1.5 RESEARCH HYPOTHESIS

People living in Prachanivet 3 Village where the characteristics of people are different have different level of perception on drugstore standards.

1.6 SCOPE OF THE STUDY

The study is to investigate the perception level on drugstore standards by questionnaire survey and find out the determinants that impact consumer's perception on drugstore standards in Prachanivet 3 Village, Nonthaburi Province, Thailand. The sample is set for 200 sampling by convenient method. Time of data collecting was done from March 1st – March 13th 2013.

1.7 BENEFITS OF THE STUDY

The result from this study provides basic fundamental information for regulators of drugstore standards. This study will help to find out consumer's perception on drugstore standards that leads to the way to improve their perception on drugstore standards and able to increase the role of drugstore in healthcare system. Also, this study will benefit owner of drugstore as they can use this information to improve whatever lacks on their business.

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CHAPTER II

LITERATURE REVIEW

This chapter will present concepts, theories and related review of literature detailed as follow.

1. Concepts about drugstore business
   1.1 General information about drugs
   1.2 Type of drugstores
   1.3 Style of drugstores
   1.4 Drugstores standard according to pharmacy council
2. Related research

2.1 Concepts of drugstore business

2.1.1 General information about drugs

In general, there are 5 types of drugs namely, Non dangerous drug, dangerous drug, special controlled drug, psychotropic substance schedule/narcotic drug schedule and traditional drug.

2.1.1.1 Non dangerous drug (NDD). Drugs that have been chosen by ministry of public health for people own purpose without any regulation from public health officers. Drugs in this category are readily available but they must have certain number of drugs per package and the details according to ministry of public health regulations. Especially, wording “Non dangerous drug” must exist and easy to see. Today, there are total of 42 NDD in Thailand.

2.1.1.2 Dangerous drugs. Drugs in this category are more danger than NDD groups. They have to be regulated by public health officers such as doctors or pharmacist. The label must have “Danger” on it and only can be sold in drugstore with pharmacist, hospital and clinic. There are so many dangerous drug such as hypertensive drugs, diabetes drugs etc.

2.1.1.3 Special controlled drugs. Drugs that easily can harm user even with a right administration. Drugs in this category must be monitored closely by doctor so only doctor can prescribe these drugs. For example, Prednisolone tabs, Dexamethasone etc.

2.1.1.4 Psychotropic substance schedule and narcotic drug schedule. Drugs that easily addicted and could cause mental stage change, also usually affect directly to society. Same as special controlled drugs, only doctors can prescribe these drugs such as morphine, sleeping pill etc.

2.1.1.5 Traditional drug. Drugs in this category do not belong in any other groups. They are quite safe comparing to the other groups.

2.1.2 Type of drugstore

According to Medicines act 1967 with the revised version in 1979. Two types of drugstore are classified:

2.1.2.1 Drugstore without any dangerous drugs or special controlled drugs:

This type of drugstore cannot have any dangerous drugs or part of any dangerous drugs. People who can run this type of drugstore only have to take a training program from the ministry of health for 30 days. Because products in this type of drugstore are not complicated so it does not require a pharmacist.

2.1.2.2 Modern drugstore:

This type of drugstore can sell various types of medicines including dangerous drugs and special controlled drugs. Modern drugstore can sell many as 10,000 items therefore, pharmacist is very necessary.

2.1.3. Style of drugstore

Three styles of drugstore can be seen in Thailand.

2.1.3.1 Chain store

Chain stores have many branches and are all over Thailand such as Boots, Watson for foreign chain store while P&F, Siam drug etc. for domestic chain store. Chain store usually well manage and form under company system with manager, purchasing team and storage team. Therefore, the cost is very high.

2.1.3.2 Wholesale

The job of wholesale is to distribute drugs to shops or retails. But drug wholesale groups have high bargain power as the numbers of this kind of business are not too high.

2.1.3.3 Ordinary drugstore

Usually, the owners of drugstore run the business themselves and pretty much do everything in drugstore. The working period is quite long but the good things about this kind of drugstore is that they will get consumer's loyalty, flexibly manage and one man decision but poor in business management.

2.1.4. Drugstores standard according to pharmacy council

Drugstore is public dependent in health aspect. In order to accomplish in healthcare delivery, the quality of drugstore must consist of

Standard 1: Place, equipment and service support issues

Standard 2: Administration and management for quality

Standard 3: Good pharmacy service

Standard 4: Compliance with rules, regulations and professional ethics

Standard 5: Service and participation to the community and society

Standard 1: Place, equipment and service support issues

The purpose of this standard is to have a proper physical element which leads to quality in service. Drugstore is proportional to the area, shows the area of pharmacist and clearly shows the area of other service. Drugs/products must be set into the same categories and the storage area must be good enough to carry on the quality of drugs/products until expiration date.

1. Place

1.1 Strong enough and must have space for consumers to walk around.

1.2 Clean, enough light, good ventilation and may have fire system or fire extinguisher.

1.3 Controlled rooms that can keep drugs/products.

1.4 NDD can put anywhere but for the others must be put where only pharmacist can get to it.

1.5 Have consulting area.(little privacy).

1.6 Have health information zone but must not put ads together.

1.7 Signs

1.7.1 Shows the word “Pharmacy”.

1.7.2 Shows pictures, pharmacy license and time of working of pharmacist where consumers are able to see them.

2. Equipment

2.1 Weighing machine

2.2 Height Scale

2.3 Thermometer

2.4 Blood pressure machine

2.5 Blood sugar test strip

2.6 Medicine tray

2.7 Penicillin group

2.8 Sulfonamides group

2.9 Refrigerator

2.10 Temperature controlled

2.11 Container

2.12 Label

2.13 Light protective and clean

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Standard 2: Administration and management for quality

This standard aims to assure that drugstore management reach the consumer's expectation of quality. Quality can prevent any risk that might happen to consumer and also protect pharmacist.

1. Person

1.1 Pharmacist

1.1.2 Have a pharmacy license and always at work.

1.1.3 Let people know the role of pharmacist by wearing a uniform or gown.

1.1.4 Friendly and good communication skill.

1.1.5 Healthy.

1.2 Pharmacist Assistant (if any)

1.2 1 Obey the order directly from pharmacist.

1.2.2 Healthy.

2. Quality process

2.1 Must have standard practice guidelines.

2.2 Drugs in drugstore are in order and organized into categories.

2.3 Have a patient's right list.

2.4 Analyze and monitor any mistake for consumer's safety such as dispensing error.

2.5 Able to find out the expectation of consumer.

2.5.1 What do they really need?

2.5.2 What do they expect for outcome?

2.6 Adverse drug reaction monitoring and allergy drug card.

2.7 Always double check to reduce any mistake.

2.8 Quality indicators such as evaluation form.

Standard 3: Good pharmacy service

Good pharmacy service standard is meant for drugstore pharmacist to perform treatment under pharmacy knowledge and able to reach consumer expectation and health.

1. Drugs/ products supply

All medical management since providing, storing and distributing must be effective and safe.

1.1 Drugs must come from reliable source with GMP standard.

1.2 Drugs must be stored in controlled room to make sure to keep the quality of drugs.

1.3 Monitor expiration date regularly.

2. Approach of pharmacy services.

2.1 Encourage the proper medication consumption such as never put all medicine in the same package.

2.2 Ask for past medical history and also personal information before dispensing.

3. Dispensing guidelines.

3.1 Pharmacist must be the only one who dispenses drugs directly to patients.

3.2 Label should consist of drugstore name, patient name, date, generic name, trade name, indication, dosage and expiration date.

3.3 Pharmacist must give information about drugs and suggestion in both writing and wording.

3.4 Never dispense drugs to a child under 12 years old without supervisor.

Standard 4: Compliance with rules, regulations and professional ethics

This standard will control all drugstores to operate under same regulations and create pharmacist ethic.

1. When operating drugstore, pharmacist cannot being suspended or revocation of license.

2. Drugstore must follow laws and regulations.

3. Illegal drugs are not allowed and drugs in drugstore must match the type of drugstore.

4. Any prescription from doctor must be kept for at least 1 year.

5. Patient confidentiality is important.

6. Never dispense drugs out of the sight of pharmacist.

Standard 5: Service and participation to the community and society

Drugstore for community and healthcare delivery to people.

1. Information about drugs, toxic and narcotic drugs in preventive treatment and be a part of the drug abuse campaign.
2. Cooperate with government to watch for any narcotics drug abuse.
3. Should not sell any health reduction products such as cigarettes, alcohol.

2.2 Related Research

Lerwit Gerdmongkolgan (2008) study "Factors Affecting Decision to Purchase Products from Drugstores of People in Muang District, Ubon Ratchathani" the research aimed to study and compare factors affecting the decision to buy products from drugstores of people in Muang District, Ubon Ratchathani Province as they were classified by gender, age, educational level, occupation, income, and marital status. The findings were as follows:

1. The majority of respondents were: female, age 21 to 25, bachelor's degree holders, students, income of less than 4,500 per month, unmarried.

2. The factors affect the decision to buy products from drugstores were service, pricing, place and location for selling, personnel, and process of management. The factors on marketing promotion was found that they all moderately affect the decision.

3. The relationship between the predictive factors – process, products and service, and pricing – and the decision to buy products was found to be statistically significant at the level of .01. The predictive factors consisting of process, products and service, and pricing were able to predict the accuracy of 66 percent.

4. The respondents who were different in gender, age, educational level, occupation, and income had significantly different perceptions about the effect of the process of management, products and service, and pricing on their decision to buy products from the drugstores. The respondents who were different in gender had significantly different perceptions about the effect of products and service. Those who were different in marital status had significantly different perceptions about the effect of pricing.

Parinda Tositarat (2009) study "Development Process of Quality Pharmacies Enrolling in the Community Pharmacy Development and Accreditation Project in Muang Chiang Mai District" the outcome of this research found that

Any pharmacist who is capable to conduct his own duty should be based on the regulation of drugstore standard no.2: Personnel who conduct their pharmacy obligations must be qualified pharmacists according to the occupational license of pharmaceutical career. The 4 elements for being the qualified pharmacies; (1) The personnel is expert. (2) The conducting locations must be clearly considered as proper, clean pharmacies. (3) The distributed products must be assured in terms of manufacturing standard. (4) The service must be safe and appropriate in accordance with all 5 drugstore standards issued by the Pharmacy Council. Regarding to the reason why the pharmacies participate in the development and quality assurance project for urban pharmacies, they realize in the advantage of pharmacists' elements to enhance their potential and to develop their occupational ability to generate the continuous studies. This, therefore, makes people accept and understand more the important role of pharmacists. Additionally, the customers of qualified pharmacies are more confident and they will be subsequently provided with qualified medicines and medical supplies, detailed explanation and suggestion how to precisely take and keep those, and health advice from pharmacists.

Also, the development process of pharmacies can generates the quality management and administration under the process in which the enrollment and conduction is launched to assure the qualified pharmacies. This is according right to the PDCA's perspective frame which can be concluded into several steps by followings. Pharmacies must clearly express their intention to take part in the assurance by conducting self-assessing questionnaires, developing themselves based on the manual of qualified pharmacy, guidance for the improvement and upgrading before the quality examination and inspection which has been beforehand informed. After the actions have been done, the inspectors will subsequently send the pharmacies the report so that they can later improve or adjust themselves. Also, it is necessary that the examined pharmacies promptly report their improvement to the Pharmacy Council to ask for the assurance as qualified pharmacies. When the committee has already conducted the quality examination and correct any corrections, the mentioned pharmacies will be awarded with certification and trophy with the symbol as qualified pharmacies. This crucial assurance will be subsequently shown to the eyes of customers and other people and valid for completely 3 years right after the assurance was officially announced.

In accordance with the factors bringing about the quality assurance accomplishment, based on the independent research, it is discovered that the pharmacists have good attitude and are enthusiastic to improve and development their own pharmacies. Furthermore, they value the importance of the qualified pharmacy development; they do not believe the participation on the development and quality assurance project for urban pharmacies would be difficult or excessively expensive.

Mayurachat Jiwaluk (2009) study "Consumer Decision Making Process towards Selecting Drugstores in Amphoe Muang Chiang Mai" the results showed that the first ranking reason for selecting services was the sickness but did not want to see doctors. The information of store location was studied. The sources of information were from friends, acquaintances who had experiences in this field. The respondents rated the

importance of services of people, process, physical evidence, place and price at a high level of importance while promotion and product were at a medium level. The sub-factors with the highest mean score and levels of importance were as followings. The product sub-factor was the varieties of medicine and medical supplies displayed. The price sub-factor was a clear price label. The location sub-factor was nearness to their homes and office. The promotion sub-factor was full-time pharmacist. The people sub-factor was salespeople with good product knowledge. The physical evidence sub-factor was the cleanliness of drugstores. The process sub-factor was consulting before giving prescription. Almost all of these sub-factors were at a high level of importance except the people and process sub-factors were at a highest level.

The respondents had their own decision making for selecting drugstore. They were not patronage customers to any drugstores. They had been customers of the drugstores that they were using for past 6 months. Regarding post purchase satisfaction, they were “very satisfied” with the services provided. They would visit those drugstores again because of convenient, location near residents/offices, proper advice from pharmacists. They would suggest others to purchase in those drugstores.

The problems encountered were that the medicine they wanted was not available and lack of price information before making decision. The respondents suggested that the drugstores should have clear price labels and empathetic salespeople.

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Apiyanee Phayapichai (2010) study “Customers’ Perception in Standard Accreditation of Boots Quality Drugstore” the research results were as follows:

1. The research found that most of customers were female, aged more than 30-40 years, holding Bachelor’s degree, self-employ and having average monthly income of 30,001-40,000 Baht.

2. Customers’ perceptions of overall marketing communication were at low level. Customers’ perceptions in store pharmacists were at high level. Customers’ perception

of standard accreditation notice was at low level. Customers' perception of website and news release were at lowest level.

3. Customers had high perception in standard accreditation of Boots quality drugstore.

4. Customers suggested that Boots should to have standard accreditation notice in stores where customers can see it.

5. Marketing communication via company's website was negatively correlated with customers' perception in standard accreditation of Boots quality drugstore.

Jaruwan Tuangsirisap (2010) results from the study "The Server of Customer's Satisfaction towards Drugstore in Muang District, Kalasin province" showed that satisfaction level of every item was high. The customers were most satisfying with the friendliness of pharmacist, while they were least satisfying with the medias about drug and health information. The results of the relationship between the four aspects service quality factors and behaviors including gender, age, education level, medical benefit schemes, address, and experience of using the service of pharmacies were not significant. However clients with lower education level (under bachelor's degree) rated the satisfaction of service facility significantly higher than those with higher education level. The groups that regularly bought the medicine form pharmacy gave the satisfaction mean scores for the service quality of the pharmacist, service area and over all service quality significantly higher than temporary customers. In addition, the more frequent buying customers within the last 3 months gave the satisfaction mean scores for the service quality of the pharmacist higher than the less frequent buying customers. The study result of this survey is advantageous in development of drugstores in order to reach the customers' need and to become the quality drugstore.

Panjanat Anodard (2010) studied "Customer Satisfaction Towards Service Marketing Mix of Pharmachoice Drugstore in Muang Chiang Mai District" Following were the research outcomes.

Most respondents were female, at age between 20 - 34 years old, with 10,000 – 20,000 Baht average monthly income. Their educational level was bachelor's degree. They came to Pharmachoice drug stores in Muang Chiang Mai district 1-2 times a month in the evening (4.01 pm – 9.30 pm) mostly on weekdays (Monday – Friday). The branch they regularly visited was Suan Dok branch on Suthep road. They spent 100 – 500 Baht on products on each visit. The products they regularly purchased were cold medicines. The main purpose of their product purchase was to treat their present sicknesses. The main reason they bought at Pharmachoice drug stores was the complete selection of products.

Based on studied results on customer satisfaction towards the service marketing mix, the marketing mix factors which the customers scored the satisfaction at high level were as follows; people, price and physical evidence. The marketing mix factors which they scored the satisfaction at medium level were as follows; product, place, process, and promotion. The highest-scored sub-factors that customers rated were as follows. In term of people factor, the customers rated for presence of pharmacist during opening hours. In term of price factor, the customers rated for their perception of worthiness when purchasing products from Pharmachoice drug stores. In term of physical evidence factor, the customers rated for appropriate and sufficient lighting in the stores. In term of product factor, the customers rated for vast variety of products available. In term of place factor, the customers rated for sufficient district-wide branches. In term of process factor, the customers rated for pharmacist's assessment before filling prescription and dispensing drugs and medications. In term of promotion factor, the customers rated for free blood pressure checking service upon request.

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Somprasong Tangploy (2010) studied “Drug Buying Behavior for the Drug Stores among Consumers in Phrapradaeng District, Samutprakarn” the findings were as follows:

Most of respondents were Thai women aged 26 – 35 years old. Their educational background was intermediate schools graduates or lower. Most of them were employees in factories with monthly income between 5,001 – 10,000 baht. The influence of drug stores’ marketing campaign on buying behavior was high. Most of the samples stated that the people who had most influence on drug buying decision were themselves. The most common time to visit drug store was around 6.01 pm – 10.00 pm. They spent less than 10 minutes in drug store for each purchase. The drug they usually bought was fever reducer and pain reliever. The significance level has been set at 0.05, the results were found that:

1. Occupation had influence on drug buying behavior of consumers in Phrapradaeng district, Samutprakarn and also the person who had most influence on drug buying decision, the time of buying, the duration spending in drug store for each buy, the amount of drugs, the kind of drugs and the trend of drug buying behavior.

2. Promotion factors had influence on drug buying behavior of consumers in Phrapradaeng district, Samutprakarn and also the person who had most influence on drug buying decision, the time of buying, the duration spending in drug store for each buy, the amount of drugs, the kind of drugs and the trend of drug buying behavior.

3. Personal factors had influence on drug buying behavior of consumers in Phrapradaeng district, Samutprakarn and also the person who had most influence on drug buying decision, the time of buying, the duration spending in drug store for each buy, the amount of drugs, the kind of drugs and the trend of drug buying behavior.

Chokchalerm Rawiyawong (2011) studied "Evaluation of the Collaboration Development between Community Pharmacies and National Health Service in Mahasarakham" The result showed that Context evaluation Administrators implemented their own policies to promote people health in the local areas which supported the project. Administrators and providers agreed that the project provided a convenient channel for the screening service and decreased the congested an outpatient department at the hospital. Input evaluation Administrators and providers agreed that there were enough staff from the faculty of Pharmacy in the coordination between organizations. They rated the top two highest opinions on the full resources of equipment (e.g. telephone, fax, etc.) (3.7+0.6) and the appropriate amount of project funding (3.6+0.6) Process evaluation Administrators and providers agreed that action plan was run as scheduled. However, the action plan in public relations was insufficient as the action plan of each organization was not clear and lack of regular coordination. Outcome evaluation in participants' perspective; pharmacists took part of helping a community in promoting health (4.4+0.5). In pharmacists' perspective, the involvement of the project must have a desire to participate and devotion. Administrators understood the project objectives and dedicated to run it at a high level (4.2+04 and 4.1+0.7, respectively) All three perspectives agreed that the project assisted the communities to promote health. The cooperation of the community pharmacies with the National Health Service was actively successful. Nevertheless, the action plan and public relations should be further developed.

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Sasithorn Seekhao (2011) studied "Attitudes of Drugstore Entrepreneurs in Pathumthani Province Towards the Accreditation of Drugstore Standard" The result showed that the majority of drugstore business entrepreneurs were married female, aged between 41-50 years old, and had been operating pharmacies, in the category of sole owner, for 6-10 years. The amount of customers per day was about 21-30 Persons.

Regarding the study on the cognitive attitudes of drugstore entrepreneurs, the results showed most of them had the knowledge on drugstore standard. For the

knowledge, their attitudes towards 5 drugstore standards were ranged as follows. They agreed to the standard no. 5 and no.4 but were impassive to the 1, the2, and the3 standards.

For the behavioral component, the majority of drugstore business entrepreneurs had not yet participated in the Pharmacy Development and Accreditation Project with two main reasons as follows: complicated process and high expenditure to be spent for business improvement to achieve the standard. In addition, those entrepreneurs were mostly informed about the drugstore standard from magazine/journal. The influencing person to get those entrepreneur participate in this standard project was the entrepreneurs themselves. However, they partly participated in this project by giving opinions to the Pathumthani Pharmacy Club towards the five standards determined by Pharmacy.

Tananya Aksornpak (2011) studied "Independent study Title: Marketing Strategies for Competition of Pharmacy Entrepreneurs in the Three Southern Border Provinces: Yala, Pattani, and Narathiwat" the study reveals that:

1. Most of the sample studied is males that age between 30-40 years old. They earn their bachelor degrees or equivalent. They have experiences for less than 10 years in running the pharmaceutical shops and less than 5 years in working in the hospitals.

2. Holistically, the pharmacy entrepreneur marketing strategies are so essential. The marketing strategies, distribution channels are the most important factor following by marketing promotion, products, and price factors. When considering each dimension, it can be said that, holistically, the distribution channels especially the convenient transportation is the first most important factor while the good locations of the pharmaceutical shops is the second. The marketing promotion is regarded as the second essential factor: the fact that the pharmacists can speak the dialect well is ranked as the most important factor while the fact that the appropriate price of the medicines for the customer financial statuses is ranked as the second important factor. Products are also regarded as the essential factor, the fact that the selection of the medicines produced from the high quality chemical substances is ranked as the most

important factor while the selection of the medicines which can be easily sold in the markets is ranked as the second essential factor. The price is regarded as the important factor at the moderate level. The similar pricing to the other pharmaceutical shops is ranked as the most important factor while the clear price tag is ranked as the second important factor.

3. The returning profit of the pharmacy entrepreneurs is at the average level. Most profits come from the fact that the customers come back to buy the medicines again. When compared with the former years while some profits come from the fact that the shops are improved and enlarged to increase the quantity of the medicines.

4. From the study of the relationship between the marketing strategies and the returning profit from the pharmacy business investment in the three southern border provinces, it is found that the marketing strategies on products, prices, distribution channels, and marketing promotion relate to the returning profit from the pharmacy business investment.

5. The study still reveals the problems as well as recommendations for the pharmacy business investment in the three southern border provinces in that the most important problem is the teenager abuse of the medicines like cough-relieving medicines, and pain-killing medicines. Therefore, the medicines should not be sold to the teenagers. The government offices should strictly solve the drug problems. The pharmaceutical shops should be strictly checked. The educational institutions should provide the adolescents the knowledge on the drug harms. Besides, more strict preventing measurements as well more consecutive safety controls should be enhanced.

Laksika sittikunkaew (2012) studied “The study of customer’s perception in service quality: a case study of Fascino Drugstore in Chiangmai province” the research results were as follows:

For the recognition of service quality, it was concluded that the most of recognition were, reliability, assurance, empathy, responsiveness, tangibility.

For quality of service, it was concluded that the quality of service from the Fascino drugstore in Chiangmai province evaluating form the most quality levels which were courtesy, responsiveness, assurance, reliability, empathy, tangibility.

From the literature reviews that I have found, there are many parts that can be used in this study. In order to fulfill the need of this study, concepts, notes, references and ideas of the literature review in each topics are useful and can be put in this study quite well.

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CHAPTER III

METHODOLOGY

This study's methods are shown as follows:

1. Population and Sample
2. Research tools
3. Quality monitoring tools
4. Data collecting
5. Data and statistical analysis

3.1 Population and Sample

Population in this study is all living in Prachanivet 3 Village, Nonthaburi Province, Thailand. Due to time constraint, sample of 200 families were randomly chosen. The samples data were collected from 5 areas which are market area, school area, apartment area, main road area and single house area. The method using in this study was convenient sampling for samples conducted from March 1st – March 13th 2013, respondents must have been to drugstore at least once in the past 6 months.

3.2 Research tools

Questionnaires were used to collect answers from respondents.

Part One: Personal information: Check lists of age, gender, education, occupation, household income and right to medical care.

Part Two: Questions about basic information of using drugstore.

1. The reason of purchasing drugs/products from drugstore.
2. How to purchase drugs/products from drugstores.
3. Frequency of using drugstore for the past 1 month.
4. Money spends on drugs/products in drugstore for the past 1 month.
5. Person impacted the decision of purchasing drugs/products.

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Part Three: Question about the perception level of drugstore standards in Prachanivet 3 Village, Nonthaburi Province, Thailand. The question is classified as rating scale which lie between 1-5 where

5	means	Very important
4	means	Important
3	means	Moderate
2	means	Slightly important
1	means	Not important

3.3 Research Variables

1.5.2.1 Independent variables are divided as follows:

- Personal data: (These variables interpret from the respondents of the survey who living in Prachanivet 3 Village, Nonthaburi Province, Thailand)
  - Gender
  - Age
  - Level of education
  - Occupation
  - Monthly income of each family
  - Right to medical care
- Basic Information of using drugstore as follows:
  - Reasons in purchase of drugs/products from drugstores
  - Frequency in purchase of drugs/products from drugstores in the past 1 month
  - Money spend on drugs/products from the past 1 month
  - Influenced persons who have impact on purchasing decision of drugs/products
  - How to purchase medicine in drugstores

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1.5.2.2. Dependent Variables are five drugstore standards which will be used to determine quality drugstore. Each standard contains many details, this study has arranged those details into 3 groups in order to make it easy for the respondents to understand and make them clear and complete as below:

1st standard-place, equipment, and service support issues

- Good air ventilation, enough light, clean
- All the equipment are clean and no contamination such as medicine tray
- Have label and other information

2nd standard-administration and management for quality

- Friendly and good communication skill
- Analyze and monitor any mistake for consumer's safety
- Drugs in drugstore are in order and organized into categories

3rd standard-good pharmacy services

- Drugs must be stored in controlled room to make sure to keep the quality of drugs
- Encourage the proper medication consumption such as never put the all medicine in the same package
- Never dispense drugs to a child under 12 years old without supervisor

4th standard-compliance with rules, regulations and professional ethics

- Not being suspended or revocation of license
- No illegal drugs
- Patients profile confidential

5th standard-services and participation to the community and society

- Cooperate with government to watch for narcotics drug abuse
- Be a part of the drug abuse campaign
- Should not sell any health reduction product such as cigarettes, alcohol

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3.4 Quality monitoring tool

Each study or research has to be believable and trusted by the respondents. In order to achieve that goal, quality must be provided before and during collecting data. The research has monitoring tools in this research as follow:

3.3.1. To validate the content of the research, this study was conducted under concept, theories and other research related to drugstore standards of pharmacist council (5 standards). This information is verified and checked for the correction of the information to make sure the data in this research is accurate.

3.3.2 Reliability, the researcher used questionnaire to 30 people as a try out to check the reliability coefficient alpha by using Cronbach α- coefficient method. The result used in the research must have α- coefficient $\geq$ 0.7 (Bonchom Srisaad, 2000:96) and the after statistical test of reliability, the alpha = 0.829 as shown in appendix B

3.5 Data Collecting

In data collecting process, the researcher does as follow:

1. The researcher and assistants collect the data by our own by explaining objectives of this study to each individual who were voluntary respondents.

2. After all data were collected; all 200 questionnaire answers were verified to check any mistake. The time of data collecting is 13 days from March 1st – March 13th 2013.

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3.6 Data and statistical analysis

3.6.1. Data analysis

The researcher have put the information in code for further data analysis. The data in code is computed in computer using Statistical package of social science (SPSS) for windows to evaluate the information and calculate into statistical way. Then, use the result to analyze following objectives. The results and information are shown in tables with discussion and conclusion.

3.6.2 Statistical analysis

There are three parts which will be used statistical analysis method: Personal information analysis: Gender, age, education, occupation, household income and right to medical care analyzed by using analysis of the frequency distribution and percentage methods.

Basic information of using drugstore analyzed by using analysis of the frequency distribution and percentage methods.

The perception level of drugstore standards according to different characteristics of people analyzed by using mean (X) and standard deviation (S.D.) and the result is classified to 5 levels according to Best's figure.

Best's figure

4.50- 5.00	means	Very important
3.50-4.49	means	Important
2.50-3.49	means	Moderate
1.50-2.49	means	Slightly important
1.00-1.49	means	Not important

3.7 Multiple regression analysis: Using dummy variables to find out the relationship between independent variables and dependent variables.

3.7.1 Independent Variables: (Dummy variables)

(X_1) – Gender

- Female = 1
- Male = 0

(X_2) – Age

- > 40 years old = 1
- < 40 years old = 0

(X_3) – Education

- Bachelor degree = 1
- Other = 0

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(X_4) – Occupation

- Private sector = 1
- Other = 0

(X_5) – Household income

- > 50,001 baht per month = 1
- < 50,000 baht per month =0

(X_6) – Right to medical care

- Social Security fund = 1
- Other = 0

(X_7) – Reason to purchasing drugs/products from drugstore

- Easy/Time saving/Convenient = 1
- Other = 0

(X_8) – How to purchase medicine in drugstore

- Telling condition to pharmacist = 1
- Other = 0

(X_9) – Frequency of using drugstore

- > 3 times a month = 1
- < 3 times a month = 0

(X_{10}) – Money spend in drugstore

-More than 300 baht per month = 1
-Less than 300 baht per month = 0

(X_{11}) – Influenced person in purchasing decision

- Pharmacist = 1
- Other = 0

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3.7.2 Dependent Variables

From questionnaires:

There are 3 sub-questions in each standard category; each sub-question has the value 1-5. If respondents gave value of 5 in any 2 out of 3 sub-question then that standard would consider as important. Other than that is only moderate

Y = 1 Important

Y = 0 Moderate

- Consumer's perception on drugstore standard No.1 (Y_1)
- Consumer's perception on drugstore standard No.2 (Y_2)
- Consumer's perception on drugstore standard No.3 (Y_3)
- Consumer's perception on drugstore standard No.4 (Y_4)
- Consumer's perception on drugstore standard No.5 (Y_5)

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CHAPTER IV

RESULTS AND DISCUSSION

The study of determinants of consumer's perception on drugstore standards: Case study of Prachanivet 3 Village, Nonthaburi Province, Thailand. The study presents the results of data analysis as follow.

4.1. Data analysis of personal information including gender, age, education, occupation, household income per month and right to medical care in both frequency and percentage ways.

4.2. Data analysis of basic information of using drugstore: Reasons to purchase drugs/products, frequency of purchasing drugs/products in the past 1 month, money spend on drugs/products in the past 1 month, person influences purchasing decision for drugs/products and how to purchase drugs/products.

4.3. Data analysis of perception level of drugstore standards according to different characteristics of people by using Mean ($\bar{X}$ and standard deviation (S.D.)

4.4. Determinants of consumer's perception: Find out the relationship between independent variables and dependent variables by using multiple regression.

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4.1 Data analysis of personal information

Personal information consists of gender, age, education, occupation, household income per month and right to medical. The results of number and percentage of personal information show that:

Gender: Gender was found that the majority was female, total of 134 women or 67% and the rest were men with total of 66 or 33%

Age: Most of them are 30-39 years of age; 57 persons or 28.5%, followed by 50-59 years old age with a total of 46 persons or 23%. Less than 30 years of age were 45 persons or 22.5%, 40-49 years old age were 35 persons or 17.50% and the age of over 60 was the least with only 17 persons or 8.50%

Education: The majority was bachelor degree with 93 person or 46.50%, followed by high school with 47 persons or 23.5%. Elementary was 25 persons or 12.5%, Vocational education was 20 persons or 10% and the least was higher than bachelor degree with 15 persons or 7.50%

Occupation: The majority was private sector with 113 persons or 56.50%, followed by government officer with 43 persons or 21.50%. Personal business was 29 persons or 14.50% and others was being the least with 15 persons or 7.5%

Household income per month: The majority was less than 20,000 baht with 79 households or 39.5%, followed by 20,000-40,000 baht with 43 households or 21.50%. Household income 40,001-50,000 baht was 26 households or 13%, Households income 50,001-60,000 baht was 20 households or 10%, Households more than 70,000 baht was 18 households or 9% and households income 60,001-70,000 baht was being the least with 14 households or 7 %

The right to medical care: The majority was social security with 84 persons or 42%, followed by universal coverage with 56 persons or 28%. Government officer was 31 persons or 15.5%, self-pay was 18 persons or 9% and the least was private insurance with 11 persons or 5.5%. The result details are shown in table no.1

Table 1: Basic information of respondents

Personal information	Number (n =200 households)	Percentage (100.00)
1. Gender		
1.1 Male	66	33.00
1.2 Female	134	67.00
Total	200	100.00
2. Age		
2.1 Under 30 years old	45	22.50
2.2 30-39 years old	57	28.50
2.3 40-49 years old	35	17.50
2.4 50-59 years old	46	23.00
2.5 More than 60 years old	17	8.50
Total	200	100.00
3. Education		
3.1 Elementary	25	12.50
3.2 High school	47	23.50
3.3 Vocational education	20	10.00
3.4 Bachelor degree	93	46.50
3.5 Higher than bachelor degree	15	7.50
Total	200	100.00
4. Occupation		
4.1 Private sector	113	56.50
4.2 Government officer	43	21.50
4.3 Personal business	29	14.50
4.4 Others	15	7.50
Total	200	100.00

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Personal information	Number (n =200 households)	Percentage (100.00)
5. Household income/per month		
5.1 < 20,000 Baht	79	39.50
5.2 20,000-40,000 Baht	43	21.50
5.3 40,001-50,000 Baht	26	13.00
5.4 50,001-60,000 Baht	20	10.00
5.5 60,001-70,000 Baht	14	7.00
5.6 > 70,000 Baht	18	9.00
Total	200	100.00
6. The right to medical (As known, or the most use)		
6.1 Social security	84	42.00
6.2 Government right	31	15.50
6.3 Universal coverage	56	28.00
6.4 Private insurance	11	5.50
6.5 Self-pay	18	9.00
Total	200	100.00

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4.2 Data analysis of basic information of using drugstore

Basic information of using drugstore consists of the reason to purchase drugs/products, how to purchase drugs/products, frequency of purchasing drugs/products in the past 1 month, money spend on drugs/products from drugstore in the past 1 month and person who influence the purchasing decision for drugs/products. The results of number and percentage basic information in use of drugstore show that:

The most reason to purchase drugs/products in drugstore was easy/convenient with 101 persons or 50.5%, followed by minor symptoms with 60 persons or 30.0%. Cheap/save cost were 21 persons or 10.5% while reputation of drugstore was being last with 18 persons or 9%.

How to purchase drugs/products: the majority was tell illness detail to pharmacist with 103 persons or 51.50%, followed by know the name of drugs or products before with 80 persons or 40%. The least was bring a sample to drugstore with 17 persons and 8.5%.

Frequency of purchasing drugs/products in the past 1 month: The majority was 1-2 times with 144 persons or 72, followed by 3-4 times with 51 persons or 25.5%. The least was more than 6 times with 5 persons or 2.5%.

Money spend on drugs/products in the past 1 month: the majority was less than 300 baths with 119 persons or 59.50%, followed by 300-500 baths with 39 persons or 19.5%. 500-700 was 31 persons or 15.5% and more than 700 baths was being the least with 11 persons or 5.5%.

Person influences purchasing decision for drugs/products: the majority was pharmacist with 139 persons or 69.5%, followed by drugstore owner with 23 persons or 11.5%. Friends or family member was 20 persons or 10%, doctor was 12 persons or 6 % and the least was advertisement with 6 persons or 3%.The result details are shown in table no.2.

Table 2: Number and percentage of basic information on the use of drugstore

Basic information on the use of drugstore	Number (n= 200 households)	Percentage (100.00)
1. The reason of purchasing drugs/products from drugstore		
1.1 Easy/Convenient	101	50.50
1.2 Minor symptoms	60	30.00
1.3 Cheap/Save cost	21	10.50
1.4 Reputation of drugstore	18	9.00
Total	200	100.00
2. How to purchase drugs/products		
2.1 Know the name of drugs/products prior purchase	80	40.00
2.2 Tell illness details to pharmacist in drugstore	103	51.50
2.3 Bring a sample to purchase	17	8.50
Total	200	100.00
3. Frequency of purchasing drugs/products in the past 1 month		
3.1 1-2 Times	144	72.00
3.2 3-4 Times	51	25.50
3.3 5-6 Times	-	-
3.4 More than 6 times	5	2.50
Total	200	100.00

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Basic information on the use of drugstore	Number (n= 200 households)	Percentage (100.00)
4. Money spend on drugs/products in drugstore for the last 1 month		
4.1 Less than 300 baths	119	59.50
4.2 301-500 Baths	39	19.50
4.3 501-700 Baths	31	15.50
4.4 More than 700 baths	11	5.50
Total	200	100.00
5. Person influences purchasing decision of drugs/products		
5.1 Doctor	12	6.00
5.2 Pharmacist	139	69.50
5.3 Drugstore Owner	23	11.50
5.4 Advertisement	6	3.00
5.5 Friend or family member	20	10.00
Total	200	100.00

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4.3 Analysis of perception level of drugstore standards

The results of perception level of drugstore standards according to different characteristics of people in Prachanivet 3 Village, Nonthaburi Province, Thailand are shown below.

4.3.1 Perception level of each drugstore standard

The perception level is determined by mean ($\bar{X}$. The results show that:

Standard no.1: Lowest mean is 4.05, highest mean is 4.43 and the average is 4.21.

The lowest perception level is having label and other information documents. This suggests that the drugstore should focus on provide a corner in the drugstore to demonstrate the information, textbooks, or any knowledge document for service supports.

Standard no.2: Lowest mean is 4.01, highest mean is 4.54 and the average is 4.24.

The lowest perception level is drugs in drugstore are in order and organized into categories. This suggests that the drugstore should focus on classify and arrange the drugs/products into categories and types with the clear labels of name of medicine to prevent from the medicine wrong taking.

Standard no.3: Lowest mean is 3.95, highest mean is 4.38 and the average is 4.18.

The lowest perception level is never dispensing drugs to a child under 12 years old without supervisor. This suggests that the item that children with age lower than 12 years old should not be delivered the medicine, and if needed, the appropriate practices should be provided. In case to deliver the medicine to children lower than 12 years old, the drugstore must ask the questions about the person who require medicines and the symptoms until they are confident about information from those children are reliable.

Standard no.4: Lowest mean is 4.29, highest mean is 4.40 and the average is 4.34.

The lowest perception level is patients profile confidential. This suggests that the drugstore must be focusing on ensuring the consumers realize the difference of the quality drugstores and have confidence in the drugstore business as the special

professional service business under the law “Pharmacy Act” to control the business directly.

Standard no.5: Lowest mean is 4.12, highest mean is 4.18 and the average is 4.16.

The lowest perception level is to be a part of drug abuse campaign. This suggests that the drugstore must aim to promote the image and public relations at all formats and styles, e.g. participation in community activities matching with their culture and ways of life, or aids to the community. The result tables are shown in table 3-7

Table 3: Mean and standard deviation of perception level of drugstore standard no.1

Place, equipment and service support issues	$\bar{X}$	S.D.	Perception level
1. Good air ventilation, enough light, clean	4.43	.572	Important
2. All the equipment are clean and no contamination such as medicine tray	4.16	.737	Important
3. Have label and other information documents	4.05	.707	Important
Total	4.21	.552	Important

Table 4: Mean and standard deviation of perception level of drugstore standard no.2

Administration and management for quality	$\bar{X}$	S.D.	Perception level
1. Friendly and good communication skill of pharmacist	4.54	.600	Very important
2. Analyze and monitor any mistake for consumer's safety	4.16	.627	Important
3. Drugs in drugstore are in order and organized into categories	4.01	.680	Important
Total	4.24	.504	Important

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Table 5: Mean and standard deviation of perception level of drugstore standard no.3

Good pharmacy service	$\overline{X}$	S.D.	Perception level
1. Drugs must be stored in controlled room to make sure to keep the quality of drugs.	4.38	.676	Important
2.Encourage the proper medication consumption such as never put the all medicine in the same package	4.24	.665	Important
3.Never dispense drugs to a child under 12 years old without supervisor	3.95	.758	Important
Total	4.18	.557	Important

Table 6: Mean and standard deviation of perception level of drugstore standard no.4

Compliance with rules, regulations and professional ethics	$\overline{X}$	S.D.	Perception level
1. Not being suspended or revocation of license	4.40	.750	Important
2. No illegal drugs	4.32	.707	Important
3. Patients profile confidential	4.29	.684	Important
Total	4.34	.615	Important

Table 7: Mean and standard deviation of perception level of drugstore standard no.5

Service and participation to the community and society	$\overline{X}$	S.D.	Perception level
1. Cooperate with government to watch for any narcotics drug abuse	4.18	.688	Important
2. Be a part of the drug abuse campaign	4.12	.701	Important
3. Should not sell any health reduction product such as cigarettes, alcohol.	4.17	.777	Important
Total	4.16	.630	Important

4.3.2 The overall perception level of drugstore standards

The results show that all the perception level of drugstore standards is important. The perception level of each standard is also important; they can be arranged from highest to lowest. The average perception of standard no.4 (4.34) was found higher than that of standard no.2 (4.24), higher than that of standard no.1 (4.21), higher than that of standard no.3 (4.18) and higher than that of standard no.5 (4.16). It means that people living in Prachanivet 3 Village, Nonthaburi Province, Thailand are aware of drugstore standards and also give precedence to drugstore standards at important level.

Even though the perception level of all standards is important but mean scores of each drugstore standard from consumer's perspective are different with significance level of 0.01. Standard no.4 has the highest mean, probably due to right now there are numbers of drugstore without licensed-pharmacist operated and there have been many incidents about selling medicine while not under pharmacist duty. People need to assure that they do not receive medicine from anyone but they need to receive medicine from people who has well-trained which is pharmacist. The second highest mean score is standard no.2 as the management for quality is intangible; consumers do not know which drugstores have good overall quality until they have been to one, this is a risk they must take. So when consumers go to drugstore, their concern of the quality is quite high.

Next is standard no.1 and standard no.3 where the mean score is in the middle, the reason can be explained that their perception on these standards is not highest because the questionnaires that design in this study were meant for only people who have been to drugstores. So those people already has have made the decision to use drugstores, they concern about place, equipment and good pharmacy service but they may not have much choices if they've already decided to go to drugstores. Standard no.5 sits last overall, this probably due to people still see drugstore as old fashion stores where the participation to the society or community services are not necessary. Also, there are not many healthcare campaigns come from drugstore for people to recognize. And just like the result from section 4.2 which said that more than half of people go to drugstore because of the convenience and time saving. The result is shown in table 8

The study results have been in the same direction with the research of Apiyani Phayaphichai (2010, p. 80) which had studied about the perception of the consumers towards the certified quality drugstores, Boots. She discovered that the overall perception at of the consumers at a high level towards the certified quality drugstores, Boots.

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Table 8: Mean and standard deviation of overall perception level of drugstore standards

Drugstore standard	$\bar{X}$	S.D.	Perception level	Rank
1. Place, equipment and service support issues	4.21	.552	Important	3
2. Administration and management for quality	4.24	.504	Important	2
3. Good pharmacy service	4.18	.557	Important	4
4. Compliance with rules, regulations and professional ethics	4.34	.615	Important	1
5. Services and participation to the community and society	4.16	.630	Important	5
Overall	4.22	4.51		

F=132.599, Sig. =0.000

4.4 Determinants of consumer's perception

In order to investigate the determinants of consumer's perception, it has to find out the relationship between independent variables and dependent variables by using multiple regression. The independent variables are gender, age, education, occupation, household income, right to medical care, reason of purchasing drugs/products from drugstore, how to purchase drugs/products from drugstore, frequency of using drugstore and money spend on drugstore in the past 1 month and dependent variables are five drugstore standards; 1st standard: - place, equipment, and service support issues, 2nd standard: - administration and management for quality, 3rd standard: - good pharmacy services, 4th standard: - compliance with rules, regulations and professional ethics and 5th standard: - services and participation to the community and society.

The multiple regression is conducted to study determinates of consumer's perception on drugstore standards where variables which are nominal scale are converted to dummy variables.

4.4.1 Determinants of consumer's perception on drugstore standard no.1

The result shows that female has more perception on drugstore standard no.1 than male with significance level of 0.01 as the typical females usually before entering any places, compared to male, they would care more about cleanness of places, air ventilation including air-condition, contamination or information documents (Table 9).

Frequency of using drugstore more than 3 times a month has more perception on drugstore standard no.1 than those who using drugstore less than 3 times a month with significance level of 0.05. People who go to drugstore more than 3 times a month are considering as regular customers while less than 3 times are more like part-time customers. People who visit drugstore quite often will care more about place, equipment and also quality of drugstore as they have to spend times in drugstore more often than people with less drugstore visiting frequency. They need clean drugstore, good air-ventilation and clean equipment because they will be visiting drugstores a lot. The result details are shown in table 9

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Table 9: Analysis of determinants of consumer's perception on drugstore standard no.1: Place, equipment and other medical service issue (Y_1)

Variables	β	SE_b	T	P
Constant		.167	-.234	.815
Gender (X_1)	**.202**	**.074**	**2.711**	**.007****
Age (X_2)	-.012	.029	-.155	.877
Education (X_3)	.121	.073	1.542	.125
Occupation (X_4)	.041	.079	.479	.632
Household income (X_5)	.131	.022	1.666	.097
Right to medical care (X_6)	-.162	.082	-1.860	.064
Reason for purchasing drugs/products from drugstore (X_7)	-.110	.066	-1.548	.123
How to purchase drugs/products (X_8)	-.074	.073	-.945	.346
Frequency of using drugstore in the past 1 month (X_9)	**.177**	**.067**	**2.020**	**.045***
Money spend in the past 1 month (X_{10})	-.082	.045	-.918	.360
Influenced person in purchasing decision (X_{11})	.148	.077	1.958	.052

Note: $SE_{est} = \pm .44$; $F=3.261$; $R^2 = .160$; Significance at $P < 0.05$*, $P < 0.01$**

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4.4.2 Determinants of consumer's perception on drugstore standard no.2

The result show that female has more perception on drugstore standard no.2 than male with significance level of 0.01 as female are nicer and tidier than male, obviously their decision must fill with quality. Communication skill, mistake monitoring or drugs in categories are something that female would consider more before go into drugstore compared to male

Household income more than 50,001 baht per month has more perception on drugstore standard no.2 compared to household income less than 50,000 baht per month with significance level of 0.05. Household income more than 50,001 baht is considering as high income family. This high income family looks for quality; they could pay more if they get a good quality from drugstore or if the quality of drugstore is good then they are willing to pay more. Comparing to those household incomes less than 50,000 baht, they may just be able to get anything that fit their budget and could not go beyond that point. This may be a reason why household income more than 50,001 baht has more perception on drugstore standard no.2 than household income less than 50,000 baht

Frequency of using drugstore more than 3 times a month has more perception on drugstore standard no.2 than those who using drugstore less than 3 times a month with significance level of 0.05.This can be explained the same way as for standard no.1 People who go to drugstore more than 3 times a month are considering as regular customers while less than 3 times are more like part-time customers. People who visit drugstore quite often will care more management for quality as they have to spend times in drugstore more often than people with less drugstore visiting frequency. They need good information documents, skilled pharmacist and quality medicine because they will be visiting drugstore a lot. This could be a reason why people who using drugstore more than 3 times a month has more perception on drugstore standard no.2 than people who using drugstore less than 3 times a month. The result details are shown in table 10

Table 10: Analysis of determinants of consumer's perception on drugstore standard no.2: Administration and management for quality (Y2)

Variables	β	SE_b	T	P
Constant		.162	-2.039	.043
Gender (X_1)	**.201**	**.072**	**2.726**	**.007****
Age (X_2)	.145	.028	1.823	.070
Education (X_3)	.055	.071	.703	.483
Occupation (X_4)	.139	.077	1.660	.099
Household income (X_5)	**.163**	**.021**	**2.089**	**.038***
Right to medical care (X_6)	-.131	.080	-1.515	.131
Reason for purchasing drugs/products from drugstore (X_7)	-.058	.064	-.824	.411
How to purchase drugs/products (X_8)	-.107	.071	-1.378	.170
Frequency of using drugstore in the past 1 month (X_9)	**.213**	**.065**	**2.458**	**.015***
Money spend in the past 1 month (X_{10})	-.018	.043	-.202	.840
Influenced person in purchasing decision (X_{11})	.114	.075	1.518	.131

Note: $SE_{est} = \pm .43$; $F=3.660$; $R^2 = .169$; Significance at $P < 0.05$*, $P < 0.01$**

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4.4.3 Determinants of consumer's perception on drugstore standard no.3

The results show that private sector has less perception on drugstore no.3 than other occupations with significance level of 0.05. The other types of jobs were government officer, personal business and others. The reason behind this result is that a lot of private sector employees have the medical benefit from their company and the benefit always not includes drugstore system as a result; they may choose to go to hospital instead of drugstore. A lot of them can go to private hospital where the service is almost perfect in all aspects. While, the rest of other types of jobs may not have that good of the medical benefit: Most of government officer go to public hospital, when comparing to the pharmacy service in drugstore, there are not much different. People who have universal coverage usually never get very good pharmacy services due to too many people for pharmacists in hospital to serve good service. There people once they come to drugstore, they will be looking for good pharmacy services that they hardly experienced in their life.

Those who have Social security fund have more perception on drugstore standard no.3 than other medical benefits with significance level of 0.05. The reason that can be explained is that Social security benefit may be able to pick the private hospital but there are always way too many people in the hospital. Pharmacists in hospital can only just check and dispense the medicines at the most; they cannot give a good pharmacy service as they wish due to time limit and waiting time of patients. When people who have Social security benefit go to drugstore, they are looking for better pharmacy service because they hardly get from the hospital.

Those who spend money on drugstore more than 300 baht per month has more perception on drugstore standard no.3 than those who spend money on drugstore less than 300 baht per month with significance level of 0.01. People who spend a lot in drugstore obviously need to get a good pharmacy service. No one wants to spend more money but get an unsatisfied pharmacy service. The result details are shown in table 11

Table 11: Analysis of determinants of consumer's perception on drugstore standard no.3: Good pharmacy services (Y3)

Variables	β	SE_b	T	Sig
Constant		.159	-.648	.518
Gender (X_1)	.113	.070	1.617	.108
Age (X_2)	.113	.028	1.495	.137
Education (X_3)	-.019	.070	-.257	.798
Occupation (X_4)	**-.192**	**.075**	**-2.421**	**.016***
Household income (X_5)	.133	.021	1.798	.074
Right to medical care (X_6)	**.180**	**.078**	**2.193**	**.030***
Reason for purchasing drugs/products from drugstore (X_7)	-.023	.063	-.349	.728
How to purchase drugs/products (X_8)	-.061	.070	-.820	.413
Frequency of using drugstore in the past 1 month (X_9)	-.051	.064	-.626	.532
Money spend in the past 1 month (X_{10})	**.326**	**.042**	**3.890**	**.000****
Influenced person in purchasing decision (X_{11})	.015	.073	.208	.835

Note: $SE_{est} = \pm .42$; $F=5.940$; $R^2 = .258$; Significance at $P < 0.05$*, $P < 0.01$**

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4.4.4 Determinants of consumer's perception on drugstore standard no.4

The results show that Female has more perception on drugstore standard no.4 than male with significance level of 0.01 as it is the quite the same reason as standard no.1 that most of females are strictly living under rules and laws and afraid to go anywhere beyond that but in the other hand, males are most likely not to follow the rules and do stuff by the own.

Household income more than 50,001 baht per month has more perception on drugstore standard no.4 than household income less than 50,000 baht per month with significance level of 0.05. As mentioned earlier that not all of drugstore have pharmacist on duty. The one that do not have pharmacist, the cost of medicine may be cheaper than drugstores with pharmacists. So the lower household income can choose whether they would go to the one with pharmacist or the one without pharmacist. It seems that price is the main factor. But higher household income has money to spend and they probably pick drugstore with pharmacist.

Pharmacist has more perception on drugstore standard no.4 than other professions with significance level of 0.05. Pharmacist from consumer's perspective on drugstore standard no.4 is important as the important person in drugstore. When talk about influenced person in purchasing decision in drugstore, it has to be pharmacist who is a part of the compliance with rules, regulations and professional ethics of drugstore standard no.4. The result details are shown in table 12

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Table 12: Analysis of determinations of consumer's perception on drugstore standard no.4: Compliance with rules, regulations and professional ethics (Y4)

Variables	β	SE_b	T	Sig
Constant		.171	.402	.688
Gender (X_1)	**.289**	**.075**	**4.079**	**.000****
Age (X_2)	-.066	.030	-.861	.390
Education (X_3)	.139	.075	1.867	.063
Occupation (X_4)	-.019	.081	-.231	.818
Household income (X_5)	**.157**	**.023**	**2.095**	**.038***
Right to medical care (X_6)	-.045	.084	-.542	.589
Reason for purchasing drugs/products from drugstore (X_7)	-.071	.068	-1.052	.294
How to purchase drugs/products (X_8)	-.102	.075	-1.362	.175
Frequency of using drugstore in the past 1 month (X_9)	.112	.068	1.345	.180
Money spend in the past 1 month (X_{10})	-.035	.046	-.413	.680
Influenced person in purchasing decision (X_{11})	**.148**	**.078**	**2.050**	**.042***

Note: $SE_{est} = \pm .45$; $F=5.452$; $R^2 = .242$; Significance at $P < 0.05$*, $P < 0.01$**

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4.4.5 Determinations of consumer's perception on drugstore standard no.5

The results show that female has more perception on drugstore standard no.5 than male with significance level of 0.05. The reason why female has more perception on drugstore standard no.5 is that female may interaction with social activities more than male so they may see stuff about health campaign more than male. Also, female probably care more about healthcare so they probably seeking for health promotion more than male

Age more than 40 year old has more perception on drugstore standard no.5 than age less than 40 year old with significance level of 0.05. The result can be explained that as people gets older they need to take care of their health more than they used to be as a result these older people will be looking for any health care promotion in the society. Any drugstores with this kind of service will be benefit for them.

Those who spend money on drugstore more than 300 baht per month has more perception on drugstore standard no.5 than those who spend money on drugstore less than 300 baht per month with significance level of 0.01. When spending more money, people expect something in return. Whenever they spend money, they may want to see drugstores give something to society and patients such as free blood pressure test, monthly health information brochure or any healthcare information. More of the money spends the more of expectation by consumers.

Pharmacist has more perception on drugstore standard no.5 than other profession with significance level of 0.05. When people think of drugstore, most of them will think about pharmacist. If there were any events or health campaign that associate with drugstore, people will expect pharmacist to have a role in that kind of activities. So any campaign, or any health promotion in drugstore, from consumer's perspective; pharmacist would have higher perception on drugstore standard no.5 than other professions. The result details are shown in table 13

Table 13: Analysis of determinations of consumer's perception on drugstore standard no.5: Services and participation to the community and society (Y5)

Variables	β	SE_b	T	Sig
Constant		.167	-.552	.582
Gender (X_1)	**.147**	**.074**	**1.980**	**.049***
Age (X_2)	**.173**	**.029**	**2.176**	**.031***
Education (X_3)	.018	.073	.226	.822
Occupation (X_4)	.000	.079	-.007	.995
Household income (X_5)	.072	.022	.926	.356
Right to medical care (X_6)	-.127	.082	-1.461	.146
Reason for purchasing drugs/products from drugstore (X_7)	.001	.066	.008	.994
How to purchase drugs/products (X_8)	-.014	.073	-.176	.860
Frequency of using drugstore in the past 1 month (X_9)	-.162	.067	-1.868	.063
Money spend in the past 1 month (X_{10})	**.246**	**.045**	**2.781**	**.006****
Influenced person in purchasing decision (X_{11})	**.148**	**.077**	**1.973**	**.050***

Note: $SE_{est} = \pm .44$; $F=3.533$; $R^2 = .171$; Significance at $P < 0.05$*, $P < 0.01$**

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CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The study of determinants of consumer's perception on drugstore standards in Prachanivet 3 village, Nonthaburi Province, Thailand is subjected to investigate about the consumer's perception on drugstore standards in different characteristic of people. It also includes the comparison among many factors that impact the perception on drugstore standards of those families living in Prachanivet 3 Village, Nonthaburi Province, Thailand. The study set the samples for 200 due to the limitations of time and money. The method using in this study was convenient sampling for samples conducted from March 1st – March 13th 2013. The research tools are questionnaires, data and statistical analysis, percentage, means, standard deviation, and multiple regression. The statistical significance has been set at 0.05. The conclusions including recommendations and limitations have been explained orderly as follows:

The results found that majority of population are females at 67 %, ages from 30-39 at 28.5%, education of undergraduate level at 46.5%, private sectors 'employees at 56.5%, monthly family income lower than 20,000 baht at 39.5%, and medical privilege of Social Security Fund at 42%. The main reasons for purchase of drug/product from the drugstores are that of convenience and time saving at 50.5%, the way of purchase by telling the conditions to the sellers for their sets of medicine at 51.5%, the frequency of drug/product purchase around 1-2 times during the past month at 72%, the expense of those purchase lower than 300 baht during the past month at 59.5 %, and Pharmacist as the influenced persons for the purchase decision at 69.50%

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It has been discovered that the perception level of all drugstore standards are at high score or in other word is important ($\bar{X}$ = 4.22), whereas the perception level of each drugstore standard is also important.

Standard no.1; the perception level is important ($\bar{X}$ = 4.21) and determinants impact consumer's perception on standard no.1 are gender and frequency of using drugstore in the past 1 month.

Standard no.2; the perception level is important ($\bar{X}$ = 4.24) and determinants impact consumer's perception on standard no.2 are gender, household income and frequency of using drugstore in the past 1 month

Standard no.3; the perception level is important ($\bar{X}$ = 4.18) and determinants impact consumer's perception on standard no.3 are occupation, right to medical care and money spend in the past 1 month

Standard no.4; the perception level is important ($\bar{X}$ = 4.34) and determinants impact consumer's perception on standard no.4 are gender, household income and influenced in purchasing decision

Standard no.5; the perception level is important ($\bar{X}$ = 4.16) and determinants impact consumer's perception on standard no.5 are gender, age, money spend in the past 1 month and influenced in purchasing decision.

Whereas education, reason to purchase drugs/products and how to purchase drugs/products are determinants that do not impact consumer's perception on drugstore standards. The result details are shown in table 14.

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Table 14: Conclusion of which determinants impact consumer's perception on drugstore standards

Variables	Drugstore standard				
	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5
1.Gender (Female)	↑	↑	x	↑	↑
2.Age (More than 40 years old)	x	x	x	x	↑
3.Education (Bachelor degree)	x	x	x	x	x
4.Occupation (Private sector)	x	x	↓	x	x
5.Household income (> 50,001 baht a month)	x	↑	x	↑	x
6.Right to medical care (Social security fund)	x	x	↑	x	x
7. Reason to purchasing drugs/products from drugstore (Easy and convenient)	x	x	x	x	x
8.How to purchase drugs/products (Telling condition to pharmacist)	x	x	x	x	x
9. Frequency of using drugstore in the past 1 month (More than 3 times a month)	↑	↑	x	x	x
10.Money spend in the past 1 month (> 300 baht per month)	x	x	↑	x	↑
11.Influenced person in purchasing decision (Pharmacist)	x	x	x	↑	↑

X- Denotes no impact

↑- Denotes positive relationship

↓- Denotes negative relationship

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This study can be an initial information deliver to Thailand health care functions in order to increase the role of drugstore in the society. Despite the facts that people's perception level on drugstore standards is important, there are still some rooms to improve people's perception on drugstore standards. If the perception of drugstore standards is high, people are aware more about drugstore standards then the management for quality of drugstores seems to be more important. In the future, if drugstores business is reliable then the role of drugstore can be a part of healthcare system in Thailand both for public and private functions.

Drugstore standards are very important for both consumers and owners. The consumer's perception on drugstore standard need to be higher for their own goods, the perception level at important is good but if it moves to very important level then it's better. This information can aware the regulator of drugstore standards in order to implement ideas and awareness to people to get their perception on drugstore standards to another level. For example, the regulator of drugstore standards could start to look at drugstore standard no. 5 as people seems least concern to this standard.

Not all of determinants impact consumer's perception on each drugstore standard. This is a pilot study to be used to clarify that why there are some determinants that have no impact to drugstore standards at all. Regulator on drugstore standards, owner of drugstore or anyone who interested can do a further research using this study as an idea in order to make the regulator of drugstore standards, owner of drugstore or anyone who interested can use this study to improve drugstores to be more acceptable and more reliable for Thai people.

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5.1 Limitation of this research

- This research was done only in Prachanivet 3 village, Nonthaburi province, Thailand and it may not explains all the need for a whole country
- There could be more variables, so the result may alter depending on variables that out in the equations
- Only people who have used the drugstore were asked to do the questionnaires, the result may be different if included those who have never been to drugstores

5.2 Recommendations for the next research

- Study of attitude, viewpoints, or management of the drugstore for quality drugstores following to the five standards of the quality drugstores defined by the Pharmacy Council. This study can be the information for any related functions in establishment of policies, or strategies to develop the present and future drugstores to be the quality ones for the maximum benefits of the consumers.
- Variables in multiple regression are all dummy variable, the results are not detailed so next research could shuffle or grouping more variables

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APPENDIX

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APPENDIX A

จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

RESEARCH QUESTIONNAIRE

DETERMINANTS OF CONSUMER'S PERCEPTION ON DRUGSTORE STANDARDS:

CASE STUDY IN PRACHANIVET 3 VILLAGE, NONTHABURI, THAILAND

Objective:

This questionnaire is used to collect data in an independent study. Please answer the questions truthfully. The questionnaire consists of 3 parts.

Part 1 Personal information

Part 2 Basic information of using drugstore

Part 3 Determinants impact perception level of 5 drugstore standards defined pharmacy council

This research information is useful for drugstore and organization who want to improve their drugstore service in both quality and quantity. Your answers will not affect anything to you as we will keep them confidential.

On a behalf of Health Economics and Health Care Management, Faculty of Economics, Chulalongkorn University, I would like to say thank you for your cooperation.

Navakan Navanuch

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Part 1: Personal information

Indication: Please mark ✓ in ☐ for the answer you think is suited or closest to your background.

1. Gender

☐ 1. Male ☐ 2. Female

2. Age

☐ 1. < 30 ☐ 2. 30-39

☐ 3. 40-49 ☐ 4. 50-59

☐ 5. > 60

3. Education

☐ 1. Elementary ☐ 2. High School

☐ 3. Vocational education ☐ 4. Bachelor degree

☐ 5. Higher than bachelor degree

4. Occupation

☐ 1. Private company ☐ 2.Government officer

☐ 3. Personal business ☐ 4. Others……

5. Household income per month

☐ 1. Less than 20,000 baht ☐ 2. 20,000-40,000 baht

☐ 3. 40,001-50,000 baht ☐ 4. 50,001-60,000 baht

☐ 5. 60,001-70,000 baht ☐ 6. More than 70,000 baht

6. Right to medical care (Known or the most use)

☐ 1. Social Security

☐ 2. Government officer

☐ 3. Universal coverage

☐ 4. Private insurance

☐ 5. Self-pay

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Part 2: Basic information of using drugstore

Indication: Please mark ✓ in ☐ for the answer you think is suited or closest to your background.

1. Reason to purchasing drugs/products from drugstore?

☐ 1. Easy/Time saving/Convenient

☐ 2. Get medicine for minor symptoms

☐ 3. Save cost

☐ 4. Reputation/trust in drugstore

2. How to purchase drugs/products?

☐ 1. Already know the name of drugs/products

☐ 2. Tell briefly symptoms to pharmacist to get treated

☐ 3. Bring a sample to drugstore

3. Frequency of using drugstore in the past 1 month

☐ 1. 1-2 times ☐ 2. 3-4 times

☐ 3. 5-6 times ☐ 4. More than 6 times

4. Money spend in drugstore for the past 1 moth

☐ 1. < 300 baths ☐ 2. 300-500 baths

☐ 3. 501-700 baths ☐ 4.> 700 baths

5. Person impacted the decision of purchasing drugs/products

☐ 1. Doctor

☐ 2. Pharmacist

☐ 3. Drugstore owner

☐ 4. Advertisement

☐ 5. Friend or family member

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Part 3: Perception level of each 5 drugstore standards

Indication: On the scale 1-5. Please give the score on each question according to your own perspective on drugstore standards.

5 = Very important 4 = Important 3 = Moderate

2 = Slightly important 1 = Not important

List of drugstore standard	*Perception level*				
	5	4	3	2	1
1. Place, equipment and service support issues					
1.1 Good air ventilation, enough light, clean					
1.2 All the equipment are clean and no contamination such as medicine tray					
1.3 Have label and other information documents					
2. Administration and management for quality					
2.1 Friendly and good communication skill					
2.2 Analyze and monitor any mistake for consumer's safety					
2.3 Drugs in drugstore are in order and organized into categories					
3. Good pharmacy service					
3.1 Drugs must be stored in controlled room to make sure to keep the quality of drugs					
3.2 Encourage the proper medication consumption such as never put the all medicine in the same package					
3.3 Never dispense drugs to a child under 12 years old without supervisor					

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List of drugstore standard	*Perception level*				
	5	4	3	2	1
4. Compliance with rules, regulations and professional ethics 4.1 Not being suspended or revocation of license					
4.2 No illegal drugs					
4.3 Patients profile confidential					
5. Services and participation to the community and society 5.1 Cooperate with government to watch for any narcotics drug abuse					
5.2 Be a part of the drug abuse campaign					
5.3 Should not sell any health reduction product such as cigarettes, alcohol					

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APPENDIX B

จุฬาลงกรณ์มหาวิทยาลัย
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Reliability

Scale: All

Case Processing Summary

		N	%
Cases	Valid	30	76.9
	Excluded[a]	9	23.1
	Total	39	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.829	26

Item Statistics

	Mean	Std. Deviation	N
sex	1.70	.466	30
age	2.17	1.234	30
edu	3.33	1.155	30
work	1.50	.861	30
money	2.83	1.840	30
care	2.13	1.570	30
reason	1.63	1.033	30
method	1.60	.563	30
freq	1.23	.626	30
pay	1.70	1.055	30
person	2.57	1.165	30
place1	4.40	.563	30
place2	4.03	.765	30
place3	4.00	.695	30
manage1	4.50	.682	30
manage2	4.07	.691	30
manage3	4.10	.662	30
serv1	4.30	.702	30
serv2	4.27	.740	30
serv3	4.17	.699	30
law1	4.33	.758	30
law2	4.23	.728	30
law3	4.30	.651	30
social1	4.03	.669	30
social2	4.10	.662	30
social3	4.13	.819	30

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